Students With ASD in Mainstream Primary Education Settings: Teachers' Experiences in Western Australian Classrooms

Rebecca Soto-Chodiman, Julie Ann Pooley, Lynne Cohen and Myra Frances Taylor *Edith Cowan University, Australia*

The shift to inclusive education within Australia has resulted in increasing numbers of students with autism spectrum disorders (ASD) being placed in mainstream educational settings. This move has created new demands on teachers who are not necessarily trained to meet the challenge. Therefore, the present study aimed to develop an understanding of how 12 Western Australian primary school (K–7) teachers adapted to the challenge of having a student with ASD in their mainstream classroom. Using an interpretivist framework, data from semistructured interviews revealed that teachers perceived a need to first recognise and accept the challenges associated with having a student with ASD in their mainstream classroom before they could move to accessing avenues of support. The implications of this finding are discussed.

Keywords: teachers, ASD, inclusive education, mainstream education, teachers' perspectives, support

Since the 1970s, the educational policies of many countries, as well as the policies of the United Nations, have been influenced by a social justice agenda (Konza, 2008). Within this agenda the educational policies of Australia, the United Kingdom (UK), and the United States of America (USA) have all affirmed the rights of all children to be equally valued members of the education system irrespective of their culture, religion, social and economic status, health, gender, and abilities (Avramidis, Bayliss, & Burden, 2000; Dybvik, 2004; Konza, 2008). For Australian children with diverse learning needs these systemic movements in the educational system have seen some support for both integration (i.e., the registration of students with diverse learning needs in a special facility or class within a regular school, with the provision of opportunities to participate in some mainstream classes with specialist assistance) and mainstreaming (i.e., the registration of students with diverse learning needs in a mainstream class, with the option of a partial withdrawal for specialist support intervention, or the within-class assistance of a support teacher or assistant; Forlin, 2006). This move toward inclusive education is evidenced at the Western Australian state education policy level by the introduction of initiatives such as the Building Inclusive Schools (BIS) and the Building Inclusive Classrooms (BIC) programs. These two Western Australian State Education

Correspondence: Julie Ann Pooley, School of Psychology and Social Science, Edith Cowan University, 270 Joondalup Drive, Joondalup, WA 6027, Australia. E-mail: j.pooley@ecu.edu.au

Department initiatives were designed to provide additional support to public schools to meet the individual needs of children with disabilities and learning needs. For instance, the BIS initiative was introduced to increase awareness at the administrative level of the obligations and requirements on the state to provide all public school students with an inclusive and flexible learning environment. The BIC initiative was additionally introduced to provide Western Australian public school teachers with practical strategies and classroom guidelines on how to create a functional and inclusive individual and group learning environment for their students with specific disabilities or learning needs.

Inclusive education considers how the education system can accommodate students with diverse learning needs (Forlin, 2006). The how is about promoting, where possible, the processes of achievement, acceptance and participation in mainstream schools for children with diverse learning needs (Humphrey, 2008). Central to these processes are the roles of teachers and, in some instances, those of education/teaching assistants (EAs/TAs). Rose (2001) suggests that the value of EAs/TAs for students with a pronounced need for routine and predictability is their ability to move with students from class to class or activity to activity. This provides the student with the constancy of presence and the consistency of approach essential to their mainstream integration (Symes & Humphrey, 2011). Students with ASD (i.e., a broad spectrum of neurodevelopmental disorders which includes autism, Asperger's disorder, pervasive developmental disorder not otherwise specified, Rett syndrome, and childhood disintegrative disorder) are one such cohort of students with diverse learning needs who are considered by some inclusion theorists to particularly benefit from the services of EAs/TAs (Levy, Mandell, & Schultz, 2009). Other theorists who hold more ambivalent or critical views of the potential benefits of inclusion contend that the presence of EAs/TAs in the classroom can produce some negative outcomes for students with ASD. These include a reduction in teacher attention, independent learning and social interaction with peers (Alston & Kilham, 2004; Blatchford, Bassett, Brown, & Webster, 2009; Farrell, Alborz, Howes, & Pearson, 2010; Howes, 2003; McVittie, 2005; Symes & Humphrey, 2011).

When dealing with students who have been diagnosed with ASD, some of the overt difficulties that teachers and EAs/TAs are expected to deal with include poor social and/or communication skills, exemplified by developmental delays and a restrictive use of language. Moreover, students with ASD often manifest challenging stereotypic behaviours such as hand flapping and twisting. In addition, students with ASD often fail to develop age-appropriate peer relationships; manifest a need for rigid routine; and have varying levels of intellectual disability and/or psychopathology (American Psychiatric Association, 2000; Matson & LoVollo, 2009).

Whilst the aetiology of ASD is reported to be a combination of genetic and environmental factors, the prevalence of ASD has increased over time. This increase in prevalence has been attributed to factors such as greater awareness of the condition (Levy, Mandell, & Schultz, 2009). In turn, this has contributed to an increase in the number of students with ASD entering the mainstream educational system.

