



## CHARACTERISTICS OF TEACHERS' RECOMMENDED SOCIAL SUPPORT STRATEGIES FOR PRIMARY STUDENTS WITH ASD

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**Received:** 13-01-2020

**Accepted:** 19-05-2020

**Published:** 30-06-2020

### Abstract

This study explored teachers' perspectives of the use of social support for students with ASD through a qualitative case study. The four main themes to emerge from the interview data reflecting the teachers' recommended strategies for social support included (a) Teachers' views of students with ASD and social support, (b) Recommendations for best practice at the whole-school level, (c) Promoting acceptance, and (d) Practical classroom strategies. The final theme contained five subthemes or a range of practical classroom social support strategies teachers may use, including Routine, Developmental Play and Group Work, Explicitly Teaching Awareness of Emotions and Body Language, ICT, and Integration. Despite being limited to the views of two busy teachers, this study highlights the significant and vital need for the use of social support for students with ASD. This study directs teachers, schools, universities and pre-service teachers towards the use of positive pedagogies and approaches to inclusive education. It is recommended that all primary teachers consider the best practice of social support within their own classroom, and further research be carried out to investigate best practice in fostering and supporting the social growth and needs of students with ASD.

**Keywords:** Social Support, Practical Strategies, Autism Spectrum Disorder (ASD), Primary Education, Inclusive

### INTRODUCTION

#### A Background to Autism Spectrum Disorder (ASD)

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition that affects roughly 230,000 people Australia-wide, with four times as many boys being affected than girls (Autism Spectrum Australia, 2019). It is important to note that cultural contexts give rise to different knowledges of autism. Firstly, Neurobiological perspectives define ASD as a polygenetic developmental neurobiological disorder which causes abnormalities in social interaction, emotional expression and recognition, and communication (O'Dell et al., 2016). In contrast, sociocultural perspectives focus on ASD as an identity that is materially and discursively produced within specific socio-cultural contexts (O'Dell et al., 2016).

The importance of obtaining accurate neuro-biological diagnoses of ASD is acknowledged as important in supporting and resourcing students' educational outcomes. When diagnosing an individual with ASD, Australian professionals use The Diagnostic and Statistical Manual of Mental Disorders (5th edition), or 'DSM-5', produced by the American Psychiatric Association (2013). This manual uses five key criteria for the diagnosis of ASD (American Psychiatric Association, 2013):

- Persistent deficits in social communication and social interaction across multiple contexts.
- Restricted, repetitive patterns of behavior, interests, or activities.
- Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities or may be masked by learned strategies in later life).
- Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.



- These disturbances are not better explained by intellectual disability or global developmental delay.

The nature of these symptoms individually varies person to person on a range from mild to severe (Mayada, Gauri, & Fombonneet, 2012). Therefore, the term ‘spectrum’ is used to describe the vast range of difficulties that people with ASD may experience and the degree to which they may be affected. As such, the DSM-5 uses a three-tiered scale to identify the level of support each individual with ASD requires (American Psychiatric Association, 2013).

Students with ASD often struggle with social interactions as their condition inhibits their ability to communicate with others and understand how others think and feel (Raising Children, 2020). Furthermore, as students with ASD do struggle in social situations they are more vulnerable to bullying and more likely to have reduced self-confidence and internalized mental health issues such as anxiety, over sensitivity hyperactivity and self-injurious and stereotypic behaviors (Cappadocia, Weiss, & Pepler, 2011).

The prevalence of ASD in Australia is rapidly increasing, especially amongst children and adolescence (Australian Bureau of Statistics, 2016). Currently, one in every seventy people in Australia is diagnosed with ASD. This amounts to a staggering 353,880 people. Alarmingly, the prevalence of this condition has increased by forty percent in the last five years (Autism Spectrum Australia, 2019). Even though rates of ASD in Australia have almost tripled in recent years (AIHW, 2017), with the condition most likely to affect people under 25 years (ABS, 2016), fewer than half of Australian teachers feel prepared to teach students with special needs when they finish training (OECD, 2018).

As more Australian children are being diagnosed with this condition and enrolled in primary schools (Manning, Bullock, & Gable, 2009). Therefore, there is a growing need for educators to be provided with the training to understand the vast complexities that are presented by the many dimensions of this condition and how to best support them.

### **Social Support for Students with ASD in the Educational Setting**

Social support is a multidimensional construct used by educators to support students with ASD, through either physical or psychological means. In its basic sense, an individual experiencing social support will feel more connected and less isolated (Raising Children, 2020). They will feel boosted and it is thought that this will aid the learning and relationship process (Hart & Whalon, 2011; House, 1981). Some examples of support strategies that educators may implement in the classroom include; suggesting games, sharing or exchanging objects, initiating conversations, making complements or commenting on an ongoing game (Garrote, Semier Dessemontent, & Moser Optiz, 2017).

