

Meaningful Inclusion for Elementary Students with Autism

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Abstract

Inclusion of students with autism in elementary schools is increasing. Studies show that meaningful inclusion of elementary students with autism can have a positive impact on social and academic outcomes. This paper examines the existing research on inclusion of students with autism spectrum disorder in the general education classroom and conducts an in-depth examination of the prevalent barriers and facilitators related to this topic. In this literature review, inclusion will be defined as teaching children with special needs alongside their typically developing peers in the same environment. For the purposes of a focused discussion, five key themes were identified: [1] impact of teacher attitudes [2] social skills interventions [3] stakeholder collaboration [4] instructional practices, and [5] peer models and supplemental supports.

Keywords: social skills, autism spectrum disorder, ASD, inclusion, collaboration, high-functioning autism, equity, and engagement

Meaningful Inclusion for Elementary Students with Autism

The focal problem of this research project is the inclusion of students with autism spectrum disorder into general education classrooms without the provision of effective supports. Lack of support, resources, and knowledge on autism presents challenges for educators on how best to serve this population of students. Much of the research in this analysis indicates that many classrooms in the United States, and worldwide, lack access to effective supports that work to promote inclusion of students with autism. In this literature review, I explore what research suggests is the shift towards inclusive classrooms to include more students with varying degrees of Autism. The rationale in this research paper will discuss the focal problem, context, and purpose of this research. The literature review section will analyze five themes that emerged during the course of my analysis, specifically: teacher attitudes, social skills interventions, stakeholder collaborations, instructional practices, and peer models. My analysis will conclude with a summary of the research outcomes and key takeaways, including suggestions for future research.

Context

The Individuals with Disabilities Education Act (IDEA) of 2004 is the federal law that guarantees free appropriate public education (FAPE) is provided to eligible students with disabilities (OSPI, 2025). The research suggests that 63% of students with autism are spending 80% of their day in the general education classroom. The number of children diagnosed with ASD has increased 51% within the last 15 years. According to the Centers for Disease Control (2021), this has led to an increase in challenges for general education teachers and prompted discussion among stakeholders on the most effective ways to support this group of students'

social and academic development. Least Restrictive Environment (LRE) requires schools, to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled. Students who are impacted by autism have been placed in general education classrooms with great frequency, much of the time, without the proper support in place to make it a socially and academically effective setting. As a special education teacher working at an elementary school in a large district in a South Puget Sound County, I can speak to the experience of the number of students in kindergarten classrooms who have been diagnosed with autism, and to the lack of appropriate support and resources to make it an effective placement for the student. The barriers impacting the implementation of evidence-based practices will be addressed throughout the conversation on the topic of inclusion as it relates to elementary students with autism.

Importance

As an elementary special education teacher, the topic of inclusion is significant to me. In my role, the expectation is to provide specially designed instruction for students with autism who have been placed in general education classrooms. Given the social, sensory, and behavioral support students with autism need, the general education classroom can be an overwhelming place to work with a student but, I believe the benefits of inclusion outweigh the negative aspects. All students have the right to build meaningful peer relationships and school provides the perfect opportunity for them to engage in structured and unstructured social interactions. The purpose of this analysis is to explore the facilitators and barriers to what the research suggests is best practice when working with students with autism in the general education setting. In my current school setting, students who are impacted by autism have been placed in general

education classrooms with great frequency, much of the time, without the proper support in place to ensure that it a socially and academically effective setting. I can speak from experience regarding the high the number of students in kindergarten classrooms who have been diagnosed with autism and the barriers impacting meaningful inclusion. This will be addressed throughout the conversation on the topic of inclusion as it relates to elementary students with autism.

Focal Questions

In this paper I am going to explore what the research says in response to the following questions.

- What are the effects of teachers' attitudes on students with autism?
- How do social skills interventions impact students with autism's social and academic performance?
- What are the facilitators and barriers to successful inclusion?
- What are the most effective strategies that educators can implement to engage students with autism?
- What are the perceived positive and negative effects of inclusion for students with autism?

Literature Review

The rise of neurological and developmental disorders such as autism spectrum disorder, accompanied by the movement towards more diversity and inclusion has generated discussions on how best to serve this group of students. The literature reviewed in this paper examines the five themes that emerged throughout my research. These five themes are impact of teachers' attitudes, social skills interventions, stakeholder collaboration, instructional practices, and impact of peer models.

Impact of Teacher Attitudes

One of the first themes to emerge in the research was impact of teacher attitudes. Teacher attitudes refer to teachers' behaviors towards and beliefs about a student and their ability to succeed in the general education classroom. These behaviors and attitudes held by teachers impact what a child with autism may think of themselves and may also influence how peers view them. Many studies have examined the relationship between teachers' attitudes, the factors that influence them and how they impact students. The following mixed methods studies sought to explain the impact of teacher attitudes on students with autism, providing insight into perceived barriers, and the implications for inclusive environments. Researchers interviewed selected participants to take part in focus groups to share unique perspectives and experiences regarding inclusion of students with autism. Participants also received questionnaires which were coded and quantified, adding validity to the research process. The following collection of studies explores these key aspects of inclusion for students with autism in inclusive classrooms, addressing many of the variables that influence teachers' attitudes towards inclusion.