The number of students who have been diagnosed with ASD and are now being included in mainstream education is increasing (Autism Advisory Board for Autism Spectrum Disorders [AABASD], 2010). This in turn has led to calls for research into the complex, but poorly understood process of mainstreaming (AABASD, 2010; Dybvik, 2004; Humphrey & Lewis, 2008). It has been suggested that it is impractical to try to reduce inclusive practice to a simple series of strategies and then expect them to work with every student (Humphrey, 2008; Symes & Humphrey, 2011). Indeed, Barnard and colleagues (2000) have proposed that without greater systematic school, teacher and parent buy-in,

mainstream inclusion will ultimately fail to meet the needs of children with ASD. In this regard, Slee (1996) has for over a decade argued that if inclusivity is ever to move beyond rhetoric then the authentic voices of those involved in the process need to be heard, as they have the most experience and insight into how the process can be effectively fine-tuned. Therefore, the aim of the present study is to investigate and interpret the experiences of teachers who have had a student with ASD mainstreamed into their primary classroom and, in doing so, answer the study's two overarching research questions; namely (1) What are the experiences of teachers in mainstream classrooms who are teaching children with ASD? and (2) What are the issues or challenges confronting teachers in teaching students with ASD in the mainstream classroom? In this regard, a combination of two complimentary qualitative approaches (i.e., phenomenology and grounded theory) were deemed the most appropriate forms of investigation to use to address these questions and, as such, formed the investigatory framework on which the teachers' reported experiences were interpreted. In this regard, a phenomenological interpretivist approach was purposely employed to capture what Bednall (2006) describes as the 'essences of meaning' which lie behind how individuals *feel* about their described personal experiences, and a grounded theory constant comparative approach was similarly employed to uncover what O'Donoghue (2007) describes as the meanings individuals attach to the ways in which they deal with particular aspects of their existence.

Method

Participants

Twelve (one male and 11 female) public sector primary school teachers (i.e., three reprimary, three Year 1, two Year 1/2, one Year 6/7 and three K–7 relief teachers) participated in the study. The seven primary schools in which the teachers taught were located in a range of low to middle socioeconomic status areas (six low and six middle SES areas), as indexed by their postal codes (Taylor & Marais, 2011), across the metropolitan area of Perth, the capital city of Western Australia. The schools had between 173 and 318 students on their rolls. All 12 teachers met the criteria for inclusion in the study; namely (a) a minimum of five years of teaching experience within mainstream classrooms and (b) recent experience (within the last five years) of teaching a student with ASD within a mainstream class. In this regard, the sample's mainstream teaching experience ranged from five to 30 years (average = 18 years) and their ASD teaching experience ranged from one to six years (average = two years). In terms of the particular student with ASD upon which participants were basing their interview question responses, two were female and 10 were male.

Interview Schedule

The use of an original semistructured interview schedule to generate data for analysis is a widely accepted practice in the educational, psychological and sociological fields of qualitative research (Symes & Humphrey, 2011). The design of the present study's interview schedule (see Table 1) was based upon a review of previously developed interview schedules within the disability literature (for examples, see Stahmer & Mandell, 2007; Taylor & Houghton, 2008). Prior to its administration, the interview schedule was reviewed by four faculty members, who commented on the schedule's content suitability and made suggestions as to how the questions could be refined. In the final version, the questions were grouped into two clusters. The first cluster (Q 1-3) was of a more general nature and

TABLE 1

Teacher Interview Schedule

General questions

- 1. What is your understanding of ASD?
- 2. What are your experiences as a teacher in a mainstream classroom who is teaching children with ASD within the classroom?
- 3. Please can you tell me about the issues or challenges you face teaching students with ASD in the mainstream classroom?

Probing questions

- 4. What support systems and resources are in place to aid you as the teacher of a student with ASD?
- 5. Are there any resources you feel would further support your teaching role that are not available or currently being offered to you?
- 6. How do you cope with the issues and challenges you are confronted with in the classroom?
- 7. Are there any particular strategies you use when teaching or integrating the student(s) with ASD?

was purposely asked first so as to familiarise participants with the interview process and to draw out some initial information on their teaching experiences (Taylor & Bogdan, 1984). The second cluster of probing questions (Q 4–7) was specifically designed to elicit a greater level of reflective thought from the teachers and to provide a more holistic understanding of their teaching experiences (Patton, 1999).

Procedure

Approval for the study was sought from Edith Cowan University's Human Research Ethics Committee. Once obtained, the principal researcher telephoned the five teachers who she personally knew to have a student with ASD in their mainstream classroom. On hearing of the aims of the study, all five teachers contacted in this manner verbally expressed an interest in participating in the project. Following their verbal declaration of interest, an electronic version of both the study's information letter and consent form were forwarded to them. Upon receipt of their signed consent forms, the teachers were once again contacted and arrangements were made with them as to a suitable time to conduct the interviews.

On the appointed days the interviews were all conducted in a quiet area of each teacher's school at a time outside of their regular class teaching period. Prior to the start of the interview, each teacher was reminded that their participation in the study was voluntary, that all of their responses would be de-identified, and that they had the right not to answer any question they felt uncomfortable in answering. Finally, all of the teachers were informed that they could withdraw from the interview session at any time, but none chose to do so.

In each instance, an audio recorder was placed on a table in full view of the teacher, and their permission was sought to audio record the session. All of the teachers agreed to this request. No time limit was placed on the interviews, but in general they varied between 20 and 55 minutes. Adhering to this format of interviewing ensured consistency in the data collection process (Wilson & Powell, 2001).

