



# Including learners with Autism Spectrum Disorder: Voices of mainstream teachers

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(Received: 16 February 2023; accepted: 12 September 2023)

## Abstract

The global shift toward inclusive education is in pursuit of creating a more equal and just society. This has led schools worldwide to experience an increase in the number of learners with autism spectrum disorder (ASD) entering the general classroom. At the first level of contact, teachers play an important role in the implementation of inclusive education; it is therefore crucial to acknowledge their experiences. Their voices need to be heard since their experiences can contribute to doing justice to the existing policies on inclusive education. In search of teachers' subjective experiences, we framed this interpretive qualitative phenomenological research study in a social constructivist paradigm. Participants were purposefully selected from an international school in Cape Town, South Africa. We collected data through an online open-ended questionnaire, followed by an in-person focus group discussion at the school. The findings indicated that while teachers are in favour of inclusion, they experience many challenges that result in a policy-implementation gap.

**Keywords:** inclusive education, autism spectrum disorder, neuro diversity, teacher attitudes, socio-educational support, social constructivism.

## Introduction

The global shift toward inclusive education is increasingly gaining momentum. Initially the emphasis was on providing access for all learners to mainstream educational institutions. However, since this is being achieved in many countries through legislation, the move now is

towards ensuring that all learners receive quality education in an inclusive education system. The justification for inclusive education is now to ensure that all learners' diverse needs are met through providing appropriate support, such as adaptations to the curriculum and structures of the school (United Nations Educational, Scientific and Cultural Organisation, 1994; Young et al., 2017). It is increasingly acknowledged that implementing inclusive education is the ideal way of creating a more equal and just society in the fields of education and psychology (Newman et al., 2021). According to the existing literature, educators play a pivotal role in the successful implementation of inclusive educational practices (Engelbrecht, 2006; Majoko, 2017; Mfuthwana & Dreyer, 2018; Rodden et al., 2019;). Furthermore, as the trend towards inclusion continues to grow, there is a noticeable increase in the enrolment of learners with ASD in mainstream classrooms (Lindsay et al., 2013; Majoko, 2017; Vlcek et al., 2020), so many teachers will find themselves responsible for educating learners with ASD.

While research shows that most teachers believe that all children are entitled to inclusive education (Budiyanto et al., 2020), it also indicates that a significant number of teachers experience several challenges because they lack the skills to support and accommodate effectively learners with ASD in inclusive mainstream school settings (Emam & Farrel, 2009; Lindsay et al., 2013; Young et al., 2017).

Although South Africa boasts some of the best human rights policies, research indicates a significant policy-implementation gap regarding inclusive education (Mfuthwana & Dreyer, 2018). In this paper, we set out to highlight the need to listen to the voices of teachers, who are at the forefront of the implementation of inclusive education, in relation to ASD.

## Autism spectrum disorder

According to the American Psychological Association (2013) ASD can be defined as a neurodevelopmental disorder, emerging in childhood, that results in affected children displaying impairments in their social communication abilities (i.e., they have difficulty recognising faces, imitating others, making eye contact, and/or engaging in pretend play) and displaying symptoms of repetitive or restricted behaviours (RRBs). Repetitive behaviours can include banging and flapping and using objects in a repetitive manner, such as rolling or banging them, or lining them up (American Psychological Association, 2013; Klinger et al., 2014), whereas restrictive behaviours may include symptoms that indicate the need for sameness in relation, for example, to requiring strict routines and needing objects, people, or places to be familiar (Klinger, et al., 2014; Middletown Centre for Autism, 2021; Woolfolk, 2016). There is no known cure for ASD, but early intervention can minimise the difficulties faced by these individuals (American Psychological Association, 2013; Little, 2017). Furthermore, as the name indicates, ASD presents on a spectrum, so individuals with it will present differently, even though there will be strong similarities between some individuals (Klinger, et al., 2014; Lord & McGee, 2001).