In a systemic review of 23 studies, Gomez-Mari examined the attitudes of primary school teachers towards inclusion, and the variables influencing them. Findings in this article also drew conclusions about the impact of teacher attitudes on students with ASD in inclusive settings, noting that "teachers' attitudes toward students with ASD are not as positive as they should be.

Gomez-Mari suggest that teachers with more knowledge are also more positive about inclusion and much of the research suggests that positive attitudes toward inclusion, especially in the case of children with special needs, are associated with different teaching and environmental

characteristics (Latorre-Coscolluela et al, (2022), and differences in priorities of importance of outcomes (Petrina et al, 2017) agree with this assessment.

Low et al. (2022) conducted a similar study utilizing a mixed methods approach in 12 urban schools in Malaysia but specifically measured the attitudes of special education teachers. The survey instrument included four sections, background information of participant, knowledge on ASD, attitudes towards educational inclusion and societal attitudes. The results revealed that societal attitudes had a strong predictive power on the special education teachers' attitudes towards inclusive education for students with ASD, reflecting not only a need for additional training on ASD for educators, but changed attitudes towards inclusive education for students with ASD as initiated at a larger community level. The next section will include research that compares two models of education and the impact each has on elementary students with autism spectrum disorder.

Petrina et al. (2022) used data collected as part of a larger multiyear study in Australia, examining the efficacy of two different models for education service delivery for students with ASD. The first model of education service delivery was a special education class, segregated but within the mainstream building. The second model was an inclusion setting in which students with autism were supported. Like the participants in the Low, and Gomez-Mari studies, Petrina et al.'s (2017) participants were general education teachers, special education teachers and parents. The focus was on investigating perceptions of the importance of friendships in comparison with other outcomes for students with ASD and other neurodivergent disorders. Researchers analyzed the 5-point rating scale data collected from the large sampling of participants and though some results were mixed, they concluded that the data suggested that

general education teachers might be less sensitive to the needs of students with ASD, placing more emphasis on their academic outcomes versus social deficit areas known to be present in students with autism.

This lack of alignment in perceptions of the importance of friendships, social skills, social development, and intellectual and academic skills highlights the need for schools to further examine stakeholder collaboration and explore additional strategies of engagement and support behavioral challenges. The research suggests that teacher attitudes play a key role in the successful inclusion of students with autism in the general education classroom and address the variables that influence attitudes towards inclusion. Given that there are many stakeholders involved in programs of inclusion, gaining the perspective of all stakeholders is critical. Two studies looked specifically at the perspective of teachers' assistants. Teachers' assistants, also known as para educators, work with students with autism in different settings in schools. Page & Ferrett, (2018) examined the perspectives of teachers' assistants as they related to inclusion of students with autism. Like the participants in similar studies, Page & Ferret noted that teachers assistants experienced

Many of the studies examined the impact of teacher attitudes, but few examined the effects of pre-service teachers' attitudes, as teacher prep programs seem a good place to start preparing teachers for the growing number of students with autism. Srivastava (2017) investigated teachers' attitudes, level of knowledge and teaching methods used to engage students in the general education classroom. They collected qualitative data from 115 participants from primary school teachers in India and noted that teachers hold neutral attitudes about inclusion of students with autism and though found that their knowledge of ASD was low,

their knowledge of effective teaching strategies for student with Autism was surprisingly high, given that their lack of knowledge about autism was low. The next theme discusses the impact of social skills interventions as it relates to students with autism in inclusive classrooms.

Social Skills Interventions

The next theme in this discussion is social skills interventions. Children with ASD share difficulties in three fundamental areas: social interactions, communication and repetitive patterns of behavior and interest Rose et al. (2022). Social skills training interventions target these deficit areas which are attributed to autism, affecting students' ability to engage with peers or access academic content. Several studies have been conducted to examine the impacts of social skills training on students with autism. The following group of mixed method studies examined the outcomes of social skills interventions on primary aged school children with autism spectrum disorder in the general education with some similar and divergent findings.

Silveira-Zaldivar and Curtis (2019) took a closer look at the perceived barriers limiting the implementation of evidence-based practices to support students with autism in the general education setting. In their study, qualitative and quantitative data were collected utilizing semi structured interviews and focus groups of inclusion stakeholders which included parents, special education and general education teachers, speech language pathologists, and occupational therapists and counselors. Questions for the panel included: [1] What are some of the evidence-based social skills interventions for students are you aware of? [2] In your opinion, what are some of the evidence-based social skills interventions currently being implemented in your district for students with High Functioning Autism in inclusive settings? [3] What are some of the barriers to implementing EBP that you have encountered? [4] What resources and strategies

are necessary to consistently implement Evidence-Based Practices (EBP) for students with High Functioning Autism? The remainder of the focus groups' time was spent viewing a presentation by the primary researcher, noting the impact of social skills on behavior, academic achievement, mental health, relationships, and adult outcomes.

Social skills training is intended to address students' deficit areas like communication, relationship skills and adaptive skills. Many of the studies in this section examined the effectiveness of social skills training on students with autism spectrum disorder, particularly in an inclusive classroom setting. A large-scale study of 280 elementary aged children with ASD, Ismail et al. (2021), used a mixed methods approach to investigate intervention outcomes of social skills training for students with ASD. Researchers looked at studies that used a variety of interventions including peer-mediated interventions, video-based interventions, and packaged interventions, researchers then extracted and assigned to categories related to stated research questions and other important components of the research. In the studies included in Ismail et al. 81% reported positive outcomes among students with ASD.