Finally, at the end of each interview, each teacher was asked if they knew of another teacher who met the selection criteria and who they thought would be willing to also participate in the study. The potential participants were contacted by the interviewee. The researcher was then contacted (as requested by ethics) by each of the newly suggested

TABLE 2	
Teachers' Experiences of Teaching Students with ASD	

Themes	Subthemes	
Challenges	Modification of curriculum and teaching technique concerns Communication difficulty concerns Problematic classroom behaviour concerns	
Support	Internal External	

teachers, a recruitment process known as snowballing or chain sampling (Liamputtong & Ezzy, 2005). Confidentiality of data was ensured through a process of stringent deidentification.

Analysis

The first author transcribed verbatim all of the interviews within a few days of the interview having taken place. This prompt transcription routine also helped to ensure consistency in the interviewing process. The second and third authors also independently checked the transcription of the interviews so as to obtain a measure of interrater reliability. Overall, there was a 90% rate of agreement between all three researchers.

All 12 interview datasets were analysed using either a grounded theory or a phenomenology interpretive approach. The grounded theory constant comparative method of data analysis was used to interpret the teachers' responses to interview Questions 1, 2, 3, 4, and 6, and the phenomenological interpretive approach was used to interpret teacher responses to interview Question 4 (see Table 1). In this regard the constant comparative method initially focused on the analysis of the first interview dataset so as to detect salient patterns. These patterns were named and key illustrative words, phrases, and verbatim quotes contained within the dataset were categorised. The same procedure was utilised with the remaining 11 interview datasets and each datasets' identified patterns were continuously crosschecked, refined and compared until trends emerged. These trends were coded and continually abstracted to draw out themes and subthemes (see Barker, 2002; Braun & Clarke, 2006; Dey, 1993; Liamputtong & Ezzy, 2005; Marks & Yardley, 2004; Neuman, 2006). Question 4 interview response data were analysed using the systematic phenomenological approach of inspecting and synthesising its contained 'meant' and 'experienced' meanings (Bednall, 2006). This process continued until all Ouestion 4 data had been intuited and unpacked (Gearing, 2004; Groenewald, 2004; Patton, 1990). Finally, the study's developed themes and subthemes were compared where appropriate to research findings within the existing body of ASD literature.

Results

When the data were examined in light of the study's two overarching research questions, it was apparent that the participant teachers were able to talk in general terms about both their experiences and specific issues that confronted them. These experiences and concerns split into the study's two central themes (*Challenges* and *Support*) and three subthemes (*Modification of curriculum and teaching technique concerns, Communication difficulty concerns,* and *Management of problematic classroom behaviour concerns*; see Table 2). In each instance, illustrative quotes are provided.

Challenges

Overall, there was a consensus among the 12 participant teachers that the experience of having a student with ASD within their mainstream class presented them with a number of time-consuming and sometimes emotionally draining challenges. Moreover, when taken in combination, these challenges made the whole teaching experience one that could best be described as being 'extremely difficult'. The following two teachers' reflections on their experiences encapsulated the sentiments expressed by many of the other participants:

I found it quite overwhelming to think that there you have a group of 28 children all varying levels of development, etc., and here is this one child who has been put in a mainstream situation. (Teacher 3)

It was the hardest year ever of my teaching career. I mean, I've been teaching for 30 years and that would've been the hardest year. I cried most nights. (Teacher 2)

Within this general experience of teaching difficulty participants were consistent in the description of three adaptations they needed to make in order to accommodate the challenging learning needs of their mainstreamed students with ASD; namely, the three identified subthemes of (a) modification of curriculum and teaching technique concerns, (b) communication difficulty concerns, and (c) management of problematic classroom behaviour concerns.

Modification of curriculum and teaching technique concerns. Participants, aware of the extra workload involved in adapting the curriculum and their lesson plans to accommodate the learning needs of students with ASD, spoke of the range of emotions they experienced when first informed they were to have a student with ASD in their mainstream classroom. For some, the dominant emotion was apprehension; for others, it was frustration, anger or resentment. These negative emotions, however, were short-lived. As two teachers explained:

At first I was extremely anxious and very apprehensive to have him in my class for two reasons. One I was still getting a handle on what to teach the rest of the class, and two, I had a limited understanding of autism itself. (Teacher 4)

 \dots if a 6-year-old can see that something's different about this child, it's wrong for me to hit back, it's wrong for me to get angry. (Teacher 2)

Once they had reached the stage of accepting the student and the challenges that lay ahead of them, participants were faced with the stark realisation that they had only a very limited knowledge of ASD and would have to modify not only what they taught, but the strategies they would use under these circumstances.

In this regard, the study's participants indicated that they felt particularly ill-prepared for the educational challenges that lay ahead of them. For example, they stated that at the start of the school year they had lacked any understanding of how far they could extend the student academically or what they should expect/accept from them in terms of atypical classroom behaviours. Even the sample's most recent graduate who had been exposed to the latest teacher training methods revealed that she had little idea of how to cope. Also, that her decisions then were largely based on 'gut instinct'. Even teachers with extensive teaching careers stated that their approach was 'very much trial and error ... you just keep trying things' (Teacher 6). The problem with these instinctual trial-and-error approaches as far as the participants were concerned was that they lacked confidence in the decisions they ultimately made. This was partly because these decisions were based on their own experience rather than knowledge from external sources, such as professional development courses, and partly because of the various communication issues that frequently arose when trying to implement a newly decided strategy.

