

Views From the Trenches: Teacher and Student Supports Needed for Full Inclusion of Students With ASD

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Abstract

The current prevalence rates for autism spectrum disorder (ASD) coupled with the mandate to provide services to students with disabilities in inclusive classrooms warrants the need to examine the dynamics of inclusion for students with ASD. Focus groups were conducted with special and general educators at the elementary, middle, and high school levels to determine the needs of students with ASD in fully inclusive settings as well as teachers' needs in facilitating their students' success. The study was translational in nature by focusing on the practice and daily experiences of teachers for informing professional development. Teachers highlighted the knowledge and skills teachers need for students with ASD to fully benefit from inclusive educational placements. Those included the need to fully understand ASD, differentiation, and social support strategies for students with autism as well as the strong need for increased collaboration between general and special educators.

Keywords

autism, teacher preparation, qualitative research

The prevalence rate of autism spectrum disorder (ASD) is currently estimated to be 1 in 68 (Centers for Disease Control and Prevention [CDC], 2014), which is an increase from 1 in 88 just 2 years earlier (CDC, 2012). Meanwhile, the Individuals With Disabilities Education Improvement Act (2004) mandates students with disabilities are to be taught to the greatest extent possible with their typically developing peers (34 Code of Federal Regulations § 300.550(b)). Therefore, the number of students with ASD taught in inclusive classrooms is increasing. Although there are many benefits to an inclusive classroom, including access to general education curricula and opportunities for numerous peer interactions, the inclusive classroom can present multiple challenges for students with ASD

and their teachers. Due to deficits in social communication and interaction, navigating peer relationships and other classroom social situations can be very difficult for students with ASD (National Research Council, 2001). Even when students with ASD have average to above average cognitive skills, they struggle with school success because of challenges in social cognition (Stichter et al., 2010).

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The salient characteristics of ASD, which include deficits in social skills and communication with restricted interests and/or repetitive behaviors (American Psychiatric Association [APA], 2013), are particularly misaligned with social success in school settings. For example, in elementary school, students are often expected to participate in group work and unstructured, child-directed play activities. Macintosh and Dissanayake (2006), however, found that elementary-aged students with ASD were likely to struggle with cooperation, assertion, and self-control, as well as hyperactivity and/or internalizing behavior. Similarly, at the secondary level, students engage in group work and participate in a variety of social networks in and out of the school setting. Teachers have reported students with ASD at the secondary level are less likely than their peers to respond aloud to questions, make in-class presentations, or work collaboratively with their peers (Newman, 2007). In addition, the secondary school setting presents many other challenges, such as multiple teachers, changing schedules, and unstructured times such as lunch and the time before and after school. Even more than elementary school, middle and high school settings can be difficult for students with ASD who struggle with transitions and lack of structure. Despite federal mandates requiring students with ASD to be educated alongside their general education peers whenever possible, research suggests physical integration does not necessarily equate to full social inclusion. In fact, research indicates that the attitudes and knowledge of typically developing peers greatly influence the quality and frequency of interactions students with ASD have with their peers (E. W. Carter, Hughes, Copeland, & Breen, 2001).

Peer Relationships in the Inclusive Classroom

The social practices of peers can either integrate or isolate students with ASD. Research suggests diagnosis disclosure may affect students' attitudes regarding their peers with ASD. For example, in elementary classrooms,

students who fully disclose their diagnosis to their peer group have been found to receive more social support from peers (Ochs, Kremer-Sadlik, Solomon, & Sirota, 2001). Similarly, at the middle school level, research indicates providing descriptive and explanatory information about students with ASD to students without disabilities results in more positive attitudes toward students with ASD, compared with providing no information or giving descriptive or explanatory information alone (Campbell, 2007).