Building levels of social support for students with ASD revolves around effective interpersonal transactions which involve one or more of the following: instrumental aid, emotional concern, information about the environment and appraisal (House, 1981). Therapeutically, social support also provides security for individuals as they transition through different parts of their lives. When individuals develop a sense of belonging, they may have a more positive sense of self-worth and outlook on life experiences (Cobb, 1976). An example of social support may include receiving willing assistance from peers on a group task, or knowing that others accept them for their unique self (Sarason, Levine, Basham, & Sarason, 1983). There are also strong relationships between the levels of social support individuals receive and one’s overall health and psychological wellbeing. In particular, informal support, such as that provided by friends and family, has been shown to be effective in reducing stress and depression-related somatic symptoms among children with ASD (Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011). Developing the social skills of students with ASD is one of the most challenging areas for educators (Robertson, Chamberlain, & Kasari, 2003). Scaffolding group work and specifically educating peers and raising awareness about autism can assist. Providing primary students with ASD the opportunity to build confidence and experience greater social support through relaxed, positive social interactions may help foster relationships and decrease the social



challenges of students with ASD (Autism Speaks, 2018; Bolourian, Stavropoulos, & Blacher, 2019). Furthermore, social support also allows peers to better understand difference and develop empathy (Rotheram-Fuller, Kasari, Chamberlain, & Locke, 2010).

According to AutismCRC (2020), one of the biggest challenges faced by educators is ensuring that the learning needs of autistic students can be successfully met within educational contexts. Despite the increased responsibility of primary teachers to create a classroom that meets the needs of students with ASD, the literature indicates they currently lack awareness of specific support strategies (Gledhill & Currie, 2020; Lindsay, Proulx, Thomson, & Scott, 2013). While many teachers agree in-principle with the use of social support, they say do not necessarily understand how to implement this (Robertson, Chamberlain, & Kasari, 2003). Therefore, this study sought to address the gap in the current research literature by sharing rare insights of primary educators of how they best support students with ASD in practice.

## METHOD

The aim of this study was to investigate teachers' insights of the use of social support for students with ASD. This study was framed and formed around the following research question; "How do teachers perceive the use of social support for students with ASD in the classroom?" In order to address this research question, a qualitative case study was conducted, drawing on the lived experiences of two experienced primary teachers from Sydney, Australia ('Annabelle' and 'Kate'). A qualitative research approach was appropriate as we were attempting to better understand a little known phenomena or aspect of our social environment (Patton, 1980). Following ethical approval by the relevant institutional committee, informed consent was obtained with the two participants taking part in a series of two semi-structured interviews. The interviews aimed to gain an open-ended understanding of the teachers' perspectives of the use of social support strategies and explore the meaning they give to their use.

The interview transcripts were transcribed verbatim and content analyzed using the six-phased approach outlined by Braun and Clarke (2006). In this method, the researcher familiarizes themselves with the data through transcribing, extensive reading and initial labelling. Secondly, a systematic coding or labelling and categorization process occurs, noting the emergence of initial themes through a process of constant comparison and data saturation. A thematic map is developed containing data representative of the major themes. Ongoing checking and analysis refines the specific characteristics and generation of a clear title for each major theme, followed by reporting. As both teachers were accessed via a sample of convenience, the findings cannot be generalized to the wider population. However, in accordance with qualitative research, the number of participants per se was not of concern, rather accessing rich data and gaining a deeper understanding of the concepts was of prime consideration. The main themes to emerge from the data are featured in the next section.

## FINDINGS

### **Characteristics of Social Support Strategies Teacher Recommend for Students with ASD**

The main themes to emerge from the interviews reflecting the teachers' recommended strategies for social support included (a) Teachers' views of students with ASD and social support, (b) Recommendations for best practice at the whole-school level, (c) Promoting acceptance, and (d) Practical classroom strategies. Table 1 below outlines the key characteristics of each sub-theme within each of these overarching categories.

**Table 1.** Characteristics of recommended strategies for supporting students with ASD

Overarching Theme	Sub-Themes	Key Features
<b>Teachers' Views of Students with ASD &amp; Use of Social Support</b>	The Need for Social Support for Students with ASD	Social support is vital for students with ASD. This notion is supported by the literature, which highlights that the prevalence of ASD amongst children is increasing.
	Behaviors of Students with ASD varies	No student with ASD is the same. The way the condition affects each individual's behavior and social interactions is different and falls on a spectrum. Therefore, each ASD student's social needs are unique.
	Students with ASD and their Susceptibility to Bullying	The behaviors that students with ASD often display often result in these students being more susceptible to bullying or social stigma.
<b>Recommendations for Best Practice at the Whole School Level</b>	Communication Amongst Stakeholders	Communication allows educators to build a greater understanding of the unique needs of each student. It also provides students with stability and consistency across both the school and home environment. However, the literature suggests that communication amongst stakeholders is not being carried out effectively.
	Professional Development	It is vital that teachers engage in frequent professional development and reflection to improve their understanding of ASD and how to provide social support to students to foster their interactions. However, the participants suggested that much of their professional practice involves learning from mentors and other teachers. The literature suggests that such learning is not always beneficial to students as it means that practices being carried out in schools are not correlating to the modern research and literature.
<b>Promotion of Acceptance</b>	Educating Others	Participants outlined that the social interactions of students with ASD can be improved by increasing the understandings held by others, including students. This notion is supported by the literature, which suggests that when students are provided with an understanding of difference, they develop empathy and compassion.
	School Ethos	When schools develop an inclusive ethos, the stereotypes of the school community are challenged and the expectations of acceptance, inclusion and diversity may be raised.
<b>Practical Classroom Strategies</b>	Routine	Routines provide security for the student and allow them to feel safe and comfortable. When students are relaxed, they are more open to social situations. However, the literature does suggest that students do need to be exposed to change to build their ability to be flexible.
	Developmental Play and Group Work	Developmental play is recommended as a natural setting to introduce social skills to students. However, the literature suggests that developmental play needs to be developed based on the interests of students. In contrast to the literature, Kate suggested