## Teachers' perceptions and attitudes

One of the major obstacles to inclusive education and the provision of appropriate support is rooted in the underestimation of the abilities of children with disabilities along with their potential and capacity (United Nations Children's Fund, 2013). This is reflected in the fact that “children with disabilities are disproportionately denied their right to education” (p. 8). In this executive summary, the United Nations Children's Fund asserted that dismissive attitudes exist throughout society and unless these shift, little change will be effected in the lives of children who live with a disability.

In this paper we argue that the positive attitudes of teachers towards difference can contribute positively to providing adequate and appropriate socio-educational support to learners with ASD according to their individual needs. These socio-educational needs relate to being accepted unconditionally (Dreyer, 2015) regardless of the challenges associated with ASD. Research has indicated that most teachers are committed to contributing to the well-being of learners in general and to ensuring improved educational opportunities for all learners in their classes. However, many teachers are becoming increasingly aware of the challenges they face in addressing discrimination and the marginalisation of diversity in pursuit of a more equitable education system (Rose & Howley, 2007). Teachers need to be consciously and constantly aware and reflective of their teaching approaches and attitudes in the classroom to ensure that every learner is able to learn (United Nations Children's Fund, 2013).

A recent study by Budiyanto et al. (2020) in Indonesia, found that most teachers believed children have the right to inclusive education. In accordance with our stance, Monsen et al. (2014) maintained that teachers with positive attitudes toward inclusion are more likely to implement inclusive education successfully. Furthermore, their research has revealed that teachers are more likely to feel optimistic about inclusion if they collaborate with other professionals (see, too, Vakil et al., 2009). Put differently, there is a strong correlation between teachers receiving support and the implementation of inclusion (Monsen et al., 2014).

Teachers experience various challenges in including learners with ASD. From the literature it can be deduced that these experiences can have a direct bearing on teachers' perceptions of and attitudes towards learners with this condition. The most significant challenges teachers face are inadequate knowledge and training about ASD and, therefore, the provision of support in relation to teaching practices, differentiation, and providing accommodations such as additional time, a separate venue, a prompter, a reader, or a scribe and so on (Little, 2017; Roberts & Simpson, 2016). In addition, learners with the social communication difficulties associated with ASD struggle to become active participants in a lesson, engage with their peers (Sutton et al., 2022) and participate in group work activities (Young et al., 2017). Another challenge that presents is that many of these learners have executive functioning difficulties that affect their planning and organisation of school tasks, and these may cause struggles with impulsivity and with emotional regulation (American Psychological Association, 2013; Little, 2017; Mesibov et al., 2004). According to Lindsay et al. (2013),

ASD is one of the most prevalent neurological disorders in children. Given the complexities concomitant with ASD, teachers may find it demanding to cope with the diverse needs of all the learners in an inclusive classroom.

That symptoms of ASD vary so greatly, based on the difference in clinical presentation, that the difficulties for teachers increase since there is no one-size-fits-all educational rulebook to guide this inclusion (Bradley, 2016). It is thus clear that teachers who have a learner with ASD in their class may need substantially more training and support in relation to the needs of such a neurodivergent child. Research has established that “pre-service training rarely prepares teachers to teach inclusively, and existing training is of variable quality” (United Nations Children's Fund, 2013, p. 9). Nonetheless, several sources propose effective methods for teachers to use to ensure the inclusion of learners with ASD. Two of these include assigning buddies to assist learners with ASD with their academic work in class (Lord & McGee, 2001; Palko & Frawley, 2009; Woolfolk, 2016), and creating routines and structuring the day so that learners have some sense of predictability (Mesibov et al., 2004; Palko & Frawley, 2009) since to know what is expected of them in their lesson(s) is vital to their sense of inclusion (Deris & DiCarlo, 2013; Hewett, 2005; Palko & Frawley, 2009).