Unfortunately, research suggests students with ASD in inclusive classrooms have fewer friendships than their typically developing peers. For example, in a study of elementary-aged students with and without ASD, students with ASD were nominated fewer times as a friend by peers, had fewer reciprocal friendships, and reported poorer friendship quality (Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011). As students enter middle and high school, friendships become more selective and navigating peer relationships often becomes more complex. For students with ASD, who often already have difficulty with social relationships, developing friendships during the middle and high school years can be even more challenging. Indeed, a study of adolescent students with and without ASD in a general education drama class indicated adolescents with ASD experienced more loneliness, had poorer friendship quality in relation to companionship and helpfulness, and had lower social network status than their peers without ASD (Locke, Ishijima, Kasari, & London, 2010). Not only do some of these students struggle to develop friendships, but students with ASD across elementary, middle, and high school levels have been reported to experience alarmingly high rates of bullying victimization (Sreckovic, Brunsting, & Able, 2014). To help students with ASD establish positive peer relationships explicit instruction, targeted interventions and authentic opportunities to foster friendships are needed (E. W. Carter et al., 2014). Unfortunately, many general education teachers do not feel prepared to meet the multifaceted needs of students with ASD in inclusive classrooms.

Teacher Needs in Inclusive Classrooms

Although parents, administrators, educators, and support personnel all agree that interventions addressing the social skill deficits of students with ASD are needed if students are expected to attain increased independence and success (Brown, Odom, & Conroy, 2001; U.S. Department of Education, 2003), research suggests general education teachers do not feel prepared to implement such interventions. In fact, some general education teachers do not support an inclusive model of teaching citing their own lack of training preparation for teaching in inclusive settings (Ross-Hill, 2009). In one study, both elementary and secondary general education teachers voiced concerns about their lack of confidence teaching in an inclusive classroom and feelings of low self-efficacy in working with special education students (McCray & McHatton, 2011). Even after taking a course in inclusionary practices, the pre-service teachers stated that although the course was helpful, they still required more support in instructional strategies and understanding characteristics of students with different types of disabilities. Not surprisingly, once teachers are in the field, they voice similar concerns. General education teachers have specifically noted concerns about their lack of knowledge and training related to ASD (Finke, McNaughton, & Drager, 2009) and some even hold misconceptions related to ASD (Segall & Campbell, 2012). Self-efficacy related to teaching students with ASD will likely increase with specific training in intervention methods (Siu & Ho, 2010).

In addition to continued concerns about their lack of preparation, some teachers have noted they do not receive adequate support within their schools (Ross-Hill, 2009). Specifically, teachers have reported a desire for collaboration to support inclusion (Finke et al., 2009). Although school personnel believe collaboration between general and special education teachers is beneficial, teachers lament the lack of planning time, the incompatibility of teachers, lack of training, varying

student skill levels, and lack of administrative support (Scruggs, Mastropieri, & McDuffie, 2007). Even when teachers feel collaborative practices are present in schools, the use of such practices is not always implemented. For example, in a study of 118 special and general education teachers, 92% believed collaborative practices were present in their schools, but only 57% reported actual use of such practices (Damore & Murray, 2009). Collaboration can become especially difficult or nonexistent when teachers diverge in their philosophies of teaching students with disabilities (N. Carter, Prater, Jackson, & Marchant, 2009). It is therefore necessary to teach pre-service teachers how to engage in discussions of philosophical differences with their future teaching colleagues so they can work together more effectively (N. Carter et al., 2009). Research has found teachers who were exposed to more professional development opportunities related to co-teaching experienced significant increases in their confidence and interest in co-teaching, and they were hopeful for the potential of collaborative relationships (Pancsofar & Petroff, 2013).

Purpose

There is a dearth of empirical research related to the social support needs of students with ASD in inclusive settings from the perspective of their educators. In addition to student needs, there is little information available about the needs of their educators; such information is needed to inform intervention development and implementation in inclusive classrooms and to provide support for those educating students with ASD in the general education classroom. The purpose of this study was to analyze elementary, middle, and high school educators' perspectives of the social support needs of students with ASD educated in inclusive settings and the needs of their educators. This study was guided by the following three research questions:

Research Question 1: What are the social support needs of students with ASD taught in inclusive classrooms?

Research Question 2: What are the needs of educators who are teaching students with ASD in inclusive classrooms?

Research Question 3: What practices do teachers find successful for educating students with ASD in inclusive classrooms?