	that educators could guide the students to do particular activities to build their social flexibility.
Explicitly Teaching Awareness of Emotions and Body Language	Explicitly teaching students about their emotions and body language helps them to interact with others as they learn how to read social cues or improve their emotional intelligence.
ICT	Despite ICT being a relatively new resource, both the participants and the literature expressed its effectiveness when supporting the social interactions of students with ASD. However, the participants only highlighted the use of applications, whereas the literature suggests that there is a wider range of ICT resources available.
Integration	Students with ASD and their peers benefit socially from integration. However, its effectiveness is dependent on the school, the teacher, and the individual needs of the student.

### Teachers' Views

Both participants strongly believe that students with ASD required essential social support structures and strategies in place in the primary school setting. The participants describe common behaviors typically displayed by students with ASD, including poor communication skills, “no eye contact,” “withdrawal”, and even becoming aggressive “lashing out” or as an avenue to “let out frustrations.” Typical behaviors witnessed included “withdrawal and anxiety” and even violence such as “hitting” and “throwing punches.” This lack of communication and/or the behavioral challenges often presented must be confronting for an inexperienced teacher (Avramidis & Norwich, 2002; Boyer & Lee, 2001). This data correlates with Barnard, Prior, and Potter’s (2000) work, which highlighted that pupils with ASD are much more likely to be excluded from school than pupils with other or no special educational needs.

Social support strategies for primary students were recommended by participants as being designed to meet “the needs of each individual student.” The wide range of behaviors of students often described by the participants highlights the importance of educators having the knowledge, confidence, and ample range of strategies available, to be able to effectively support students in regulating their emotions and in communicating their needs effectively. The concept of social support strategies designed to meet the needs of individual students is supported in the literature (Kasa-Hendrickson & Kluth, 2005). When a range of social strategies are implemented, teachers may notice students beginning to have more meaningful conversations. Additionally, their social interactions occur more frequently and last for longer periods of time (Garrote, Semier Dessemontent, & Moser Optiz, 2017).

It was also reported by participants that they felt the behaviors and appearance of some students with ASD often resulted in them being more susceptible to bullying by peers. Kate stated, “Unfortunately because some of our students do look different, we do see some bullying.” Annabelle concluded that relationships of students with ASD “can be broken.” She said, “Students might think that they are strange or different and not know how to respond.” Specifically, the difficulties they experience with communication and interaction impede their ability to engage with peers and form relationships. Therefore, this increases their vulnerability and chances of being bullied frequently and chronically over long periods of time. Furthermore, the literature also suggests that students with ASD are often isolated and bullied as their peers don’t understand the behavioral influences of this condition (Hebron & Humphrey, 2013). Some students feel threatened and uncomfortable as they don’t have the awareness to understand why students with ASD isolate themselves or act differently to what they perceive to be socially “normal” (Boutot, 2007). Consequently, both of the participants stressed the need for social support and increased connectedness for students with ASD. Through increasing peer



understanding, other students can “become familiar and develop a higher tolerance and understanding of ASD” (Annabelle). This notion of increased tolerance is supported by Eldar, Talmor and Wolf-Zukerman (2010), who suggests that peer awareness allows students to develop empathy and compassion towards their peers with ASD.

### **Best Practice Approaches and Policies**

Kate concluded that she felt it was the necessary for teachers to communicate with a student’s family to gain an understanding of each student’s individual needs, abilities and who they are. She stated how she felt:

The parents are the best source. They know their kids they have done it before you for 6 or 7 years. You only have them at school they have the weekends and before and after school, parents are definitely first point of call.

She then went on to explain that:

If we have a very good relationship with the parents then we can help the parents understand their child, it also helps us understand that child’s wellbeing and their social interaction then benefit from that communication.

Annabelle also highlighted that good communication lines also provided teachers with opportunities to better understand the social abilities of each student and how to guide future learning opportunities to incorporate familiar situations and support social growth. Annabelle explained how when she spoke with the parents, it:

Provides me with an understanding of how they communicate at home, what relationships they have at home. So, cousins, siblings, neighbors, those kinds of things. I also talk to parents about what good relationships they have outside of school so that we can talk about them and use them as examples, here at school.