Ignorance is often the source of dismissive attitudes in general and this is frequently true for the neurotypical peers of learners with ASD in the classroom as well. Changing the attitudes of neurotypical learners can contribute substantially to supporting teachers in creating an inclusive classroom and promoting inclusive practices in all learners. Research has indicated the significance of educating the neurotypical learners about ASD and how to assist their peers with this condition (Laghi et al., 2018; Little, 2017; Mesibov et al., 2004). Research has established that neurotypical peers who are educated about ASD have more positive feelings towards engaging with neurodiverse individuals (Mavropoulou & Sideridis, 2014). This can be of benefit to everyone; children who have experienced inclusive education and who understand disability as a social reality and construct, can be “society’s best teachers in reducing inequalities and building an inclusive society” (United Nations Children's Fund, 2013, p. 3).

Furthermore, for inclusive education to be successful, opportunities for collaboration are necessary (Vakil et al., 2009; Vlcek et al., 2020; Woolfolk, 2016). The Department of Basic Education (DBE) adopted a systemic approach to the implementation of inclusive education (Department of Basic Education, 2001). Schools are required to establish multi-disciplinary school-based support teams (SBSTs) that include subject specialists and educational psychologists who share the responsibility of providing support to the teachers and, in so doing, create inclusive schools (Department of Basic Education, 2014). It is important that SBST members have “a shared vision, a shared framework, and shared strategies” to assist the learner with ASD to the best of their ability (Cloninger, 2017, p. 20). Collaboration with the teacher is, of course, vital to successful inclusion since it not only creates support between and among members but also assists in ensuring that the support offered is consistent across disciplines (Vlcek et al., 2020).

## Research design and methodology

Listening to the voices of teachers about their experiences of including learners with ASD in a mainstream classroom is, of course, vital. This focus on subjective experiences led us to use a qualitative approach to collect rich data that could respond to the research questions (Johnson & Christensen, 2017; Patton, 2015). Focusing on the experiences of teachers, and following Cohen et al. (2018), our interpretive qualitative phenomenological research study was framed by a social constructivist paradigm since it focused on respondents' experiences (see Patton, 2015; Silverman, 2013; Wilson & MacLean, 2011). This choice of paradigm as Cohen et al. (2018) and Creswell and Creswell (2018) have pointed out, is rooted in the assumption that the participants' experiences are highly subjective in nature. Using social constructivist theory allowed us to explore teachers' experiences of inclusion that help inform their opinions and attitudes towards including learners with ASD in their classrooms.

The selection criterion for the teachers was that they had to have had experience of teaching learners with ASD in an international school. An international school is one that follows an international curriculum, as opposed to the one mandated by the DBE. The school we selected, situated in Cape Town, has a range of staff and learners who represent about 40 nationalities, so is diverse in terms of language, race, culture, and religion and welcomes learners with various (dis)abilities. As a result of its international status, the school also attracts international teachers who have a different educational background to teachers trained in South Africa and who may not be privy to the South African policies on inclusive education. However, we saw this international school, given its diversity, as a rich source of data. At the time of this research, the school accommodated learners from Grades 1 to 12. Upon receiving ethical clearance from Stellenbosch University, the school principal gave us permission for the school to be used as a research site.

Since the research focused on teachers' experiences of the inclusion of learners with ASD, we used non-probability, purposive sampling because, following Patton (2015) and Wilson and McClean (2011) we needed participants based on the pre-determined criterion of having had experience of learners with ASD, as mentioned above, for this study. At the time of the research, the staff consisted of 96 teachers. We emailed them the information leaflet about the study with a request to participate in it if they had the requisite experience. Only 12 of the teachers indicated that they had such experience, and all were invited to participate in the research. However, eventually, only five participants agreed to be part of this research.