Method

Focus groups were used to better understand teachers' perspectives of the social support needs of students with ASD who were educated in fully inclusive classroom settings. A secondary focus was to explore teacher preparation practices and current strategies teachers find most helpful for successful inclusion of students with ASD. Discussions were centered on the supports, skills, and knowledge teachers viewed as important for supporting students' social success across multiple grade levels in elementary, middle, and high schools.

Procedures and Sample

Six focus groups and one interview were held over a 1-year period in one school district in a Southeastern state. The school district served approximately 7,500 students and employed slightly more than 600 educators and support staff. The district's Exceptional Children's Coordinator (ECC) recommended specific schools based on their enrollment of students with ASD. General and special education teachers ($n = 34$) who had experience with students with ASD were invited to participate in the focus groups via their school principal and the ECC. The 34 teachers came from 6 different schools, 2 at each level of elementary, middle, and high school. Participants across the school levels included the following: 10 elementary teachers in which 1 was a special education teacher; 12 middle school teachers, 2 were special education teachers; and 12 high school teachers, 4 were special education teachers and 1 was a student-teacher. The participants included 31 females and 3 males; 30 were European American, 3 were African American, and 1 participant did not disclose ethnicity. Teacher participants' ages included the following: 9 who were less

than 30 years old, 16 who were 31 to 50 years old, and 8 who were 50 and above. Their years of experience included 1 year (1), 5 to 10 years (15), and 10 or more years (18). Seventeen of the participants held bachelor's degrees and the remaining 16 had master's degrees.

The focus groups were held at the schools immediately after the school day ended. One teacher at the high school level was unable to attend the focus group at her school and requested to be interviewed by the research team. On arrival, focus group participants signed consent forms and completed a short demographic form. All focus group participants were given a case study for review and a list of questions to begin the discussion. The case study described a fictitious student named *Luke*. *Luke* was depicted as often playing and working alone, being a strict rule follower, and typically experiencing isolation or bullying by his peers.

The case study and questions were similar across elementary, middle, and high school grade levels, but varied slightly to better describe students at the varying grade levels. For example, in the elementary case study, *Luke* was described as playing alone during recess, and in the middle and high school case study, he was described as spending his morning before the bell rang alone in the library whereas other students congregated in the halls. The focus group questions were as follows: (a) How is *Luke* similar to or different from the students you work with? (b) What are your biggest concerns related to students such as *Luke*? (c) What would be most helpful to you in helping students such as *Luke* with his social skills? (d) What was or would have been helpful to you in your teacher preparation related to working with students such as *Luke*? (e) Do you have ideas about times in the day or situations in which peers could be a source of support for *Luke*? (f) Do you have ideas about best times to provide social support to students similar to *Luke* during or after the school day? Focus group participants were given a US\$25 gift card as compensation for their time. All focus groups were facilitated by university faculty or trained graduate

students using a script for the focus group facilitation. Another member of the research team attended each focus group meeting to take notes. Focus groups included four to eight participants and lasted approximately 1 hour each.

Data Analysis

All focus groups were audio taped and transcribed verbatim. A member of the research team listened to all audio tapes and reviewed each transcript to check for accuracy.

Transcripts and summaries of the focus groups were emailed to each participant to serve as a member check (Brantlinger, Jimenez, Klinger, Pugach, & Richardson, 2005; Creswell, 2008). The participants who responded did not identify any concerns with the transcripts and had no additional comments. Each transcript was read multiple times to gain familiarity with the data. The data were coded using a constant comparative method (Bogdan & Biklen, 1998; Strauss & Corbin, 1998). Themes and subcategories were generated and constantly reviewed and revised as new themes and subcategories emerged from additional focus group discussions. This constant process of organizing and reviewing data was used to group the data into discrete categories. While reviewing the data, memo writing (Charmaz, 2000) was used to identify relationships within the transcripts and help the researchers better understand the participants' perspectives regarding their students and professional development needs. Researchers read transcripts and assigned codes line-by-line. All categories were then compared and contrasted and primary content was grouped to form major themes and subcategories.

All data were coded by two members of the research team. Coders compared their categorizations of the data to serve as an inter-rater reliability index (House, House, & Campbell, 1981). Inter-rater reliability was determined by dividing the number of agreements by the number of agreements plus disagreements and multiplying by 100%. The average inter-rater reliability across the six focus groups and one

interview was 87%. If there was a disagreement in the coding, the coders discussed those disagreements to ensure a consensus coding process. Major needs and supports for students with ASD and for teacher preparation as described by practicing educators are described below.