However, because social initiations are so critical to the functional impact of social skills training, Rose et al. (2009) suggested that social skills also be implemented in a group setting, so that students with ASD can have the opportunity to practice newly learned skills in a structured or semi structured functional setting, such as recess or structured play centers in a kindergarten classroom. For Rose's study, a parental focus group was utilized to allow for in depth exploration of the intricacies of complex issues. The 31 participants were requested to complete the questionnaires at the set times, (pre, post and review). The prequestionnaire allowed the parents to rate their child's current level of difficulties across the areas of anxiety; depression,

aggression; withdrawal; poor self-esteem/low confidence, social difficulties; communication difficulties and “other.” The post questionnaire allowed parents to rate their child on any changes they had noticed across several social skill areas, including their ability to start conversations. The questionnaires were followed by a quantitative analysis of each. The outcome of this study suggests that the implementation of social skills training programs positively impact students’ level of engagement with peers, including social initiations, (Ismail et al., (2022), Williams et al., (2006) and is also consistent with the findings in Locke et al. (2017), Kasari et al. (2021), and Dean et al. (2021) who utilized peer mediated social skills training in inclusive settings, with the consideration of malleable factors to improve social and academic performance.

In a study that both supports and challenges the previous articles' findings, Sabey et.al, (2020) analyzed the impact of social skills interventions on three students with autism. The researchers looked at three case studies in a rural setting in a mainstream classroom in the United States. Social skills were implemented over the course of a few weeks and researchers collected post intervention data via direct playground and cafeteria observations. Researchers’ findings indicated that, post interventions, students with ASD had an increase in more socially acceptable behaviors. Although increasing evidence supports the use of social skills training to improve social performance, little evidence has demonstrated that this improved performance improves the quality of the social lives of individuals with autism.

Silveira-Zaldivar & Curtis reported that less than 10% of school-based interventions for students with autism are evidence based, and explicit instruction in expected and unexpected social behaviors could help to limit socially unacceptable behaviors (Dean & Chang, 2021; Williams et al., 2007). The research suggests that one such evidence-based practice is social

stories. Social stories are short stories that provide students with ASD, examples of social situations and appropriate ways to react in them. Karkhaneh et al, (2010) believed that there are benefits to social stories for teaching new, prosocial skills and deterring behavior that negatively impacts school performance and social situations. In their comprehensive qualitative analysis on sixteen eligible controlled trials sifted from relevant electronic databases, five of the six trials showed statistically significant benefits. A variety of outcomes related to social interaction, including increased outcomes of tasks after implementation of social stories, game playing skills, story comprehension, generalized social comprehension, facial emotion learning, labelling, social skills, aggressive behavior, and improved communication skills. Dean et al., (2021) utilized a systemic review of social skills interventions in inclusive classrooms. Post observations were categorized and quantified, and the research concluded that social interventions were found to improve social outcomes for students with autism as it relates to inclusion.

The impact of targeted social skills interventions through explicit instruction for school aged children with autism is evident in much of the research in this project. As stated previously, profound deficits in social skills and communication are some of the core underlying features of autism. The inability or reluctance to initiate social situations is also a key feature of autism. Students with autism do not have the skills to initiate peer relationships, and communication deficits and sensory needs, such as stimming, make it challenging to maintain (Frie2022; Han & Cumming, 2022) because social deficits are a core feature of autism, explicit instruction in deficit areas is key component to a successful program for a student with autism.

In their broad, systematic search of 14 published empirical research and unpublished dissertation studies of group-based social skills training programs for children diagnosed with autism, (Williams et al. 2016) findings concluded that though social study skills may have a positive impact on students with autism spectrum disorder, this study suggested that development and recommendations that will address deficit areas require a structured manual-based curricula for replication and fidelity, the use of random controlled groups whenever possible, for the sake of validity and identification of a primary outcome. Though this article was outside of my desired time, 2006, it reflected a need for deeper research of the time, on the impact of social skills for students with autism, addressing core deficits, such as social reciprocity.

Peer social groups are another key component of a social skills program. Rose (2009), believed that the data reflected an increase in prosocial behaviors for the target research group of students with autism, ages 6-16. This researcher used data collected from a mixed methods study, which relied heavily on qualitative findings from parental focus groups, direct/indirect observations and pre and post assessments to provide evidence of improving prosocial skills in their 5-week study. Rose focused on two research questions: [1] Is participation in a social skills group beneficial for children/adolescents with autism from the perspectives of child, parent, and facilitator? [2] Are any notable improvements reported in relation to their ability to communicate or interrelate socially? Though the research from the parent rating scale concluded that most of the social skills the children had, stayed the same after the social skills interventions, in contrast to that, several parents did rate their child as having improved in at least one area.

Social skills training is a critical component to successful inclusion. Primary aged children with autism are at risk of peer rejection and addressing these deficit areas of development will provide more opportunities for students with autism to engage in meaningful peer friendships, and the most valuable reason for inclusion. Stakeholders of inclusion programs need to collaborate effectively and consistently to be able to implement social skills programs. The significance of stakeholder collaboration is discussed in the next section.