**Table 1**  
Description of the participants

Participant	Gender	Teaching experience	Subjects	Grades	Further training in inclusive education	Number of learners with ASD taught
*Susanne	F	21 years	Maths and Life Orientation	Grade 5–10	None	2
*Rachel	F	2,5 years	isiXhosa, Geography, and Life Orientation	Grade 5–11	None	2
*Dylan	M	4,5 years	Music and Life Orientation	Grade 5– 12	None	7
*Thando	M	4 years	German and Maths	Grade 6–9	None	1
*Cecelia	F	6 years	English and Life Orientation	Grade 9–12	None	1

\*Pseudonyms are used to ensure confidentiality.

## Data collection and analysis

### Open-ended questionnaire

In alignment with the qualitative interpretivist approach in studying a phenomenon, data was collected by our using Microsoft Forms to create an online open-ended questionnaire, followed by a focus group discussion at the school. The questionnaire allowed us to collect biographical data. In line with the socio-constructivist paradigm, the focus group discussion allowed for the sharing of experiences and discussion of the participants' thoughts, ideas, and beliefs (see Patton, 2015).

Additionally, we designed the questionnaire to collect data in pursuit of understanding participants' experiences of inclusion and of working with learners who have ASD. In line with Cresswell and Cresswell (2018) we used a structured guide to ensure focused responses to the research questions.

### Focus group discussion

An in-person focus group discussion was conducted at the school to allow us to delve more deeply into the themes that emerged from the data collected through the online questionnaire. All five participants were invited to partake in the focus group discussion, but only four did

so. Using this focus group discussion as an additional data collection tool allowed us to obtain rich data and allowed it to be triangulated (see Wilson & MacLean, 2011). This triangulation through data collection methods, as suggested by Cresswell and Cresswell (2018) and Patton (2015) contributed to ensuring the validity and reliability of the data collected.

## Data analysis

Since the data analysis was aligned with the qualitative interpretive approach and the socio-constructivist paradigm of this study we analysed it using thematic content data analysis procedures to identify themes and sub-themes to answer the research question in line with Dawson (2009) and Silverman (2013). The data collected through the online interview questionnaires was thoroughly read and we reflected on the findings and made notes identifying themes. The focus group discussions were transcribed. We read and reread the data, made notes, and reflected on the participants' experiences as presented in the data. The identified themes were then used to compare the findings with previous literature and identify limitations from which recommendations arose (see Cresswell & Cresswell, 2018).

## Results

Four themes emerged from the thematic content data analysis. In Table 2 we present the themes and sub-themes.

**Table 2**  
Themes and sub-themes

<b>Themes:</b>	<b>Sub-themes:</b>
1. Perceptions of inclusive education	1.1 Teachers' knowledge of inclusive education 1.2 Teachers' perceptions of inclusive education
2. Challenges with the inclusion of learners with ASD	2.1 Challenges for the teachers 2.2. Challenges for the learner with ASD 2.3. Challenges for the other learners in the class 2.4 Curriculum challenges
3. Creating an inclusive environment	3.1 Supporting the learner 3.2 Neurotypical learners' acceptance of diversity 3.3 Teacher support
4. Support needed to create an inclusive school	4.1 Teacher training 4.2 Professional support

## Theme 1: Perceptions of inclusive education <sup>1</sup>

### *Subtheme 1.1: Teachers' knowledge of inclusive education*

According to the data collected, these teachers' understanding of inclusive education is that all learners should receive quality education and that teachers should adapt their teaching methods to facilitate optimal learning. Below are some verbatim responses from the open-ended interview questionnaire.

It is my understanding that if, as a teacher, you can effectively differentiate [between assessments and content in lessons], you can successfully cater for different competencies, concentration levels/abilities, and interests. (Rachel)

Inclusive Education is education that serves everyone, including those with physical disabilities and those who are neurodivergent. (Dylan)

### *Subtheme 1.2: Teachers' perceptions of inclusive education*

All the teachers in this study had positive perceptions about inclusion and thus believed that learners with ASD should be included in the mainstream classes. The following are some direct responses from the open-ended questionnaire and/or focus group.