These findings are in congruence with the research literature (Breitenbach, Armstrong, & Bryson, 2013). Bronfenbrenner (1986) indicates that building relationships with parents and establishing inclusive family-centered support plays a vital role in providing students with opportunities to make social discoveries. Furthermore, Irvine and Lynch (2009) suggest that in order to effectively support the social interactions of students with ASD everyone involved in the education of the students need have open lines of communication with one another. Such collaboration provides students with consistency and stability across both the school and home environment.

Annabelle then went on to explain the difficulties that arise when this communication is not evident:

The biggest issue we were having was that parents’ teachers and therapists were all having different goals. So, at the beginning of the year, we had a big meeting with everyone together and we picked three goals that we wanted the child to work on and then we talked about the common language that we are going to use in terms of those goals...it’s really important to have the same clear, concise goal, the same language that we are using to help them achieve that goal.

Whilst the participants and the literature both emulate the importance of teachers communicating with the parents of students with ASD, the literature suggests that such communication is not being effectively carried out in schools (Lilley, 2012). Specifically, the literature suggests that although there are many programs available in schools to promote parent involvement, their implementation and success in schools are lacking (Peterson & Hittie, 2010, Vismara & Rogers, 2008; Whitebread & Bruder, 2007). Meade (2011) states that this may be due to teachers and parents lacking the time and resources to provide opportunities for involvement. The literature also suggests that this lack of communication is often caused by language and cultural barriers (Bang, 2009).

Another vital aspect of providing students with ASD social support that was depicted throughout the interviews was the importance of teachers in the school accessing professional development. This notion aligns with the literature that states, professional development provides teachers with research-based theory, skills, strategies to support the social needs and interactions of students with ASD (Syriopoulou-Delli, Cassimos, Tripsianis, & Polychronopoulou, 2012). Such knowledge empowers



teachers to feel more confident when implementing and supporting students with ASD. However, teachers access to professional development is highly dependent on the school, time constraints and the educational budget (Soto-Chodiman et al., 2012). Therefore, the ethos of the school and their perspective of inclusive education strongly dictate the professional learning that educators are able to undertake (Cologon, 2010).

It was also expressed by both participants that staff and learning teams within the school need to be collaborating and communicating clearly with one another to enhance their professional learning and knowledge so they can effectively support students with ASD. Annabelle suggested that “using our collective brain as a team is really important”. Kate specified that she is able to gain strategies by “talking to other professionals about issues and challenges that occur and watching how they interact with the students.” Annabelle also outlined that:

Sharing our knowledge is the best thing, knowing that you are not always going to know everything but there is always someone you can talk to or some more information or research that you can do to always keep learning and keep up to date.

Although the literature indicates teachers commonly provide support, mentor, reflect and learn from one another (Kennedy, 1991), it is also suggested that what teachers learn off one another can be limiting and is not always beneficial to the specific group of students one has in their own class. Explicitly, when young teachers learn from more experienced teachers, they tend to adopt the practices of their mentors. This may partially explain why the pedagogical approaches of teachers are remaining the same despite years of reforms and new research into the way students interact and learn (Kennedy, 1991). Furthermore, the literature suggests that teachers’ knowledge of teaching may be tacit, so they don’t know how to explain their own practice or guide novices (Sternberg & Horvath, 1999).

Additionally, another imperative approach recommended for the effective support of social interactions of students with ASD was the use of professional reflection amongst professional or teaching groups in the school. Annabelle stated:

It is always important to have a debrief, not only with the kids but also myself and the Special Needs Learning Officer about what can we do differently next time, what worked, and what didn’t.

Kate supported this idea stating:

I always reflect on what I do and I think well each day is a fresh start so I think that didn’t work so well how can I improve to help the child the next day.

She suggested that if she “didn’t reflect” on her teaching, she didn’t “think the children would improve socially”. This aligns with Zeichner and Liston’s (2014) educational research indicating that reflective practice allows educators to analyze their practice and identify how they can improve their practice to enhance the learning opportunities of their students. Such reflections result in practice that meets each student’s social and academic needs (Zeichner & Liston, 2014).

### **Promotion of Acceptance**

It was outlined by Kate that it is important for a teacher to encourage conversations about ASD amongst students in the classroom. Both participants outlined the example of a school awareness initiative that was implemented across the school for Autism Awareness Day. Annabelle explained:

We have just finished celebrating Autism Awareness Day and across the whole school. It was expected that each teacher was to teach a lesson on ASD that myself and my team had created to bring about awareness. If the student with ASD understands their own diagnosis it is important that they share that. Especially for the older kids because when they share, there is more understanding and more acceptance. Especially in integration because then their peers have the knowledge to understand why they are different. That knowledge and understanding shapes them to be more accepting of students with ASD.



When asked about the effect of this, Kate stated:

With some students, you really did notice a difference in the way they talked about and understood students with ASD. Other students didn't, they didn't really connect and would probably call them weird and not have anything to do with them. But I think it does make them more understanding.