Results

Teachers' perspectives of students' needs in inclusive classrooms, including recommendations for strategies and teacher preparation practices most helpful for assisting teachers in achieving successful inclusion of students with ASD, are outlined below. Teachers described the student and contextual characteristics of the school environment to include peer perceptions and needs, as well as teachers' needs interfering with the students' full inclusion. Presented below are the issues highlighted by teachers during focus groups, to include salient characteristics of their students with ASD, social support needs, and recommendations for changes in teacher preparation.

Child/Youth Characteristics and Needs

Teachers across all grade levels noted several key characteristics of their students with ASD interfering with their full inclusion in the school setting. Teachers addressed the diversity of ASD characteristics by stating, "Every student with autism is different—the student I had several years ago is very different from my student this year." The characteristics described ranged from social isolation to aberrant behaviors interfering with full inclusion. Teachers mentioned social support needs in the following areas: (a) social relationships, (b) social academics, (c) self-advocacy, (d) transitioning, and (e) peer-related needs.

Social-relationship needs. Across all the age levels, students were described as being socially isolated. Students in the elementary grades were noted as often being on the playground alone with very few, if any, skills to

engage peers or join in peer play. If engaged in play, students with ASD were described as engaging in a *fantasy world*. One elementary teacher described a student who was fascinated with war as always displaying inappropriate fighting behaviors. Similarly, students at the middle and high school levels were described as being disinterested in peers because they operated in a *fantasy world* or seemed to prefer the company of adults for social interactions.

Students with ASD were also described as not understanding social rules, which often contributed to their social isolation. Teachers felt strongly that their students needed to be taught to approach peers in socially appropriate ways and to engage in *small talk*. One high school teacher's comments highlighted this concern: "I have a student who speaks three different languages, but he can't communicate at all with his peers." Other characteristics interfering with the students' successful social inclusion included students who were (a) overly possessive of peers who befriended them; (b) obsessed with rules; and (c) exhibiting different or aberrant behaviors such as eating pencils and backpacks, loving pine straw, and making humming noises during class.

Aberrant behaviors often resulted in students with ASD being bullied. As a middle school teacher emphasized, "They make themselves targets for bullying because they do not know how to adapt to new situations." Teachers described peers as being very bossy over the student with ASD to the point of convincing a middle school youth to lick the bleachers in the gym because they supposedly tasted like candy. High school teachers recalled a student with ASD who ran for a student government position being made fun of and discredited as a viable candidate by his peers. Teachers often felt overwhelmed and helpless in knowing how to negotiate the social support needs of their students in inclusive classrooms. In addition to their struggles with supporting students' needs related to forming friendships and gaining acceptance, teachers also highlighted the social-academic needs of their students within the classroom.

Social-academic needs. Because students with ASD often display a rule-bound nature, teachers stressed how their students had no tolerance for peers who did not take school work as seriously as they did. As described by an elementary teacher, "He can't see past his rules. He does not understand that his rules may not be the right way for everybody." Teachers described how group work can be challenging for the students with ASD as well as their peers and teachers. Secondary teachers recalled incidents when students with ASD called their peers' names such as *idiot*, *moron*, and *stupid* when the peers did not understand academic information as quickly as the student with ASD. Due to these social-academic concerns, teachers also stressed the need for understanding and advocacy of students with ASD for them to be fully included in the school environment.

Need for self-advocacy skills. With a focus on students with ASD increasing their social competence, teachers expressed concerns about the future of students with ASD who seemed to lack self-advocacy skills. As a middle school teacher described, "He needs to be able to say 'these are my strengths and this is what I need help with.'" Teachers commented that without self-advocacy skills, these students were often misunderstood and fall behind in school because it takes teachers and peers a long time to figure out those important features of students' ASD.