Communication difficulty concerns: One of the most frequently recounted communication challenges participants experienced related to their students' pragmatic understanding of language. Teachers spoke of their students' inability to understand the nonliteral usages of language. Aware of this language difficulty, teachers tried to alleviate the problem by mentally pre-checking every instruction they issued either to the student or to the class as a whole so as to make sure that whatever they said or wrote was free of nonexplicit or double meanings. One teacher illustrated the need for this pre-checking process by relating an account of what can happen when it is not diligently employed. She recalled how she had on one recent occasion issued the classic primary school whole class instruction of 'stop what you are doing and go and sit on the mat' (Teacher 8). The 'mat' she was referring to in this case was a small carpeted area within her classroom. In this instance, her student with ASD did not make the connection between the word 'mat' and the 'carpeted area'. Instead, he went walking around the classroom looking for a mat upon which he could sit. She explained:

They can only see the carpet and they don't know where the mat is \ldots they actually want a mat on the floor. (Teacher 2)

The students with ASD's pragmatic understanding of language was just one communication difficulty participants had to deal with on a daily basis. Another was their interaction with the student. Some participants stated that they found it difficult to 'reach' their student as the ordinary teacher–student verbal interaction was largely absent. In this regard, one teacher described her teacher–student communication difficulties in the following terms:

Well the main challenge was that I just couldn't communicate with him. I just wanted to talk to him, I wanted to make him understand things, ... but whenever I wanted to talk to him he just avoided me ... he used to just turn around, give me his back, and avoid contact ... I just wasn't sure he was learning or not. (Teacher 5)

Whereas this type of interactional communication difficulty was not one participants could easily overcome, many did try to surmount the problem to a degree by making their classroom a 'safe' and 'calm' environment for their student with ASD. Specifically, they tried to adopt a quiet and patient approach to their teaching, partly because their students with ASD did not respond well to loudness, and partly because they realised students with ASD require more reassurance than their peers without ASD. One teacher explained:

 \dots because he is a little forgetful, and he comes to me and asks me again and again, I now just repeat all of my instructions. (Teacher 7)

A third communication difficulty that was commonly raised by participants related to the atypical interactions students with ASD had with their classmates. Participants dealt with this problem by making more modifications to their teaching techniques; namely, they incorporated a range of inclusion-orientated activities into their teaching regime. In this regard, one teacher described how she always 'had to guide him a lot on how to interact with the other boys', not just during the regular class time, but also during morning recess and the lunch break. The teachers indicated that this type of intervention was necessary as although the student's peers displayed a willingness to help their classmate with ASD within the classroom setting, the same out-of-class willingness to include them in their recess games was not as evident; in many instances, students with ASD were observed playing alone.

Australasian Journal of Special Education

Rebecca Soto-Chodiman et al.

Another teacher stated that, besides constantly encouraging turn taking and sharing amongst her students, she also went to 'great lengths' to ensure 'all activities were so open ended' that there were elements in each activity that were readily accessible to the ability level of every child in her care. A third more experienced teacher stated she facilitated communication by teaching the whole class elements of Makaton[®] Signs (a combination of speech, sign and graphics):

We did a song about colours, and we incorporated Makaton Signage in our ... assembly, so that was inclusive for that child, and the other children loved doing that too. (Teacher 12)

Problematic classroom behaviour concerns: Despite their best efforts to facilitate communication between the student with ASD and their fellow classmates, the teachers revealed that interactional behavioural problems often arose. There was consensus that some of these problems related to the stereotypic utterances and physical mobility (i.e., a tendency to get up and just wander around, or escape from, the classroom) that students with ASD regularly displayed and which the other students in the class found disconcerting especially during quiet periods. One teacher explained:

He would make lots of noises ... *and the noises would be very, VERY disconcerting to the mainstream classroom while you're trying to teach. (Teacher 2)*

Another source of irritation for students without ASD was the students with ASD's inflexibility, mainly their inability (particularly during group work), to accommodate anyone else's point of view. The following two comments are typical in this regard:

There would be big challenges because the others wouldn't see his point of view, and he didn't see their point of view. (Teacher 9)

Even in working in groups on a science investigation, for example, everyone had to do what this person thought he should do ... not accepting other people's ideas. (Teacher 6)

Such problematic interactional behaviours were at the core, according to the teacher participants, as to why the other students in the class often drifted away from associating with the student with ASD, thus leaving them somewhat isolated.

A different form of inappropriate interaction that participants reported occasionally occurred with some of their students with ASD was the student's request for a show of physical affectionate reassurance from not just their teacher but also from their classmates. One teacher spoke of her student's inappropriate requests for cuddles:

I had one [student] that gave me cuddles, but I have to keep him away — I put my hand in front and say 'no' or just smile or say something like 'a high five will do' ... because when he goes outside he also might try to cuddle the other kids or strangers, so I have to teach him that that is not okay. (Teacher 5)

Although such kinds of problematic interactional behaviours made it difficult for many participants to cope with their students with ASD, the sample was divided as to whether the mainstream classroom setting was the most appropriate educational placement for students with ASD. Only two participants expressed a strong belief that students with ASD would benefit more from being educated in a special education setting than in a mainstream classroom. The remaining participants, however, were all united in their assessment that in order for the mainstream classroom to be an effective learning environment, teachers of students with ASD have to be allocated considerable support. This viewpoint is well documented in the existing body of ASD literature (see Avramidis & Kalyva, 2007; McGregor & Campbell, 2001).