Annabelle suggested that sometimes the behaviors that students with ASD display can cause social relationships to fracture or decrease group acceptance. She suggested that the teachers may use discussions with the class to build understanding. She explained:

Sometimes students feel frightened and I need repair the relationships. I use whole class discussions to build awareness and ensure that students understand difference and everyone feels safe.

These statements made by the participants about peer acceptance are supported by the literature (Vakil, Welton, O'Connor, B, & Kline, 2009).

The participants also stressed the importance of the school's attitude and approach to advocating acceptance of students with ASD, regardless of their background or condition. Kate suggested that having a specialist support unit in the school has created an "in-built culture" of acceptance within the school:

Having a support unit for a long amount of time in a school and having some of those students integrating into the mainstream classrooms is really important. The students who get to spend time with them become familiar with them and I think they have higher tolerance and understanding of ASD.

She highlighted the importance of encouraging acceptance across the whole school, affirming:

We also teach acceptance as a part of our school values. It's really important that they understand that they are little bit different and why he helps them to understand how they can approach these students and why they might be acting. It helps social interactions and lowers those barriers. When we see negative behaviors, we speak to those students to give them that understanding and build their tolerance and acceptance of people who are different.

This correlates with a study by Humphrey (2008) that emphasized the ethos of a school as the cornerstone of inclusive education for students with ASD. Furthermore, Humphrey's (2008) study suggested that when the school maintains and encourages a consistent positive focus of inclusion through all aspects of work within the school the stereotypes and expectations of students, parents and teachers are challenged and standards continually raised.

## **Practical Classroom Strategies**

The final theme to emerge indicated that teachers draw on a wide range of approaches to help boost the interactions and academic learning of students with ASD. This theme contained five subthemes: Routine, Developmental Play and Group Work, Explicitly Teaching Awareness of Emotions and Body Language, ICT, and Integration.

### **Routine**

Kate was able to explain how classroom routines build structure, enhance a student's understanding of what is expected and help reduce the chance of conflict arising. She explained:

Structure and routines help the children to understand. With them understanding, there are less arguments, fights and conflict between the children because they know what they have to do. There is no danger and they feel comfortable because of the routine. So, that helps with their wellbeing and social interactions.

Annabelle also concluded that routines build a safe environment for students:

When students are feeling safe and secure and they know the expectations, they are more likely to have positive social interactions. They feel comfortable so they are happy to open up and share. You will find that as soon as someone new is in the classroom, they all close in. If there is someone different in the classroom or they are out of routine they kind of shut down, if they are not sure what to expect, so they get really anxious. This stops any social interactions. So, making sure it's consistent making sure they are prepared and that we do things over and over again it eases their anxiety in turn that opens up their social interactions they are more willing to share and engage.



## **Developmental Play**

Developmental play is another effective practical social support strategy recommended by the participants. Annabelle suggested that play is a part of cognitive development for all students. She stated, “We know that with young children the first signs of those social interactions occur through play.” Both participants also highlighted how developmental play plays an important role in a student’s development of social skills. Annabelle suggested that even if students are not communicating verbally, through play situations, “they are able to interact with students that they might not normally associate with.” She continued stating that:

It gives them a chance to use their imagination and be themselves. When they are comfortable, that’s when they are more likely to share and talk and communicate. A lot of our students who do not communicate at all, even during those playtimes they might not communicate verbally, but they are happy to show what they have created. So, they are looking for input and sharing those kinds of things with others.

Kate proposed her view that developmental play provides a teacher with opportunities to develop student’s ‘social flexibility’ in a comfortable environment. She stated:

We find a lot of the children are drawn to the one activity they like, so to try and encourage them to go to something else they are not interested they like it and that is their space. Sometimes other children will come over and play. Sometimes I take them away, so there is someone different to talk to, so I do try and change it. That allows more social interactions even if they are just side by side.

She also believed that play environments provide a relaxed environment free from anxiety. She felt it was advantageous for including students with ASD as the “interactions are not forced” and it allows an environment where the teacher can highlight social skills such as “looking at the person they are talking to when they are speaking.” Kate also stated that it is also an opportunity to “highlight behaviors that are not appropriate and use them as teaching opportunities that are shaped towards the student’s social needs.”

Currently, the literature emphasizes the need for fostering student’s social skills in natural settings. Developmental play is one of the main settings which the literature suggests for introducing social strategies to students. Such settings allow students to relax and feel comfortable. This encourages them to develop the frequency, duration and or quality of the social interactions they engage in (Garrote, Semier Dessemontent, & Moser Optiz, 2017). Although, this study’s participants believed that developmental play fosters the social interactions of students with ASD, they did not state how this play should be structured or what developmental play involves. Gillis, Callahan, and Romanczyk (2011) concluded that when ASD students’ social interactions are developed through play, the play that they engage in needs to be more tailored, individualized, and therefore ‘scaffolded’ to be successful. Furthermore, their work outlined that in order for play to foster students’ fluent social interactions, it must incorporate highly motivating themes, special interests or a common factor bringing students together, such as a craft activity or sport. Further research regarding the nature of developmental play may be required to help illuminate best practice approaches.