Transition from one setting into the next. Teachers discussed how peers' expectations and interests change over time as students aged together. An elementary teacher explained, "The student with autism is not changing in terms of his interests and social skills like his peers—I see a wider social gap at 5th grade than when I taught 3rd grade." Consequently, transitioning into adolescence and middle and high school was a concern. As students enter middle school, their rule-bound nature interferes with the ambiguity of the adolescent social culture. The context of the changing and different school environments was highlighted by teachers as they described their

dilemmas in meeting the needs of the other students in their classrooms. Characteristics of students with ASD were not the only challenge; teachers also noted issues related to peers as a contributing factor in the successful inclusion of students with ASD.

Peer-related needs. Teachers noted how peers need to be informed about ASD to be more understanding and accepting of students with ASD. Issues regarding peers included peers not wanting to be with the student with ASD all the time to peers experiencing ostracism by fellow classmates if they were nice to the student with ASD. Clearly, teachers were overwhelmed with the conflicting demands of meeting the needs of students with ASD in their classrooms, in addition to meeting the academic and social needs of their “typical” students. The need for special education support and consultation was evident for making inclusion successful for all.

Teachers discussed how peers’ developmental expectations and acceptance changed according to grade level. Teachers described how elementary-aged peers were more understanding of the student with ASD, but with limits. One teacher explained this situation by stating, “Peers are willing to work with the child with ASD in the classroom but in social play they shy away from the student.” Another teacher explained further, “They don’t choose to sit with him at lunch or play with him—it’s like they need a break from him.”

At the middle and high school levels, teachers discussed the need for peers to be able “to walk the walk and not just talk the talk.” They described peers who were “just friends in the classroom, but not really friends.” They further explained that there were peers who joined support groups or buddy programs for the student with ASD as a *resume builder* only. Not all interactions were negative or agenda-driven, as teachers described some students who actively sought out students with ASD and tried to befriend them. Teachers, however, relayed incidences when the peers were teased and ostracized for being nice to the student with ASD. Thus, the need for building a school community of

acceptance and tolerance was emphasized. Unfortunately, both general and special education teachers noted their lack of resources and skills in meeting the unique needs of students with and without ASD in inclusive classrooms.

Teacher Related Needs for Practice and Professional Development

Given the multiple needs and characteristics of students with ASD and the peer-related issues described above, teachers shared specific suggestions about their pre-service and in-service professional development needs. Teacher informational needs included knowing more about (a) ASD and students’ individual characteristics, (b) accommodations for students’ academic and social needs within inclusive classrooms, (c) facilitation of the general social needs of students with ASD, and (d) promotion of advocacy for students with ASD.

Knowing more about ASD and students’ individual needs. General education teachers strongly expressed their need to know more about ASD and how to accommodate for students with ASD in the classroom. As a high school teacher aptly stated, “I don’t have any kind of special education background, so some training on how to work with these students is really needed.” Teachers discussed how they were baffled by the range of ASD characteristics and were unclear about how to address individual students’ personalities and needs. Relatedly, teachers lamented their teacher preparation programs for not emphasizing practical strategies for individualization in the classroom. As one teacher stated, “We spent too much time reading about students with disabilities, but not on how to structure the classroom to be individually responsive to students’ needs.” A greater emphasis on practical strategies to include students with ASD in the classroom was noted as a strong need in teacher preparation and ongoing professional development. Furthermore, teachers noted that their teacher preparation would have been more effective if they were given opportunities to

interact with students with disabilities in school settings, rather than just reading about inclusion.

Teachers highlighted the importance of understanding their students' individual learning needs at the beginning of the school year. Recommended strategies included making Individualized Education Programs (IEP) more accessible and useful. Teachers specifically noted that IEPs were too long to sift through to understand a student's individual characteristics and needs. Teachers recommended brief information outlining each student's characteristics and needs with corresponding classroom accommodations needed. A high school teacher emphasized this point by stating, "If I had had a list of helpful hints it would have been tremendously useful instead of my three to four week learning curve in trying to figure this student out." Other recommendations included systematic information sharing from previous teachers of students with ASD so teachers could learn what was helpful in the past instead of "having to reinvent the wheel."