Stakeholder Collaboration

A third theme that emerged from the literature was stakeholder collaboration. Stakeholder collaboration refers to the collective insights and cooperative relationships among members of a group or team. Students with autism who have been mainstreamed into general education classrooms require the support of a collaborative team to be successful. Stakeholders include parents, special and general education teachers, occupational therapists, and speech language pathologists, among others. If a student has additional challenges to accessing the curriculum or classroom, like hearing devices or visual impairments, more team members will be needed for effective collaboration. The following collection of research explores the impact that stakeholder collaboration has on social and academic success of students with autism in an inclusive classroom setting from various stakeholder perspectives.

Most of the research in this literature review references collaboration of stakeholders as key to the successful inclusion of students with autism. The benefits of the collaborative process are evident in several studies. Many of the studies gathered data from what teachers perceived to be barriers and facilitators to successful collaboration.

Schultz et al. (2016) utilized a qualitative study comparing the perceptions of the teacher and parent collaboration process. Researchers gathered data specifically from classroom teachers and special education teachers, looking to gain their perspectives. Through semi-structured interviews and focus groups, several issues emerged. Some of the thirty-four teachers had concerns about parents' lack of involvement in their child's education program. Several teachers also agreed that the need for support from parent was critical in the social development of their child. Several teachers' perceptions of the collaborative process noted over involvement of parents could be problematic. Many teachers felt that over involved parents have an unrealistic expectation of what schools can provide for their child with autism. However, all the teachers in this study stressed the importance of parental advocacy and agreed that parent and teacher collaboration would provide students with more opportunities for success in general education.

Vlcek et al. (2022) and a team of Australian researchers, used a qualitative online study to examine the experiences stakeholders had with inclusion of students with autism from the perspective of teachers, parents and allied health professionals. Participants in the research included three diverse groups of 41 teachers, 44 parents and 44 allied health professionals. Researchers recorded 129 responses and thematic data emerged which described the barriers and facilitators of successful inclusion and compared perspectives of stakeholders regarding the significance of the collaborative process. Researchers determined that the most significant reason to be to address challenging behaviors of a students. However, all participants agreed that collaboration should be an ongoing proactive process and not a crisis response to behaviors of a student.

Vlcek, et al (2020) also reported that their study emphasized that the team's collaboration was paramount to meeting the needs of the students through improving each care provider's skills and knowledge. Consistency across environments is key. As similarly noted in Silveira-Zaldivar & Curtis (2019), collaboration opportunities with support staff that have expertise in autism is lacking, particularly in larger schools with increased student populations.

Families as stakeholders is a critical component to the success of a student in an inclusion program. Several of the studies addressed the facilitators and barriers of successful inclusion. Roberts et al. (2016) sought the perspective of stakeholders in the collaborative process, including that of parents. Roberts conducted a comprehensive database search of stakeholders' perspectives from 23 studies. Aside from utilizing semi-structured interviews for much of the research, 4 quantitative studies were also included. Like most of the other studies on the topic of stakeholder collaboration. Stakeholders identified similar barriers and facilitators to inclusion, and it can be determined that current practice is not meeting the needs of students with autism. Vleck et al, (2019) reported that collaboration was sought and valued as an opportunity to increase an understanding of the motives behind a student's challenging behavior. Their research highlights the impact of parents' involvement in the child's individual education program consistent understandings of collaboration across teachers, parents and other providers is their classification of "positive outcomes." Effective stakeholder collaboration is a key component to meeting the needs of students with autism in inclusive classroom. In addition, instructional and behavioral supports are another significant factor in the success of students with autism in inclusion programs. These supports are discussed in the upcoming section.

Instructional and Behavioral Supports

Instructional and behavioral supports was the fourth theme that emerged in the research. Instructional and behavioral supports refer to practices educators and stakeholders implement in their learning environments to engage students in meaningful learning. Several of the studies examining instructional practices utilized a mixed methods approach, uncovering a thread of barriers and enablers of inclusion for students with autism. The following selection of mixed methods studies focused on perspectives of general education teachers, teachers' assistants, and parents of students with autism to determine the effectiveness of evidence based instructional practices in the general education classroom.

Bruck et al., utilized a two-part, mixed methods study focusing on improving teachers' knowledge of autism in mainstream classrooms. Bruck evaluated the resources and materials available to staff and teachers of students with autism and their ability to effectively use those resources with students in mainstream classrooms. Bruck and a team of Australian researchers conducted the 2-part mixed methods study, which investigated the effect of using a web-based model of practice (MoP) for professional development. The MoP contained evidence-based strategies for teacher to use in general education settings. Researchers found that teachers accessed the strategies through MoP and were able to examine the frequency of implementation across student outcomes. It was concluded that, though effective in terms of delivering appropriate strategies, the recurring issue of lack of time to train or become familiar with the MoP to truly make it affective, was a common complaint among participants.

Being intensely focused is a specific trait of children with autism (American Psychiatric Association, 2013). General education teachers who lack knowledge of autism may feel

challenged to support their learning in the general education classroom. Children with autism exhibit repetitive, ritualistic, or compulsory behavior patterns such as rocking and constant movement, or excessive talking, known as scripting. To address this concern, several studies have examined the effects of instructional and behavioral supports for general education teachers of students with autism.