Support

The support that participants perceived to be essential appeared to bifurcate into two distinct types; namely, *internal* and *external* support.

Internal support: The presence of an educational assistant (EA) was the main form of within-class support available to participants. However, participants indicated that not all of their allocated EAs were sufficiently trained to provide them with the required level of support. In some instances, the EA's inexperience actually compounded the difficulties they were facing as not only had they to deal with a very difficult teaching situation, but they also had to provide on-the-job EA training. One teacher explained, 'I ended up having to do a lot of telling her [the EA] what to do with him, and what to say' (Teacher 3). Another remarked that having an inexperienced EA was difficult because 'although I'm not really the expert [in this case] I was, I had to be' (Teacher 2). A third teacher revealed that she had 13 different EAs in her class and each one had left because they were unable to cope with the challenges her student with ASD created.

Although participants believed an inexperienced EA added considerably to their workload, they also stated that the assistance of an experienced EA reduced the workload to more manageable proportions. Contemplating the difference that an experienced EA can make, one teacher reflected:

I was very fortunate that my educational assistant was truly on the same track; she had an understanding of autism. I think the problem we had with the other people was they didn't have an understanding. (Teacher 12)

Participants revealed that as the school year progressed they became more aware of and were able to access other avenues of external support.

External Support: In many instances participants found the parents of their students with ASD to be an ongoing avenue of support. Through talking with the parents the teachers came to realise that the parents had considerable first-hand experience of managing their children's behaviour and, as such, had useful insights into appropriate tactics. According to participants, the benefit they derived from 'liaising' with parents and accessing their knowledge was that it facilitated greater consistency in the behavioural management approaches adopted both at home and in school.

A second avenue of external support available to participants was the school psychologist. The school psychologist not only carried out formal assessments of students with ASD but, more important to participants, they also provided strategies to use within the classroom. In time, the participants came to realise that the school psychologist was not only caring for the psychological needs of the student, but was also providing them with support on a personal level. One teacher explained:

They can just say 'ok let's sit down and have a chat' and in the end you realise he's there sort of supporting you ... so he was quite good like that. (Teacher 12)

The third avenue of external support for many participants was the Western Australian Department of Education's Statewide Specialist Service Centre for Inclusive Schooling (CIS). The assistance CIS gave typically took two forms. First, CIS provided specific resources (e.g., visual schedules, visual cue cards, visual warning devices, and large font worksheets, pictorial schedules, sand timers, and computers). Second, CIS would on request send a 'visiting' mentor teacher to provide practical professional advice and, in some instances, even attend case conferences. A similar type of paraprofessional service aimed at fostering greater student independence was also offered by the Autism Association of Western Australia (AAWA; see Harrower & Dunlap, 2001). As one teacher explained:

Australasian Journal of Special Education

The Autistic Association would listen, and say 'well hang on, you're not doing this for the child', or 'you've got to integrate this more'. (Teacher, 12)

This teacher commented that the modification strategies suggested by both CIS and AAWA were predominantly aimed at helping teachers to put strategies in place that would enable their students with ASD to gain greater independent mastery of everyday learning tasks.

Other than fellow teachers, friends and family members, the fourth and final source of external support available to participants were the professional development (PD) days organised by their school, the state education authority or one of the area's universities. While participants all found their PD sessions helpful they stated that the content of these sessions were usually general in nature (i.e., relating to the topic of inclusion rather than autism per se). Typical comments included:

I can't think of any other ones [PD days] specifically related to autism that I saw were available in the time that I had the child. (Teacher 6)

It would be ... advantageous ... to have some kind of PD on how to cope better... how to help that kind of child [child with ASD]. (Teacher 9)

I'd like to go for a week PD and go to an information [autism] workshop to prepare. (Teacher 4)

The benefit of attending extended PD courses has been linked in the literature to the engendering of more positive teacher attitudes toward the inclusion of students with special needs in mainstream classes (Avramidis & Kalyva, 2007; Ljiljana, as cited in Konza, 2008).

Participants concluded that it was the collective knowledge they received from both their internal and external avenues of support that ultimately provided them with sufficient knowledge and confidence to move away from their use of 'gut instinct', 'trial and error' approaches and into using more professionally 'informed' coping strategies.

Discussion

106

The shift to inclusive education for students with diverse needs has created a range of new demands and workload challenges for both teachers and EAs/TAs in mainstream educational settings (Conroy, Asmus, Sellers, & Ladwig, 2005; Forlin, 2001; Jordan, 2008; Male & May, 1997; Symes & Humphrey, 2011). While undoubtedly the extent of teachers' difficult experiences do relate to the severity of their students' needs (Avramidis & Kalyva, 2007; McGregor & Campbell, 2001), the present study has identified a number of specific teacher challenges and support issues which pertain specifically to the mainstreaming of students with ASD within the primary school setting.