Furthermore, elementary teachers stressed the need for collaboration between professionals to include general and special education teachers, school counselors, and school psychologists as well as parents. Thus, sharing goals and strategies that work for individual students with ASD in a collaborative manner was viewed as essential. As one teacher emphasized, "Suggestions from a skilled special education professional who understands autism is so important while he or she is working in the classroom with the target student." The traditional special education "pull-out" model of services was viewed as least helpful for both the student with ASD and his or her classroom teacher.

Accommodations related to social and academic needs. Teachers felt conflicted about when and how to emphasize students' social and academic needs within the inclusive classroom setting. A middle school teacher emphasized that teachers needed to know where to place their priorities in the classroom—in the social or academic areas—realizing that both

interfere with the student's success. A teacher noted, "I need to know how far to push him—what his limits are. I learned that he is less flexible after certain classes like gym, but it took me a while to figure that out." Another example provided by a teacher included,

If a student with ASD is working diligently but has his feet on another desk and is making weird sounds, the important thing to me is that he is working. But I often wonder should that be the real focus or should the focus be on where his feet are and the weird sounds he is making?

Teachers repeatedly emphasized knowing how and when to intervene was an important skill for them to learn.

Moreover, teachers discussed their needs in knowing the best strategies for placing students with ASD in cooperative learning groups. Teachers at the high school level stressed how they learned through experience the importance of purposeful grouping of students with ASD. They recommended that students with ASD be in honors or advanced placement classes where they are with peers who are more serious about school. A high school English teacher emphasized, "I have learned through trial and error that placing students with ASD in cooperative learning groups with peers who excel academically is best because those peers are more willing to make allowances for the students with ASD characteristics." Other teachers noted the need to sometimes give students with ASD independent assignments within a group so that the student could contribute to the group, but not have to work directly with group members at all times. Again, the support and advice from the special educator were seen as essential for assisting general educators in facilitating group work in their classrooms.

Other helpful academic accommodations included the need for structure in the students' schedule. High school teachers emphasized the need for careful scheduling for the student's school day. One teacher remembered, "I had a student with ASD who had gym before Honors English and it was a disaster!" Teachers at all levels emphasized that school

structure and routine provided “the order students with ASD need so they won’t get distracted and anxious.” Teachers noted that structuring students’ schedules required advocacy and support from the special educator as well as the school administrator.

Facilitating students’ social skills. Teachers at all levels and across disciplines expressed concerns about the lack of students’ social skills. Elementary teachers were most concerned about the social scaffolding their students with ASD needed in nonstructured activities, such as recess, library, and lunch. Elementary teachers clearly saw that their students needed help socially, but very few, if any, support services were provided to help these students interact with their peers. Special education teachers noted their high caseloads and strong emphasis on academics in students’ IEPs limiting the types of services they could provide.

Furthermore, teachers at the middle and high school levels questioned where and how social skills should be incorporated into the school day. Teachers’ questions included the following: “What academic material is not necessary so the social piece can fit in?” “How do you incorporate social skills with 27 other students and no additional classroom supports?” Clearly, teachers saw the need for students with ASD to be a part of the classroom social culture, but were puzzled about strategies to facilitate the student’s full social inclusion. The issue was further explained by their lack of understanding of students’ characteristics and needs. As a middle school teacher stated, “I find it hard to tease out whether they really prefer to be alone or if that’s a choice they make because they know they are going to be made fun of.”

Moreover, teachers expressed their strong desires to help their other students understand their peers with ASD so the students with ASD “are not dehumanized.” Thus, the issue of disclosure of the student’s autism diagnosis was a major concern. Teachers wanted to know how, when, and to whom they should disclose the information about the student’s ASD. They were particularly concerned about privacy and confidentiality issues related to

the student and his or her family. Again, special education teachers were noted as a strong source of information and support in achieving the above.

At the elementary level, teachers suggested the use of peer buddies was the best strategy to ensure all students were included and engaged. Elementary teachers, however, also emphasized that if given adequate time and resources, such as consultation from special education teachers, they could assist the student with ASD in navigating the school social culture. Contrarily, middle and high school teachers indicated that “peer buddies are more effective than a special education teacher who is trying to teach the student with ASD social skills while he or she is walking to class.” Another teacher noted, “The peer is able to break the social barrier much faster than we are in the teacher’s role in middle and high school.” Special educators noted the importance of peer support models, but also discussed their lack of time and skill in facilitating such models.