Majoko, 2016, conducted a qualitative study in Zimbabwe of 21 general education teachers to address concerns regarding barriers and facilitators to successful inclusion programs. Many of the teachers interviewed, listed some of the most significant barriers to successful inclusion which included engagement in curriculum and managing challenging behaviors that can interfere with the learning environment. Effective academic and behavioral strategies can have a powerful impact on students' ability to access the general education curriculum. In addition to these strategies, the benefits of peer models are discussed in the next section as it relates to inclusion.

Impact of Peer Models

This section of the literature review explores the impact of peer models on students with autism. Much of the research indicates similar findings and several benefits of inclusion for both students with autism and typically developing peers including evidence of improved prosocial behavior, an increase in academic performance and an increase in peer friendships. Research suggests that, contrary to common belief, students who are placed in special or segregated classes away from mainstream classrooms do not experience more success or more friendships (Kurth, 2014; Santos, 2016).

To effectively analyze the differences and similarities of inclusion programs, several studies used comparison models. Reed et al. 2019 conducted a study in the United Kingdom utilizing comparison model of teaching that addressed the impact of evidence based instructional practices for students with autism in the general education classroom. Reed et al. (2019) sought to examine the effects of a pilot outreach support program known as *The Garden School*. Like several other research studies conducted in the United States, and abroad, the benefits of peer models including evidence of increased prosocial behavior, improved academic outcomes and the most significant, increased peer friendships Specialist advice and support were provided by highly skilled teachers and knowledgeable staff who work with students with autism. The principal aim of the initiative was to ensure that knowledge and capacity within the participating schools increased; leading to better outcomes for pupils with autism. Through independent rating scales and participant interviews, researchers determined that inclusion practices improved across several areas including lesson planning, effective collaboration with stakeholders and increased knowledge of autism among the staff.

Three more studies utilized comparison models to address the benefits of peer models and found similar outcomes. Santos et al., 2016; Waddington & Reed, 2016; and Fang et al, 2022 all noted greater participation is linked to positive health, developmental outcomes, and improved physical and mental health. In their 2022 study, Fang compared the participation levels of students with autism spectrum disorder in segregated special education classes to students in mainstream classrooms and found that children with ASD in inclusive educational settings demonstrated a higher level of involvement with classroom activities and peers.

Settanni et al. (2023) also found that students who are segregated from their general education peers have fewer friendships, have been less accepted and experienced stigmatization more. Their small study in the United States looked at improving typically developing peers' attitudes toward autistic students. Settanni et al. conducted a mixed method review to analyze peers' attitudes towards their peers with autism and found that, like teachers' attitudes, they reported more negative attitudes towards peers with autism. In contrast, the study also found that students who had more experience with autistic individuals reported more positive attitudes, in contrast, students who had more experience with autistic individuals reported more positive attitudes.

Summary

Students with autism have been mainstreamed into the general education classroom in increasing numbers. The research in this analysis demonstrates that there are several contributing factors to the success of students with ASD in general education settings: teacher attitudes, social skills interventions, stakeholder collaboration, instructional practices and peer models and supports. The literature suggests that by providing these evidence-based practices and interventions for primary aged students with autism spectrum disorder improves their social and academic outcomes. There were also several gaps in the research regarding peer models and supplemental supports. There was less research, in my analysis, on the impact of peer models and supplemental supports such as para educators. Given para educators' role in supporting students with autism, more research is needed regarding their impact and any barriers they may face.

Furthermore, the literature consistently identified barriers of meaningful inclusion through the practice and reflection of teachers, parents and staff working with students with

autism in the general education setting. In addition, to focus groups and surveys, stakeholders shared anecdotal evidence and their perceptions of meaningful inclusion and the multiple components that make it an effective practice.

This examination of the research on meaningful inclusion revealed perceived barriers that impact students' social and academic development. The inclusion of students with autism in mainstream classrooms has increased exponentially in recent years. General education teachers and other stakeholders are seeking effective strategies and evidence-based practices to support the successful implementation of an inclusive setting for students with autism.

Meaningful inclusion for students with autism can be achieved through evidence-based practices that address several key elements of inclusion. Improving teacher's attitudes through professional development on knowledge of autism provides general education teachers an opportunity to increase their self-efficacy. Strivastava et al. 2017; Gomez-Mari et al. 2022; noted that lack of teacher knowledge contributes to low self-efficacy, which in turn, contributes to student social and academic progress.

Research in this literature review has described the best practices for meaningful inclusion of elementary students with autism in the general education setting. The tables in the following section synthesizes the action the research suggests, the current action my elementary school is taking and additionally, what my recommendations for further action.

Action Plan

The research in this literature review described best practices for meaningful inclusion of elementary students with autism in the general education classroom. The table will focus on the five key themes from my research: [1] teacher attitudes [2] social skills interventions [3]

stakeholder collaboration [4] instructional/behavioral supports and [5] impact of peer models.

The site of practice I am examining is a large elementary school in a large district in Royal County in western Washington. The school population size is estimated to be about 600 students, pre-kindergarten-5th grade, most of diverse backgrounds.