Foremost of these identified challenges was the issue of increased workload relatedstress which the study's participants stated that they experienced when attempting to modify their class curriculum and teaching techniques to meet the language, communication and behavioural needs of their students with ASD. The issue of increased workload stress levels among teachers teaching students with unique and challenging educational needs has been linked to the lack of the types of basic teaching materials, facilities and services that would assist them to cope with the challenges associated with teaching students with ASD (Leblanc, Richardson, & Burns, 2009; Male & May, 1997). It is not surprising then that the present study's teachers consistently related that they had initially resented their students' inclusion into their mainstream classrooms partly because they felt illprepared for the challenges that lay ahead of them, and partly because they were unsure of what to expect from the students in terms of either their academic abilities or classroom behaviours. An earlier assessment of 72 UK teachers' views on autism and the training needs of teachers dealing with a student with autism in their mainstream class (Helps, Newsom-Davis, & Callias, 1999) also detailed similar expressions of resentment by participants. It would appear that teachers have a tendency to overestimate their students with ASD's abilities, and this increases the potential for teacher confusion and student integration failure. An interesting finding was that the current study's teachers, in the absence of prior training, overcame their personal feelings of resentment and frustration by relying on their personal cache of experiential knowledge to help them integrate their students with ASD into their mainstream classrooms.

Another UK study conducted by Emam and Farrell (2009) with eight mainstream teachers revealed that a commonplace frustration of teachers trying to integrate students with ASD into their mainstream classrooms was related to the students' inability to understand the nonliteral usages of language. These UK teachers indicated that their students' literal interpretation of language imposed restrictions on their own within-class use of language. It is of interest that both the teachers in the Emam and Farrell study and in the present study addressed this pragmatic interpretation of language issue by developing different ways of conveying instructions to their students with ASD compared to the methods used with other students in their classrooms. In the current study new entrants to the teaching profession stated that they often relied on their 'gut instinct' when devising effective ways of communicating with their students with ASD. While their more experienced colleagues revealed that they tended to adopt a mental self-checking process that enabled them to determine prior to issuing a written or verbal instruction whether it was (a) explicit and (b) free of any potential double meaning.

In addition, the current study reveals that teachers and other students in the class find the stereotypic utterances, physical mobility and problematic interactional behaviours of students with ASD disconcerting. This has led in some instances to classmates of students with ASD socially disassociating themselves from the student and consequently increasing the isolation that inclusion was designed to overcome. Again, this observation is not peculiar to the present study's cohort of teachers. Dybvik (2004), in her account of a typical school day in the life of Daniel, a student diagnosed with autism, described how although some of his classmates did accept Daniel they did so at a very different level than they did the other students in the class. Typically, their 'helping' of Daniel took the form of doing his work. Dybvik argues that as such, this helping of Daniel by his classmates was not necessarily a positive outcome for Daniel as it tended to ingrain his dependency on 'help' rather than assist him to master independent learning skills. For some other students in Daniel's class, however, his unpredictable behaviours would become 'too much for them' and they would 'keep their distance'. It is not surprising then that Dybvik and some of the present study's teachers have questioned, given that the mainstream classroom is 'geared towards the norm', whether it is the most appropriate educational setting for students with special learning needs. Dybvik further questions whether it is even possible for mainstream teachers to effectively adapt the standardised curriculum to meet the individual needs of such children like Daniel without actually lessening the teaching experience of their classmates or harming their or their schools' test scores.

One of the keys to making mainstream inclusion work, as identified by both the present study's participant teachers and also researchers working in the field of ASD, is the need to improve both the level of school-based support and professional training provided to regular classroom teachers and their EAs/TAs (Dybvik, 2004; Helps et al., 2009; Symes

& Humphrey, 2011). The present study's cohort of teachers indicated that one of the supports that they readily tapped into was their students with ASD's parents. They stated that parents were valuable sources of information as to what worked and what did not work in the day-to-day management of their children. Moreover, that paraprofessional governmental and nongovernmental ASD support groups were also valuable repositories of specialised resources and practical advice. However, nearly all of the study's teachers articulated what they really wanted and needed was greater access to PD training days.

The small body of research literature pertaining to the mainstreaming of children with diverse learning needs is beginning to present a strong case for improving the PD provided to mainstream teachers of students with ASD. For instance, Howlin, Gordon, Pasco, Wade, and Charman (2007), and Jennett, Harris, and Mesibov (2003) argue that additional PD training has two major advantages. First, PD training enables teachers to become more effective educators, and in turn improve the educational experiences of students with and without ASD in their classrooms. Second, frequent or extended PDs allow teachers to gain a broader theoretical understanding on specific pedagogies, to advance teachers' knowledge, and to reduce teacher reliance on intuitive/trial-and-error approaches in dealing with students with ASD. Other support comes from a slightly earlier study by Avramidis, Bayliss, and Burden (2000) who, in their examination of the level and depth of teacher training and theoretical understanding of ASDs, found that teachers who attended long-term university-based PD activities were generally more prepared for, more positive in, and more confident about teaching students with an ASD. One further benefit of improving both teachers' theoretical knowledge and practical understanding of the diverse learning needs of students with ASD is that it allows them to work more effectively with (and in some instances train) their EAs/TAs. Indeed, Symes and Humphrey (2011) have argued that the lack of teacher awareness and understanding of the specific needs of students with ASD is the central impediment to teaching assistants (TAs) being able to adequately support students with ASD in mainstream classrooms.