Advocacy supports. Another useful strategy described by teachers was parental and teacher advocacy for the student with ASD. The strong need for advocacy was highlighted by the following comment: “When these kids get to middle and high school, they are on their own unless they or their parents can advocate for them.” Teachers at all levels felt that parents coming to school and explaining their child’s specific needs and characteristics related to ASD was a more appropriate approach at the elementary grade levels than in middle and high school. Teachers recognized that “parents know their child more than anybody else and when parents can provide helpful tips about what makes their child tick or not, that is so helpful.” Teachers at all levels noted the most useful strategy was when parents provided a short book or information sheet describing their children’s characteristics and needs. This helped facilitate the “getting to know you” aspect of building a relationship with the student with ASD. General education teachers suggested their special education colleagues could do much in encouraging parents to take

an active role in their child's academic and social success in school.

All of the above strategies were seen as helpful for students with ASD, as well as for their teachers and peers. By knowing more about individual students and the various manifestations of ASD, general and special education teachers would be better equipped to fully include the student in the school and classroom culture. Helpful strategies ranged from social to academic supports, as well as advocacy efforts on behalf of the student. Such strategies can inform our teacher preparation curricula to create a collaborative network of general and special educators who can facilitate the successful inclusion of students with ASD.

Discussion

Results from this study illuminated the social-related challenges students with ASD experience in inclusive classrooms from teacher perspectives. Several areas of need were expressed including interventions aimed at teaching students with ASD social skills and self-advocacy skills, as well as interventions to foster friendship development and reduce bullying victimization. These issues can inform our efforts in professional preparation for general and special educators.

Implications for Teacher Professional Development

General education teachers highlighted the need for more knowledge about ASD and individualization strategies for students with ASD in inclusive settings. In particular, they noted their needs to make appropriate social accommodations for students with ASD in their classrooms. They also stressed their desires to promote peer acceptance and inclusion of students with ASD. Finally, all focus group participants (general *and* special educators) emphasized the need for collaboration to make inclusion successful.

Previous research has highlighted the importance of teachers possessing basic knowledge regarding students' disability

characteristics as well as understanding teachers' roles and responsibilities in meeting students' individualized learning needs (Allday, Neilsen-Gatti, & Hudson, 2013; Winn & Blanton, 2005). In fact, at both the elementary and secondary levels, general education teachers have noted their lack of confidence in working with special education students (McCray & McHatton, 2011). Without this basic knowledge, general educators are often overwhelmed and frustrated with meeting the diverse learning needs of students in their classrooms. Furthermore, teachers in this study highlighted the need for applied experiences in their professional preparation. Guided field experiences in classrooms with general and special educators working collaboratively in meeting students with ASD learning and social needs would be most meaningful for the pre-service professional. Research has demonstrated that guided field experiences in inclusive classes improve teacher efficacy in working with students with disabilities (Jung, 2007).

Furthermore, specific differentiation strategies to accommodate students with ASD learning needs are essential for general and special educators to implement as a collaborative team. Teachers in this study noted similar concerns as general education teachers in previous studies in relation to their lack of knowledge and training related to ASD (Finke et al., 2009; Segall & Campbell, 2012). Teachers need skills in designing and implementing classroom-based instruction based on the learning needs and interests of individual students with ASD. The IEP can be a useful document when it is condensed and focused on specific classroom modifications needed for individual students. Furthermore, general and special educators who are exposed to coursework *with* applied experiences in accommodating for individual students' learning needs are needed (Kozleski, Pugach, & Yinger, 2002). Research suggests that self-efficacy related to teaching students with ASD will likely increase when training is focused on specific intervention methods (Siu & Ho, 2010). With regard to meeting the individual needs of students with ASD, several evidence-based practices to address the

social-related challenges of students with ASD have been identified (Wong et al., 2014). Additionally, the National Professional Development Center on ASD's website (<http://autism.pdc.fpg.unc.edu>) includes a number of free resources for professional development to encourage successful implementation of evidence-based practices, including coaching resources, video modules, and implementation checklists.