Impact of Teacher Attitudes on Self-Efficacy

Teacher attitudes refer to teachers' behaviors towards and beliefs about a student and their ability to succeed in the general education classroom. The research highlighted several contributing factors to the teachers' attitudes towards the inclusion of students with autism: lack of knowledge, which contributes to low self-efficacy and is one of the perceived barriers to inclusion (Srivastava et al., 2017, Ballantyne et al., 2022). Additionally, research suggests that previous training, education, and experience on ASD contribute to possessing positive attitudes toward ASD (Gomez-Mari et al., 2022; Low et al., 2020; Ballentyne et al., 2022; Roberts & Simpson, 2016). Furthermore, perceptions of lack of support, which included teachers' aids or para educators, family and behavioral specialists and support teams (Stephenson et al., 2020; Latorre-Coscolluela, 2022), were all found to be contributing factors impacting teachers' attitudes. The research strongly suggests that the attitudes of teachers can significantly impact the potential success of a student with autism in the general education classroom. The table below examines research findings around teachers' attitudes in inclusive settings.

Table 1

Impact of Teacher Attitudes

Research	Practice	Recommendations
<p>The research suggests that teacher knowledge and lack of understanding of deficit areas of ASD is a key factor in determining the success of a student with autism in the general education classroom (Gomez-Mari et al., 2022; Reed, 2019, Silveria-Zaldivar, 2019; Srivastava et al., 2017).</p>	<p>There is currently no system in place in my elementary school setting that supports general education teachers’ knowledge of inclusion of students with ASD or application of evidence-based strategies that support students’ meaningful inclusion.</p>	<p>I recommend the district or administration create a professional development opportunity focusing on knowledge of ASD and effective applications of evidence-based strategies for general educators. This PD should be presented by a collaboration of special education staff, school psychologist or behavior specialist and offered in the beginning of the school year with 2 additional PDs. Additional PDs will provide general education teachers opportunities to reflect and share strategies, questions, and concerns.</p>
<p>The research suggests that teachers’ experiences and level of self-efficacy can impact successful inclusion of students with autism spectrum disorder (Page, 2018; Gomez-Mari, 2022; Leonard & Smyth, 2022).</p>	<p>In my current elementary school setting, there is no system in place to address general education teachers’ concerns regarding their level of self-efficacy in teaching students with ASD.</p>	<p>I recommend general educators building strong, collaborative partnerships with family, special education staff and other general education teachers who have successfully implemented inclusion.</p>

<p>The research suggests that several perceived barriers of educators and staff influence attitudes towards inclusion of students with ASD including lack of time, support, or training (Beamish et al., 2020; Leonard & Smyth, 2022; Gomez-Mari et al, 2022).</p>	<p>In my current elementary school setting, there is no recognized system in place to address all staff's concerns of the perceived barriers to the successful inclusion of students with ASD such as time, support, or training.</p>	<p>I recommend a staff survey examining the impact general education teachers are experiencing while attempting to support students with ASD in mainstream classrooms. Based on the outcome of survey, administration could implement a professional development day to include knowledge of ASD, co-teaching opportunities with special educators and evidence-based strategies to increase engagement.</p>
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Social Skills Interventions

Research suggests that social skills interventions that address social communication such as social stories, explicit instruction, and group social settings provide students with ASD more access to social acceptance and peer friendships in mainstream classrooms. Social skills promote the successful inclusion of students with ASD by addressing some of the core deficit areas of autism, such as social communication, and peer interactions. Most of the research studies in this analysis, reported that social skills interventions promote prosocial behaviors, decrease challenging behaviors and increase peer acceptance. The table below includes the research findings on the effectiveness of social skills interventions for students with autism, the current practices in place in my elementary school setting and what I suggest should be implemented.

Table 2

Social Skills Interventions

<i>Research</i>	<i>Practice</i>	<i>Recommendations</i>
<p>The research suggests that interventions to improve social communication such as, social stories, teaching social initiations, reading social cues, facial expressions, and body language, improved social behaviors of students with Autism and are beneficial to students' prosocial behavior (Karkhaneh et al, 2010; Rose & Anketell, 2009; Ismail et al., 2022; Han & Cummin, 2022).</p>	<p>In my current elementary school setting, students' social communication is addressed through social stories, paired with explicit instruction in deficit areas to deter unwanted behaviors such as leaving the learning area unexpectedly or reminders to keep hands to self.</p>	<p>I recommend continuing the practice of addressing social communication deficits through the development of social stories and explicit instruction in deficit areas, making sure to be extremely specific and utilize real life visuals e.g., picture of the student completing the task or expectation.</p>
<p>Studies suggested that regular access to a structured peer social groups with typically developing peers be implemented so students with ASD have the opportunity to practice newly learned skills in a structured or semi structured functional setting (Rose et al., 2009; Kasari et al., 2021; Dean & Chang 2021; Williams et al., 2007).</p>	<p>In my current placement, social skills interventions occur in a small group setting. Students are placed in groups with other students who may have social emotional and communication deficits.</p>	<p>I recommend continuing the current practice of social skills interventions delivered in small social group settings. This provides students with an opportunity to not only receive targeted instruction in deficit areas but allows them a semi structured peer group setting in which to practice new skills.</p>
<p>The research indicates that the implementation of social skills training programs using explicit instruction such as modeling, student rehearsal, feedback, and positive reinforcement, such as PBIS, can positively impact students' level of engagement with peers</p>	<p>In my current elementary school setting, social skills training is in practice for students who have been identified as having social and communication deficits through the IEP evaluation process.</p>	<p>I recommend continuing the current practice, but with more thoughtful research into appropriate curriculum and more fidelity of implementation.</p>