I have always had positive experiences with the inclusion of learners with ASD. It does come with its challenges, but it's always rewarding once the relationship has been built and you understand their behaviour. (Dylan)

I feel that [inclusive education] is absolutely necessary. . . The other learners in the class learn to accept differently abled peers in the learning environment, and the ASD learner learns how to adapt in everyday life. (Thabo)

Thabo touched on this during the focus group discussion when he said,

I think there's obviously the huge benefit for the rest in the class with regard to learning tolerance and how to accept others being different.

## Theme 2: Challenges with the inclusion of learners with ASD

### *Subtheme 2.1: Challenges for the teachers*

Although all participants had positive perceptions of the inclusion of learners with ASD, they admitted that they experienced several challenges. These include keeping the neurodiverse learner's attention focused on the work at hand while managing the rest of the class and the various deadlines such as those associated with tests, for example.

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<sup>1</sup> The extracts collected from the participants' responses have been lightly edited in the interests of coherence.



The following are direct responses of teachers regarding challenges from the open-ended questionnaire, followed by the focus group discussion.

To make sure that the learner stays focused on the work at hand (Thabo).

But then you find that you might default into just a normal pattern of teaching because there's a test coming up and you must plan and prepare for it, and you are rushed for time. So there [are] so many of these other things that also factor into inclusion which is absolutely terrible. (Cecelia)

### *Subtheme 2.2: Challenges for the learner with ASD*

The participants indicated the challenges some of these learners may experience such as struggling with executive functioning and with group work.

The following are verbatim responses from the open-ended questionnaire.

Learners on the spectrum often need additional time and the learner needs more attention. Therefore, it takes more time to manage this in class. (Susanne)

Providing them with work that is stimulating enough but still keeping them engaged in the class is a challenge like making sure they don't zone out. In the past, I have struggled to include them in group work and then I feel bad for their group members, but I have found ways to work around that. (Rachel)

During the focus group discussion, the participants reiterated some of these struggles.

Struggles with changes in the classroom are difficult to manage. For example, trying to create a new seating plan has its challenges. (Dylan)

I know that if I would maybe have put some of these kids in certain groups, they would struggle with social integration. The other group members would come to me and say, 'This person is not going to do the work.' (Dylan)

### *Subtheme 2.3: Challenges for the other learners in the class*

All participants indicated their concerns about the neurotypical learners in an inclusive classroom since they may also experience challenges with inclusion. These concerns included a lack of time to focus on the neurotypical learners in the class or having inconsistent rules for their learners.

The following are some verbatim responses from the open-ended questionnaire regarding challenges that neurotypical learners experience in the inclusive classroom.

There is no time to support the other learners. (Susanne)

It is challenging for the learners around him [a learner with ASD] not to get distracted when he fixates on something specific or starts repeating an action. (Thabo)

During the focus group discussion, a participant reiterated this challenge.

I must continue my lessons as planned [without adaptations] because I also have bright kids who are literally sitting and twiddling their thumbs after a while because they're done and have become bored. But then another learner with ASD will need more guidance. So, it's difficult juggling the various needs. (Cecelia)

#### *Subtheme 2.4: Curriculum challenges*

The participants also indicated that abiding by the pressures of the curriculum is challenging, especially in the senior grades where they must assign more attention to the learners with ASD. This leaves the teacher afraid of leaving the rest of the class behind and struggling to keep up with the curriculum.

Some of these challenges were described in a direct response from a participant in the open-ended questionnaire.

Based [on] the two learners I had, my challenge was that they didn't begin tasks on time or keep up with the expected class deadlines and would either finish the work extremely fast or [at the] last minute. In both cases their work was rushed, and they would avoid going over their work if I asked them to look at it again or edit [it]. (Cecilia)

These challenges were reiterated in the focus group.