Limitation of the Study

The findings from a single small-scale qualitative research study such as the one just described cannot be generalised to be representative of a larger cohort of participants dealing with the same issues in different geographic locales without clarification and supporting evidence. However, the discussion section demonstrates agreement with multiple, independently completed, small-scale qualitative research studies, reinforcing their collective voice and giving greater strength to their findings.

In conclusion, the present study adds to the existing body of ASD literature in so far as it provides a qualitative phenomenological/grounded theory interpretivist perspective on both the emotional and implementation experiences of teachers dealing with the inclusive education practice of mainstreaming students with ASD. In this regard, the present study found that adequate training is considered by Western Australian teachers to be a key component in effectively facilitating inclusive schooling. Moreover, the teachers perceived the successful implementation of inclusive education to be largely dependent on the provisioning of PD training for teachers prior to and during the period they have a student with ASD in their mainstream class.

References

Alston, J., & Kilham, C. (2004). Adaptive education for students with special needs in the inclusive classroom. *Australian Journal of Early Childhood*, *29*(3), 24–33.

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Autism Advisory Board on Autism Spectrum Disorders (AABASD). (2010). Education and autism spectrum disorders in Australia: The provision of appropriate educational services for schoolage students with autism spectrum disorders in Australia: Position paper. Retrieved from http://www.autismaus.com.au/uploads/pdfs/Education_Position_Paper_2010.pdf
- Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology*, 20, 191–211. doi:10.1080/713663717
- Avramidis, E., & Kalyva, E. (2007). The influence of teaching experience and professional development on Greek teachers' attitudes towards inclusion. *European Journal of Special Needs Education*, 22, 367–389. doi:10.1080/08856250701649989
- Barker, N.C. (2002). Foundations of qualitative methods. In C. Barker, N. Pistrang, & R. Elliott (Eds.), Research methods in clinical psychology: An introduction for students and practitioners (2nd ed., pp. 72–93). Chichester, England: Wiley.
- Barnard, J., Prior, A., & Potter, D. (2000). Autism and inclusion: Is it working? London, UK: National Autistic Society.
- Bednall, J. (2006). Epoche and bracketing within the phenomenological paradigm. *Issues in Educational Research*, *16*, 123–138. Retrieved from http://www.iier.org.au/iier16/bednall.html
- Blatchford, P., Bassett, P., Brown, P., & Webster, R. (2009). The effect of support staff on pupil engagement and individual attention. *British Educational Research Journal*, 35, 661–686. doi:10.1080/01411920902878917
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3, 77–101. doi:10.1191/1478088706qp063oa
- Conroy, M.A., Asmus, J.M., Sellers, J.A., & Ladwig, C.N. (2005). The use of an antecedent-based intervention to decrease stereotypic behavior in a general education classroom: A case study. *Focus on Autism* and Other Developmental Disabilities, 20, 223–230. doi:10.1177/10883576050200040401
- Dey, I. (1993). Qualitative data analysis: A user-friendly guide for social scientists. London, England: Routledge.
- Dybvik, A.C. (2004). Autism and the inclusion mandate: What happens when children with severe disabilities like autism are taught in regular classrooms? Daniel knows. *Education Next*, *4*, 43–49. Retrieved from http://educationnext.org/autismandtheinclusionmandate/
- Emam, M.M., & Farrell, P. (2009). Tensions experienced by teachers and their views of support for pupils with autism spectrum disorders in mainstream schools. *European Journal of Special Needs Education*, 24, 407–422. doi:10.1080/08856250903223070
- Farrell, P., Alborz, A., Howes, A., & Pearson, D. (2010). The impact of teaching assistants on improving pupils' academic achievement in mainstream schools: A review of the literature. *Educational Review*, 62, 435–448. doi:10.1080/00131911.2010.486476
- Forlin, C. (2001). The role of the support teacher in Australia. *The European Journal of Special Needs Education*, 16, 121–131. doi:10.1080/08856250110040703
- Forlin, C. (2006). Inclusive education in Australia ten years after Salamanca. European Journal of Psychology of Education, 21, 265–277. doi:10.1007/bf03173415
- Gearing, R.E. (2004). Bracketing in research: A typology. Qualitative Health Research, 14, 1429–1452. doi:10.1177/1049732304270394
- Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods*, 3, 1–26. Retrieved from http://www.ualberta.ca/~iiqm/backissues/3_1/pdf/groenewald.pdf
- Harrower, J.K., & Dunlap, G. (2001). Including children with autism in general education classrooms: A review of effective strategies. *Behavior Modification*, 25, 762–784. doi:10.1177/0145445501255006
- Helps, S., Newsom-Davis, I.C., & Callias, M. (1999). Autism: The teacher's view. Autism, 3, 287–298. doi:10.1177/1362361399003003006
- Howes, A. (2003). Teaching reforms and the impact of paid adult support on participation and learning in mainstream schools. *Support for Learning*, 18, 147–153. doi:10.1046/j.0268-2141.2003.00300.x