(Ismail et al., 2022; Sabey et al.,2020; Dean & Chang, 2021).		
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Stakeholder Collaboration

Research suggests that stakeholder collaboration is a key component to a successful inclusion program for students with autism spectrum disorder. Stakeholders refer to parents, teachers, speech language pathologists, occupational therapists, and administrators as part of a collaborative team in support of meaningful inclusion of students with autism. Research indicates that collaboration between parents and educational teams not only contributes to improved academic outcomes and increased peer friendships for students with ASD, but increased knowledge for all stakeholders, including shared objectives and alignment of goals and by providing consistency and routine across environments and educational teams (Roberts & Simpson, 2016; Stephenson et al., 2020; Vlcek et al.,). The table below shares what the research findings were, addresses what current practices are being implemented in my school and what my recommendations are with respect to the significance of stakeholder collaboration.

Table 3

Stakeholder Collaboration

<i>Research</i>	<i>Practice</i>	<i>Recommendations</i>
The research indicates that collaboration of key stakeholders: teachers, parents, school psychologists, Speech Language Pathologists and Occupational Therapists is paramount to meeting the needs of the students	In my current school setting, the collaborative process is deemed valuable by all stakeholders, however, there is currently inadequate time for collaboration outside of the daily 45 minutes of individual teacher planning	I recommend a PLC rotation for special education staff to collaborate with grade level teams and specialists such as speech language pathologists and occupational therapists at a minimum of once per week.

<p>through improving each care provider’s skills and knowledge (Vlcek et al, 2020; Petrina et al., 2017; Stephenson et al., 2021; Roberts & Simpson, 2016).</p>	<p>time and a weekly 45-minute PLC (Professional Learning Community).</p>	
<p>The research indicates that collaboration of stakeholders provides a multi-disciplinary approach to educational planning and provides opportunities to share perspectives and align goals leading to improved social and academic outcomes for students with ASD in inclusive settings (Petrina et. al., 2017; Majoko, 2016; Vlcek et al., 2020).</p>	<p>In my current elementary school placement, there is no system in place for collaboration with parents outside of what the special education team communicates to families during IEP meetings or parent-teacher conferences. The process seems different for each team, depending on the needs of the child and how strongly parents advocate for their needs.</p>	<p>I recommend continued collaboration with parents and a multi-disciplinary approach to educational planning including all stakeholders. Improve communication through phone calls, emails, and shared documents accessible by all stakeholders where information can be exchanged and questions can be responded to.</p>
<p>Research indicates that collaboration of stakeholders provides consistency across environments for students with ASD (Lynch & Ervine, 2009; Eldar et al., 2010; Stephenson et al., 2020).</p>	<p>In my current elementary school setting, special education teams, consisting of all stakeholders, meet during IEP meetings, evaluation, or reevaluation meetings. This happens at a minimum of once per year.</p>	<p>I recommend establishing positive relationships and consistent communication with family and other stakeholders in the interest of meaningful inclusion.</p>

Instructional and Behavioral Interventions

Findings in my research indicated that instructional and behavioral interventions should be implemented to appropriately support students with autism in the general education classroom. Social deficits and repetitive sensory-motor behaviors associated with ASD, can be disruptive to the learning environment. Instructional and behavioral interventions can decrease out of seat behaviors and address sensory processing differences for students with autism

spectrum disorder (Kim et al., 2024; Leinfuss, 2024), providing more opportunities for all students to access the curriculum and engage in their learning environment. Outcomes from the research include the benefits of curriculum adaptations and modifications (Kim et al., 2024; Wood, 2018), sensory breaks and opportunities for movement to decrease disruptive classroom behaviors including: restricted, repetitive behavior patterns, intense interests, and activities, (MacDonald et al., 2018; Miramontez et al., 2016; Wartroba et al., 2024) and behavioral interventions (Han & Cumming, 2022; Watkins et al., 2019).The findings concluded that implementation of the interventions in the table below, will increase students access to the general education curriculum and provide opportunities for more meaningful engagement in classroom activities.

Table 4

Instructional/Behavioral Supports

<i>Research</i>	<i>Practice</i>	<i>Recommendations</i>
The research suggests that providing students with curriculum adaptations and modifications or access to their special interests can enable more access to the curriculum, the ability to participate in classroom activities, increased intrinsic motivation and promoted independence (Lynch & Ervine, 2009; Eldar et al., 2010; Stephenson et al., 2020	In my current elementary school setting, curricular adaptations and modifications are implemented for students with ASD, due to challenges with accessing the general education curriculum. e.g., hands on activities with manipulatives such as sensory letters or numbers versus paper and pencil tasks.	I recommend getting to know students and their families to understand some of their special interests, and ways in which they prefer to learn.
The research suggests that providing students with access to sensory breaks,	In my current elementary school setting, students are given opportunities for	I recommend a minimum 3 of scheduled movement breaks for all students in