## **Explicit Teaching of Emotional Awareness and Body Language**

The participants both expressed the importance of explicitly teaching students about their emotions and body language. This was rationalized as such understanding was through to help students to interact with others more effectively as they learn how to read social cues or respond in a measured, appropriate manner. Annabelle outlined some of the activities she uses in the classroom to build students awareness of their emotions and body language. For example: “We use a lot of activities on reading body language, so I’m always modelling different body language. I always ask why do you think I felt that way. I didn’t use any words?”. Kate supported this concept and indicated that many students are not aware of their own emotions. She stated:

At the beginning of the year, students were not really aware of their emotions they would scream and cry and not be able to tell us if they were happy or sad. So, we have done a lot of work on building that.



Through our wellbeing program and interventions, we use in class, they have developed a deeper understanding of whether they are happy or sad and that helps them to communicate their needs.

Annabelle also stated that some students are not aware of how they are communicating. She asserted: I will often mimic the student's behavior so that they can see how they are using their bodies to communicate. They will often respond and say that they didn't even realize that is how they were communicating. So, talking about it as it happens as well making it authentic in a real context is really important to help develop student's awareness of self as it helps them to communicate.

Kate further stressed the importance of teaching students about their emotions and body language in contexts that are relevant to each student. She explained how:

It is important that we use contexts that students can see themselves in. If we are always using examples that they can't relate to they just think I don't do that. So, we use a lot of modelling when students do display a behavior they can improve. I model it and say this is what you just did. I do it with them all day long and it's really important that they understand it. It's those teachable moments throughout the day.

Annabelle further highlighted the importance of contextual learning and reflecting with students on their emotions. She continued:

We are doing a lot of dramas and skits and watching videos on how to show different emotions and communicate using our bodies. It is hard in the moment, the students know the theory behind it all but in the moment, their body just does it and they can't stop themselves. So, when that happens we debrief afterwards I could see that you couldn't control yourself what could you do differently next time, I know that you tried really hard and I know that you do know but what could you do next time in that social interaction then it's all about building that relationship afterwards.

The importance of teaching students about emotions and reading body language is congruent with the literature. The literature consistently outlines that students with ASD have trouble reading body language, emotions and social cues of others (Attwood, 2000). Therefore, students with ASD require explicit and repetitive teaching of how individuals use their bodies to express themselves. The literature outlines that educators use observations, modelling and social stories to successfully build students awareness of social cues (Partington & Mueller, 2013). This is also consistent with Bandura's (1977) notion of observational learning and modelling.

### **Use of ICT Strategies**

Annabelle and Kate suggested a range of ICT applications that could be used to support the social interactions of students with ASD. They both discussed a pictorial program called 'PEX', which they felt was beneficial for non-verbal students to communicate using pictures and building sentences to communicate their needs, emotions and wants. Kate highlighted how:

It helps them to initiate conversations and let me know what they want through pictures. I can get them to repeat the sentences so over time, I can develop that as a way of them having a conversation.

The program guides them into social interactions so that they feel more comfortable with their peers and teachers. As they use the program, their communication skills I develop and they know the expectation of how to use those key words and how to use visuals to get what they want or need.

Annabelle asserted that many young students with ASD come to school and don't understand that they actually need to communicate. She also suggested that PEX helps students to understand this need. Kate stated:

It can be really difficult with Kindy kids when parents know their child and what they want and so they don't need to communicate. So, this application gives students two or three options and them being able to identify what they want and them being able to give it to you. It helps us to teach them that for them to receive what they want the need to ask for it.

Kate also stated that she has been using another application she has found helpful called 'Core Words'. She explained:



A new program I am using with the speech therapist is core words. It is based on about 77 words that we use regularly. From those key words we expand and get students to start using sentences. It has really helped students to build their vocabulary using those core words. Having a more comprehensive vocabulary helps them to communicate and interact with others.

Annabelle further suggested another application called ‘Key Words Sign’. She stated:

This application is used to focus on one word for the week and so just repeating and drilling that word for the week. This app gets students use to having interactions, especially those who have come from preschool where it is free roam. By using key words students are progressively growing their communication skills and engaging in social interactions so that they feel more comfortable with their peers and teachers. They know the expectation of how to use those key words and how to use those visuals to get what they want.

Despite ICT being a relatively new resource utilized in schools, there is a large field of literature that supports its use to facilitate positive social interactions of students with ASD (Bernard-Opitz, Sriram, & Nakhoda-Sapuan, 2001). Specifically, Autism Speaks, one of the largest autism research funders internationally, promotes collaborations among technologists, designers, engineers, and various stakeholders in the ASD community (Bölte, Golan, Goodwin, & Zwaigenbaum, 2010). However, the participants only suggested applications used on i-Pads. This contradicts the literature as ICT is outlined as something much broader, with many more technological resources that foster the social interactions of students with ASD. Some of the technologies mentioned in the literature include virtual reality, video diaries, video modelling, robotics and Interactive Whiteboards (Bölte, Golan, Goodwin, & Zwaigenbaum, 2010). This may suggest that there is a barrier between adoption of ICT in schools and recommended use cited in the emerging literature. This may also indicate that teachers are not being provided with adequate professional development or resources to learn about the latest innovative technologies that are being established.