Australasian Journal of Special Education

- Howlin, P., Gordon, R.K., Pasco, G., Wade, A., & Charman, T. (2007). The effectiveness of Picture Exchange Communication System (PECS) training for teachers of children with autism: A pragmatic, group randomised controlled trial. *Journal of Child Psychology and Psychiatry*, 48, 473–481. doi:10.1111/j.1469-7610.2006.01707.x
- Humphrey, N. (2008). Autistic spectrum and inclusion: Including pupils with autistic spectrum disorders in mainstream schools. *Support for Learning*, *23*, 41–47. doi:10.1111/j.1467-9604.2007.00367.x
- Humphrey, N., & Lewis, S. (2008). 'Make me normal': The views and experiences of pupils on the autistic spectrum in mainstream secondary schools. *Autism*, *12*, 23–46. doi:10.1177/1362361307085267
- Jennett, H.K., Harris, S.L., & Mesibov, G.B. (2003). Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. *Journal of Autism and Developmental Disorders*, 33, 583–593. doi:10.1023/B:JADD.0000005996.19417.57
- Jordan, R. (2008). Autistic spectrum disorders: A challenge and a model for inclusion in education. *British Journal of Special Education*, *35*, 11–15. doi:10.1111/j.1467-8578.2008.00364.x
- Konza, D. (2008). Inclusion of students with disabilities in new times: Responding to the challenge. In P. Kell, W. Vialle, D. Konza, & G. Vogl (Eds.), *Learning and the learner: Exploring learning for new times* (pp. 39–64). Wollongong, Australia: Faculty of Education, University of Wollongong. Retrieved from http://ro.uow.edu.au/edupapers/36/
- Leblanc, L., Richardson, W., & Burns, K.A. (2009). Autism spectrum disorder and the inclusive classroom: Effective training to enhance knowledge of ASD and evidence- based practices. *Teacher Education and Special Education*, 32, 166–179. doi:10.1177/0888406409334279
- Levy, S.E., Mandell, D.S., & Schultz, R.T. (2009). Autism. *The Lancet*, 374, 1627–1638. doi:10.1016/S0140-6736(09)61376-3
- Liamputtong, P., & Ezzy, D. (2005). *Qualitative research methods* (2nd ed.). Melbourne, Australia: Oxford University Press.
- Male, D.B., & May, D. (1997). Stress, burnout and workload in teachers of children with special educational needs. *British Journal of Special Education*, 24, 133–140. doi:10.1111/1467-8527.t01-1-00029
- Marks, D.F., & Yardley, L. (2004). *Research methods for clinical and health psychology*. London, England: Sage.
- Matson, J.L., & LoVullo, S.V. (2009). Encopresis, soiling and constipation in children and adults with developmental disability. *Research in Developmental Disabilities*, 30, 799–807. doi:10.1016/j.ridd.2008.12.001
- McGregor, E., & Campbell, E. (2001). The attitudes of teachers in Scotland to the integration of children with autism into mainstream schools. *Autism*, 5, 189–207. doi:10.1177/1362361301005002008
- McVittie, E. (2005). The role of the teaching assistant: An investigative study to discover if teaching assistants are being used effectively to support children with special educational needs in mainstream schools. *Education 3–13: International Journal of Primary, Elementary and Early Years Education, 33,* 26–31. doi:10.1080/03004270585200301
- Neuman, W. (2006). Analysis of qualitative data. Boston, MA: Pearson Education.
- O'Donoghue, T. (2007). Planning your qualitative research project: An introduction to interpretivist research in education. New York, NY: Routledge.
- Patton, M.Q. (1990). Qualitative evaluation and research methods (2nd ed). Newbury Park, CA: Sage.
- Patton, M.Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, 34, 1189–1208. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089059/
- Rose, R. (2001). Primary school teacher perceptions of the conditions required to include pupils with special educational needs. *Educational Review*, *53*, 147–156. doi:10.1080/00131910120055570
- Slee, R. (1996). Inclusive schooling in Australia? Not yet! Cambridge Journal of Education, 26, 19-33.
- Stahmer, A.C., & Mandell, D.S. (2007). State infant/toddler program policies for eligibility and services provision for young children with autism. *Administration and Policy in Mental Health and Mental Health Services Research*, 34, 29–37. doi:10.1007/s10488-006-0060-4
- Symes, W., & Humphrey, N. (2011). School factors that facilitate or hinder the ability of teaching assistants to effectively support pupils with autism spectrum disorders (ASDs) in mainstream secondary schools. *Journal of Research in Special Educational Needs*, 11, 153–161. doi:10.1111/j.1471-3802.2011.01196.x

- Taylor, M.F., & Houghton, S. (2008). Examination-related anxiety in students diagnosed with AD/HD and the case for an allocation of extra time: Perspectives of teachers, mothers and students. *Emotional* and Behavioural Difficulties, 13, 111–125. doi:10.1080/13632750802027663
- Taylor, M.F., & Marais, I. (2011). Not in my back schoolyard: Schools and skate-park builds in Western Australia. *Australian Planner*, 48, 84–95. doi:10.1080/07293682.2011.561825
- Taylor, S.J., & Bogdan, R. (1984). Introduction to qualitative research methods: The search for meaning (2nd ed.). New York, NY: Wiley.
- Wilson, J.C., & Powell, M. (2001). A guide to interviewing children: Essential skills for counsellors, police, lawyers and social workers. London, UK: Routledge.