We have so much leniency in the younger grades, and it really doesn't matter if certain content doesn't get done. But then of course the skills are important. But when you're [teaching] Grade 10 or whatever, it's quite stressful as a teacher. (Rachel)

Yes [agreeing with another participant], of course but I feel like I want to know exactly how we minimise and adapt this task, while keeping the essence of it, especially in literature. After all, a test is a test. The literature essay is the literature essay. So how do we maintain the Independent Examination Board (IEB) standard? Because that's what we're always thinking about . . . final matric. (Cecelia)

### **Theme 3: Creating an inclusive environment**

All participants indicated that inclusive environments need to be created to support the learners. Below are the various subthemes that arose from our study.

#### *Subtheme 3.1: Supporting the learner*

Most participants indicated that teachers need to take an individualistic approach to inclusion by making adjustments in the classroom. These adjustments could be differentiating assessments and tasks, adapting the curriculum, managing sensory overload and/ or seeking additional support.

Below are some direct responses from the participants to this.

To support the learner, you require resources that encourage learners to guide their own learning process within a framework provided and facilitated by an educator. (Rachel).

Avoid over-stimulation. (Thabo).

Try to speak to the learners and come to an agreement with them on what plans and arrangements to put into place. Furthermore, advice and support from parents and psychologists is required. (Rachel)

During the focus group, the need to support the learners with ASD was reiterated.

But for me, my biggest coping strategy has been differentiation. So, like making sure that there's always a core body of work that has to be done in order to cover the curriculum. (Rachel)

[I] think if you have a child with special needs, you want the child to integrate into mainstream society as much as possible. So, there's not a lot of resources and it's expensive, so I was told that . . . having a child with autism is the most expensive special need to have because of all the therapy that's required. If we have them in mainstream schools, I think it's a step in the right direction for most people and the waiting lists for these . . . special needs schools are so long. Yeah, you really take what you can get at that point. So, I do think you [are] ultimately trying to integrate them. (Dylan).

### *Subtheme 3.2: Neurotypical learners accepting diversity*

An additional subtheme that was identified is the necessity to educate the rest of the learners in a class about ASD. All the participants concurred that the class should be made aware of the struggles of a learner with ASD since this may create an environment of understanding that leads to greater empathy with, and acceptance of, diverse individuals.

The following is a direct response to the open-ended questionnaire.

First, all learners should be mobilised and trained to deal with all in the best way. Being empathetic, being able to empathise with others, and wanting to offer help is the most important thing. This requires training all learners in the class. Managing time expectations and fostering a sense of understanding towards the learners in the class with ASD is required. (Susanne)

The theme of neurotypical learners accepting diversity was elaborated on in the focus group.

Creating a discussion with the class surrounding inclusive education and difficulties experienced by those with autism would foster an inclusive environment in which learners understand diversity. (Thabo).

## Theme 4: Support needed for the inclusion of learners with ASD

Theme 4 identified a variety of support methods that the participants deemed necessary for schools to become inclusive spaces.

### *Subtheme 4.1: Teacher training*

A vital finding of this research was that all participants echoed the importance of further training in inclusion. Teachers feel they are not adequately trained for inclusive teaching.

The following are some direct responses from the open-ended questionnaire illustrating the importance of further training.

We need more training! I don't have any formal training on any learning barriers or even mental health issues and how to deal with them in the classroom. I find this very distressing and irresponsible of the education system . . . Luckily, I think I am generally quite sensitive to these issues, but I know I also make many mistakes. This could be damaging for learners with ASD. (Rachel)

Teachers aren't trained to work with ASD students. We are all just winging it. This perpetuates to a great extent misconceptions and bad generalisations about learners with ASD. We need help! (Dylan)

Proper training on what ASD is exactly and how to deal with the learners with ASD [is necessary]. (Thabo)

The need for further training was reiterated in the focus group.

We just don't have enough education as educators on inclusive education. (Rachel)

So, I think also being informed about inclusion and disability and having education and training [is needed]. If you know, at least [you] have a guideline of some sort. (Thabo)

### *Subtheme 4.2: Additional professional support*

Participants indicated the need for support and collaboration from a multi-disciplinary team including psychologists to help navigate their inclusive practices and assist them with the learner(s) with ASD. It is clear that collaboration and additional support are important factors in relation to managing inclusion.