### **Integration**

Finally, the participants highlighted the importance of integration for students “who are able” (Annabelle). Kate concluded, “It gives them opportunities to access the curriculum and it helps them to focus on their social and academic goals as well”. Annabelle supported this notion highlighting the importance of students not only integrating to access the curriculum but also to develop social skills. She asserted:

A student in my class who is working at stage level for spelling. So, she integrates for spelling because that’s something she is successful with. When she is at spelling, she is really successful with spelling but she is not really forming any friendships she is really focused on the lesson. So, she also goes to sport, which is something that really likes. So, she goes to that same class for dancing where that’s more of a social thing where you have partners and they work together. So, it’s really important that they go for academics and for social to develop those skills.

Kate suggested that “integration allows teachers to guide interactions and set students up for social success.” If they don’t have the benefit of integration, she explained:

We try to send them out to different classrooms to find different peer groups, but you often find that because they have been together for so long and are comfortable, they find it hard to branch out of their comfort zone. We find peers in the mainstream that have common interests and having them integrate for sport or things that they really like.

She highlighted how integration provides students with opportunities to socialize with students who are the same age as them. She stated:

It’s very important for them to communicate with children that are the same age as them, we have four kids in Kindy and that’s great but I have one boy in year 6 who doesn’t get that communication in our classroom.

Annabelle suggested that integration helps to provide controlled situations which help students with ASD to understand and cope with social change. She stated:



There is a student in my class who likes going to integration but when he goes there, he is a different person. He is very quiet and very meek. Whereas when he is in my room, he is the most outgoing person in the room. So, we are trying to build some friendships with one or two other peers so that they don't feel overwhelmed with everyone trying to be their friend. We are constantly directing them to sit with those peers. We purposely chose those peers as they are really good at encouraging him and they have the same interests to try and build his social confidence.

Literature clearly indicates that both students with ASD and their peers benefit socially from integration. In a study conducted by McGillicuddy and O'Donnell (2004), it was outlined that through integration, students with ASD learn social skills and how to use them appropriately as well as flexibility. However, the success of an inclusion program is dependent on the School Principal and the ethos of the school. If the teachers are not equipped with the time, resources and training to facilitate the social and academic learning of students with ASD then inclusion will not succeed (Scruggs & Mastropieri, 1996).

Furthermore, the participants highlighted that inclusion is important for those students who are able. However, the literature suggests that this is challenging in practice and questions, how is success measured? Who decides if a student is able to fully participate and whether the teachers can capably cope (Florian, 2008; Avamidis, Bayliss, & Burden, 2000).

The notion that a range of support strategies are needed to support each student is a leading notion which the literature strongly supports. The use of routines, peer education, positive school ethos and teaching awareness of body language are all aspects of this study that are in congruence with the literature. However, while the literature and the participants highlight that ICT and developmental play effective social support avenues. The literature suggested many ways to use these strategies that the participants did not mention. This may suggest that there is a gap between the literature and the pedagogical practices of educators. This may be due to the way in which the educators are learning their professional knowledge. Furthermore, the participants highlighted that communication is the cornerstone to implementing effective social support strategies. However, the literature suggested that this is not being implemented in schools. Finally, integration was strongly supported by the participants of this study, whereas the literature surrounding this field of education is very controversial.

## DISCUSSION and CONCLUSIONS

The findings from the interviews provided an extremely valuable insight into teachers' perceptions of the use of social support for students with ASD in the primary classroom. Explicitly, this data was gathered in a new way by open-endedly asking for the way that teachers view the need and use of social support in Australian classrooms. Data surrounding teachers' views of social support has not been presented in the literature in this way previously. The participants recommended a range of strategies for use by teachers and schools for the provision of social support for students with ASD. This is useful as the literature suggests that no student with ASD is the same and each student with ASD presents with different social needs.

Despite ICT being a relatively new resource, both of the participants praised its use to support the social interactions and skills of students with ASD. However, the participants only mentioned the use of 'i-pad' applications. In contrast, the literature highlights that there is a wider range of ICT available that can be used to improve and support the social interactions of students with ASD. Some of these resources mentioned in the literature include videoing, robotics, video diaries, video modelling, interactive whiteboards and virtual reality (Bölte, Golan, Goodwin, & Zwaigenbaum, 2010).