Teachers also expressed the need for peer tolerance and acceptance. This is essential, as research has shown that peers' attitudes and knowledge are influential in the quality and frequency of interactions students with ASD have with their peers (E. W. Carter et al., 2001). Several disability awareness programs exist and research suggests they have improved students' knowledge about disabilities and their attitudes toward peers with disabilities (Lindsay & Edwards, 2013). Both general and special educators need to learn these strategies so inclusion can be promoted and be successful for all students.

Finally, teachers noted the importance of advocacy for students with ASD including parental and self-advocacy. Research has shown that self-advocacy skills were predictive of IEP involvement for students with ASD (Barnard-Brak & Fearon, 2012). A stronger focus is needed in special education professional development promoting advocacy for parents and students with ASD as well as other disabilities. Student involvement in IEP development could help teachers answer questions such as the ones shared in this study related to wondering whether students desired to be alone or chose to be alone because they were not sure how to be part of the group. These are important life skills for the students with ASD as well as their parents. The educators' role should be to empower parents and students to be advocates for themselves.

Clearly, teachers' current roles and the models of support needed to facilitate the successful inclusion of students with ASD have become more complex so the content and expertise from general and special education become necessary in service provision. Thus,

professional development programs should be founded on collaboration across disciplines in education. Research has indicated that interdisciplinary approaches in professional development are likely to yield more collaborative skills of professionals who have experienced interdisciplinary collaboration in their professional development (Crais et al., 2004; Pancsofar & Petroff, 2013). Interdisciplinary collaboration can be achieved through both courses and field work. In a national survey of special education faculty, however, limited to no coursework focused on collaboration across disciplines was noted (Harvey, Yssel, Bauserman, & Merbler, 2010). For true collaboration to be achieved in inclusive classrooms, interdisciplinary preparation requires "targeted efforts" to facilitate cooperation across faculty and programs integrating general and special education teacher preparation curricula.

Research Limitations and Future Research

The results of this study present several limitations and areas for future research. First, although our focus groups included elementary, middle, and high school educators, all participants were from one school district. Inclusive programming is often facilitated differently across school districts; therefore, a more nationally representative sample exploring the social challenges of students with ASD and their teachers for full inclusion in school settings is needed. Also, the focus group participants included a volunteer sample of educators. Educators may have chosen to participate depending on their previous positive or negative experience educating students with ASD in inclusive classrooms, which may have potentially biased the opinions expressed. Thus, the extent to which these findings can be generalized to a broader population is unknown.

Second, the perspectives of students with ASD and their families were not included, so it is unknown whether they feel the challenges expressed by teachers are the same obstacles they feel as students with ASD and parents.

Future research needs to investigate the perspectives of students with ASD and their parents/guardians from the pre-school to high school levels. Understanding a variety of perspectives will help determine the most effective and efficient support strategies to ensure students with ASD fully benefit from inclusive classrooms. This, in turn, can inform the professional development of both general and special educators.

Third, one focus of this study was to better understand the social-related challenges students with ASD experience in inclusive classrooms. Students with ASD may, however, likely experience academic-related challenges that could also affect their successful inclusion in general education classrooms. More research is needed on the academic-related challenges these students experience in inclusive classrooms from the perspective of their educators.

Finally, teachers expressed concern about their knowledge of providing necessary accommodations for students with ASD. Future research is needed to investigate the most effective method to provide professional development to pre-service and in-service teachers regarding educating students with ASD. Furthermore, more research is needed on the best processes and models of collaboration between special and general education teachers to support students with ASD in inclusive settings.

Conclusion

Our research focused on “views from the trenches” because we felt it was important to gain the perspectives of teachers from “where the rubber meets the road” in determining their professional development needs related to the successful inclusion of students with ASD. Such research is needed in teacher education where it is translational in nature—by allowing the practice and daily experiences of teachers guide our professional preparation efforts. Clearly, teachers often feel overwhelmed in knowing how to negotiate the learning needs of students with ASD coupled with the demands of their peers in general

education classrooms. A collaborative approach in professional development and practice is needed in which special and general education teachers as well as support personnel collaboratively problem solve drawing on their individual disciplinary backgrounds and expertise to make successful inclusion truly work for all—teachers, peers, and students with ASD.

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