The following are two direct responses from the open-ended questionnaire.

I would also find it helpful to have a specialist/counsellor attend a lesson with an ASD student, so that [I as] the teacher [could] receive feedback. (Dylan)

Training and parent and psychologist support [are necessary]. (Rachel)

### *Subtheme 4.3: Systemic change*

Although creating inclusive environments is the goal (Smit et al., 2020; United Nations Educational, Scientific and Cultural Organisation, 2017), these participants think that our society and educational institutions have not yet reached the desired level of development. They believe that making numerous changes is imperative, given that not all vital stakeholders, including educators, school management teams, and education boards have embraced the notion of fostering inclusivity in educational institutions.

This theme was brought to the fore in the focus group. The following verbatim responses illustrate this.

There are systems in place which don't always allow for inclusivity and adapting teaching methods. For example, the IEB is content heavy, and we have to teach for the final exam papers, leaving little time to focus on and create inclusion. (Cecelia)

I don't . . . want to . . . pass judgement, but it seems like older [people] haven't taken cognizance of these types of changes and shifts happening. And for that reason, I feel inclusion is not occurring and older teachers have accepted that this is the way it is. And you can't make a real change if you are not aware of inclusive principles and there is not a concerted effort to bring this awareness to the forefront. I also feel that you can implement more inclusive principles in the younger grades up until Grade 9. However, after Grade 9 there's no more support and the focus is very much on the content and academics. (Cecelia)

## **Discussion**

The findings of this research clearly demonstrate that teachers' experiences exert a discernible influence on their attitudes concerning the inclusion of ASD learners in mainstream classroom settings. However, although many teachers experience several challenges, they maintain that inclusive education is the way forward. This is consistent with findings by Budiyanto et al. (2020) on teachers in Indonesia. It is further evident that the successful inclusion of learners with ASD is determined by the teachers' self-perceived (in)competence to teach those with ASD in a mainstream classroom. Despite encountering various challenges, the participants in this research study expressed their agreement that inclusive education is essential and that learners with ASD should receive instruction alongside their neurotypical peers. The nature of the disability and the wide array of symptoms, and the teachers' experiences of ASD, inspired them to advocate for an approach that give prominence to the individual.

The positive attitudes displayed by the participants, despite the challenges they experience in terms of practical implementation of support strategies in class, clearly need to be nurtured. To ensure this, teachers require support and collaboration from other professionals in the school and beyond, as these participants pointed out. This finding is consistent with previous research by Lindsay et al. (2013) that highlighted that teachers require guidance through

training and collaboration from professionals in the field of inclusion. The major challenges of learners with ASD as reported by participants in this research study are that they struggle with concentration and attention, with completing tasks on time, with experiencing sensory overload, and with working in groups. These challenges necessitate teachers' demonstrating innovation to address these requirements effectively, while concurrently ensuring the fulfilment of the needs of all other learners in the classroom. This, too, posed a challenge; participants indicated that they experienced difficulties ensuring that the needs of the whole class were met. Frequently, as they pointed out, teachers inadvertently overlook the needs of neurotypical learners since the neurodiverse learner(s) demand(s) a greater share of their attention. This situation can result in neurotypical learners feeling disengaged or impatient in desiring to progress to subsequent topics. Teachers are forced to tread a fine line juggling addressing the needs of all learners in the classroom and ensuring that everybody receives quality education and support.

In this study the participants agreed that to promote acceptance, empathy and understanding, it is important that the neurotypical learners be educated on what ASD is. Teachers felt that this could contribute to the understanding and acceptance of diversity in general along with ASD. In other words, neurotypical learners could go a long way towards creating inclusive schools as is consistent with earlier research (Laghi et al., 2018; Little, 2017; Mesibov et al., 2004).