This leads to the question, why are primary schools not implementing a wider range of technology? Jager and Lokman (1999) suggest that schools don't have access to enough funding to not only purchase such technologies but also to train staff to effectively implement them effectively. The literature also outlines that rather than adopting ICT transforming pedagogies, it is being used to



maintain existing teaching approaches (Tanner, Dixon, & Verenikina, 2010). This gap between the literature and the experiences of the participants also suggest that the barrier between the practices of schools and the emerging literature (Aresti-Bartolome & Garcia-Zapirain, 2014). Consequently, it is suggested that pre-service teachers must be trained in emerging ICT so that they may bring this knowledge into schools. It is also evident that funding needs to be provided to equip schools with emerging ICT and training to use it so that they may foster the social needs of students with ASD.

Integration was a key strategy that was suggested by both of the participants. The participants suggested that integration allows students to access the curriculum and focus on their academic and social goals. However, this is an extremely controversial aspect in the field of education. According to the literature integration is not always successful as there is a conflict between meeting the social and academic needs of the students with ASD whilst also meeting the needs of the other students in the class (Humphrey & Symes, 2010; Lindsay et al., 2013; Soto-Chodiman et al., 2012; Akgul, 2012). The literature also indicates that many teachers feel overwhelmed as they are not provided with the time or training to adequately meet the needs of students with ASD (Brownell, Adams, Sindelar, & Waldron, 2006). Scruggs and Mastropieri (1996) suggest that whilst teachers are not provided with adequate support, their perceptions of inclusion are tainted and therefore, their inclusive practices will not be successful.

In contrast, the opposing field of the literature supports the use of inclusive practices proposed by the participants. Boutot and Bryant (2005) stressed that when students with ASD are exposed to inclusive settings, they are accepted, visible and members of peer groups. This is vital for students with ASD as having reciprocal relationships with peers is key to a child's social, emotional, and even cognitive development. McGillicuddy and O'Donnell (2004), also highlighted that integration allows students to learn social skills and how to implement them appropriately in social situations. Harper, Symon and Frea (2008) suggest that integration provides opportunities for students to develop their social skills, particularly through the use of peer mediation strategies. This was not something suggested by the participants; however, it is a method that is strongly supported in the literature.

Hence, it is suggested that a school education team should determine if inclusion will contribute to a student's progress towards their social goals and ensure that the teachers facilitating this inclusion have been provided with professional development to support the social needs of these students. It is also suggested that all teachers are provided with training to support students with ASD. Additional barriers include negative and discriminatory attitudes and practices, lack of support to facilitate inclusive education, and inadequate education and professional development for teachers and other professionals. Critical to addressing all of these barriers is recognizing and disestablishing ableism in Australia (Cologon, 2013).

Certain limitations must be considered when interpreting the findings of this study. Firstly, this study is limited to the views of only two teachers participating in the case study analysis. Specifically, the participant selection of this study was purposive. Therefore, each of the participants was willing to volunteer and made it clear to the student researcher that each was passionate about inclusive education and integration. Thus, the findings are not generalizable as the study excluded a broader range of opinions and perspectives such as those of counsellors. Additionally, both of the teachers that are being interviewed are also from the same school. The study did not include a wide range of participants representing various socio-economic backgrounds or school sectors. However, the findings are valuable as primary teachers are extremely busy and to find two willing participants was highly valuable.

As the scope of the study was limited to investigating the use of social support strategies that teachers use within the classroom, the constraints of this study did not allow for analysis of whether the social support strategies cited by the participants were actually successful in assisting the student's social interactions and learning outcomes. Further future studies could include the views of students with ASD to broaden the scope and include their perspectives and voice (Goodall, 2018).



Finally, the findings in this study have offered a considerable amount of information that can be used to establish effective practice that targets the social needs of students with ASD. However, due to the small number of perspectives explored, this study has the potential to limit its findings to a relatively small school locality within the area of metropolitan Western Sydney. It is therefore recommended that further studies be conducted on larger numbers of teachers across different areas and school systems. Conducting a larger study and comparing the results to this study might help other school systems discover additional perspectives on the subject. Furthermore, a future study may focus on measuring the use and effectiveness of the strategies suggested and discussed in this study.

There is a plethora of research conducted on ways to provide students with ASD academic support. However, there has been a lack of literature available targeting the perspectives of teachers towards the use of social support strategies to support the social interactions of students with ASD. According to the Australian Bureau of Statistics (2016), the prevalence of ASD amongst children in Australia continues to grow. This translates to more students enrolling into primary classrooms with this condition. Teachers are required to adhere to the Disability Discrimination Act (Commonwealth of Australia, 1992) and the Disability Standards for Education (Commonwealth of Australia, 2005). This involves educators providing an equitable education for all students. Our research study has contributed to this field of research and the education sector more broadly, by providing a unique and deep understanding of teachers open ended perceptions of social support and its use for students with ASD in primary classrooms.

This study's findings highlight the significant and vital need for the use of social support for students with ASD. The participants highlighted a range of social support strategies that teachers may use within the classroom to support the needs of students with ASD. This study directs teachers, schools, universities and pre-service teachers towards the use of positive pedagogies and approaches to inclusive education. It is recommended that all primary teachers consider the best practice of social support within their own classroom to foster the social growth and needs of students with ASD.

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