While South Africa does have strong policies on inclusive education and the implementation thereof, teachers experience several practical challenges regarding such implementation. Findings from this research indicate a large gap between policy and implementation. Participants generally reported that not all staff members were on board with implementing inclusive practices and exhibiting welcoming attitudes. They also reported that teachers struggle to keep up with the curriculum because of having learners with different educational needs and managing these needs in the classroom. They further reported difficulties with maintaining the standards required by the school, especially when it comes to IEB exams since a set curriculum needs to be followed to prepare learners for these. However, while it is reportedly easier to differentiate and adapt work in the earlier grades, it becomes more difficult to do so in the Further Education and Training phase (grades 10–12). In these higher grades, teachers and learners experience more pressure to complete tasks to a certain standard since learners are preparing for the matric exams.

Teachers further indicated that they lacked training on inclusion and, specifically, working with learners with ASD. Therefore, they felt overwhelmed since they did not always understand what measures and teaching practices should be implemented. Again, this is consistent with previous research conducted (see Lindsay et al., 2013; Monsen et al., 2014). This seems to exacerbate their sense of self-perceived incompetence.

In light of this, participants indicated that they need additional professional support to assist with implementing inclusive education. Most participants indicated the need for assistance from a counsellor or psychologist to guide them with advice on best practices for working with learners on the spectrum. Although the school has a SBST for guidance and support, the

participants felt that more practical help is needed for inclusion to become a reality. Some even mentioned the need for an assistant in their classrooms. It has become clear that there is a dire need to create more opportunities for collaboration and multi-disciplinary cooperation if we are to create inclusive schools. The need for in-depth specialised training on the inclusion of learners with ASD and the help of a multi-disciplinary team is echoed throughout the data collected.

It has been established that South Africa has robust policies on inclusion that arose from the desire to create a socially just society in which human rights are promoted at all levels of society after the demise of the apartheid regime (Mfuthwana & Dreyer, 2018). However, the findings from this study are consistent with other research (Kefallinou et al., 2020) that concluded that there is a wide policy-implementation gap when it comes to inclusive education. This is exacerbated by teachers feeling overwhelmed as result of the lack of specialised training and inadequate support despite the establishment of systemic support structures such as SBST and the District-Based Support Team (DBST). This is, however, an international school and it not obliged to follow the policies of the Department of Education.

Aligned with the above, we offer the following suggestions.

- As an independent school, the school management team (SMT) needs to plan for in-service professional development opportunities.
- The SMT needs to form networks with the DBST and the IEB to ensure that relevant national education policies are followed and that teachers are trained so as to narrow the gap between policy and practice.
- While the school does have a SBST, regular meeting between the SBST and teachers to discuss topics related to inclusive education are not held. It is thus suggested that regular meetings be held to discuss learner progress, inclusive methodologies, strategies, techniques, and in-service training to support inclusive education.
- Teachers need to take ownership of creating inclusive classrooms. It is, therefore, suggested that they empower themselves through further training and professional development.

It is envisioned that these strategies will contribute to narrowing the gap between policy and practice in international schools in South Africa and abroad.

## Conclusion

This research set out to determine and understand teachers' perceptions and attitudes regarding the inclusion of learners with ASD at an international school. The findings are significant in light of the global move toward inclusive education and the fact that there is an increase in learners with ASD entering mainstream schools. We have to provide appropriate and adequate support to ensure equal education for all. While this research was conducted at an international school, the lessons learned are relevant for the public schooling system in South Africa and abroad as well.

From the literature, as well as findings from this research, it can be concluded that teachers' perceptions and attitudes towards learners with ASD, informed by their experiences, play a cardinal role in ensuring the successful implementation of IE in schools. The policy-implementation gap that we identified in this research needs to be narrowed and eventually closed. The rationale for this is that the challenges teachers experience are overwhelming and manifest as feelings of incompetence along with an appeal for training and support. If the imperative of IE is to be achieved, the voices of those on the ground need to be heard and responded to.

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