<p>visual schedules, and work system throughout the day, will promote on-task behavior (Miramontez & Schwartz, 2016; Leinfuss & Ohara, 2024; MacDonald et al., 2018; Reed, 2019; Kurth, 2014).</p>	<p>movement breaks in their classroom at the discretion of their teachers and what the schedule allows as well as physical education once per week and 45 minutes of recess per day. Students who qualify for occupational therapy services under their disability category, may receive occupational therapy support to address sensory</p>	<p>general education classrooms, and the continued support of occupational therapists for students whose individual education plan qualifies them for fine motor and sensory support services.</p>
<p>Positive Behavior Support (Han & Cumming, 2022; Positive Behavioral Interventions and Supports (PBIS) is an evidence-based, tiered framework for supporting students' behavioral, academic, social, emotional, and mental health (PBIS.org, 2025).</p>	<p>In my current elementary school setting Positive Behavior Support Interventions are implemented on a 3-tiered system. All students in the school receive tier 1 support. Students identified as needing more support through screenings and referrals from teachers and parents, can access tier 2 support, while students receiving tier 3 interventions have been identified as having the highest level of need.</p>	<p>I recommend continuing school wide positive behavior support systems for all 3 tiers, but it should be implemented with more fidelity than it is currently being implemented.</p>

Peer Models

I define peer models as typically developing students in the general education classroom who can model and facilitate expected behaviors and social interactions for students with disabilities. The research highlighted several key benefits of peer models and their impact on students with autism spectrum disorder including: increased prosocial behaviors and increased academic performance and engagement (Santos et al., 2016; Eldar, 2010) and increased peer

friendships and social status (Pinto et al., 2019; Mitchell, 2023; Lynch & Irvine, 2009), which is arguably one of the most important aspects of the elementary education experience. The impact of being accepted by peers and having the opportunity to build meaningful relationships is a critical component to inclusion and can have lifelong implications (Lynch & Irvine, 2019; Mitchell, 2023) for students with autism. It is not enough to simply place students with ASD in general education classrooms without additionally addressing deficit areas and providing structured and semi-structured opportunities to engage in meaningful contact with their typically developing peers.

Table 5

Peer Models

<i>Research</i>	<i>Practice</i>	<i>Recommendations</i>
<p>Research has found that children with autism display more prosocial behavior when among typically developing peers, than with other students with autism (Eldar et al., 2010; Dere, 2018; Fang & Patten, 2022).</p>	<p>In my current elementary school setting, students with higher functioning autism are mainstreamed into their general education classrooms with typically developing peers, much of the time with little to no classroom support outside of visuals and strongly established classroom routines. Several general education teachers at my school have a background in either behavior or special education. Their prior knowledge of deficit areas and the current practices they are implementing in their classrooms, positively impacts the students they serve.</p>	<p>I recommend students with high functioning autism remain in general education with their typically developing peers and be provided the supports addressed in this research.</p>

<p>Most of the research indicates that inclusion increases academic performance and engagement for students with autism spectrum disorders (Lynch & Irvine, 2009; Eldar, 2010).</p>	<p>In my current elementary school setting, several students with autism in general education settings have demonstrated an increased ability to engage in the curriculum as well as ability to demonstrate some understanding of content or standards.</p>	<p>I recommend continued inclusion of students with autism in the general education classroom with increased access to support with the understanding that some higher functioning students may need more support, particularly in the primary years.</p>
<p>Research indicates that inclusion creates a sense of belonging and increases opportunities for all students to have meaningful peer friendships (Mitchell, 2023; Pinto et al., 2019).</p>	<p>In my current elementary school setting, I have observed several peer friendships progress over the course of three years, which, I believe, can be attributed to some of the interventions mentioned in this research.</p>	<p>I recommend the interventions in this research be implemented to foster an environment where students with autism are provided increased opportunities for meaningful peer friendships.</p>

Summary

The research reflected in this action plan, shows that students with ASD who are mainstreamed into general education settings need several supports in place for inclusion to be meaningful and effective. Much of the literature in this analysis indicates that the impact of teacher’s attitudes, implementation of social skills interventions, stakeholder collaboration, instructional strategies and peer models can have significant impact on outcomes for students with autism spectrum disorder.

Discussion

This is a literature review about meaningful inclusion of elementary students with autism. In my literature review chapter, I found five themes: impact of teachers’ attitudes, social skills interventions, stakeholder collaboration, instructional and behavioral supports and impact of peer

models. I then looked at my school site to see what was being implemented in comparison to what research suggests.

In this section, I will go back to my rational questions, answer them, make implications for teachers and schools, provide implications for researchers, describe the overall parameters and conclude.

Discussion of Findings

In this section, I will return to the questions in the rationale which were: [1] What are the impacts of teachers' attitudes on students with autism? [2] What are the impacts of social skills interventions? [3] What are the impacts of stakeholder collaboration? [4] What are the effects of instructional and behavioral supports? [5] What is the impact of peer models

Impact of Teacher Attitudes

My first question was "what are the impacts of teachers' attitudes on students with autism"? Much of the research in this analysis discussed the impact of teacher's attitudes towards inclusion of students with autism and their self-efficacy in practice. I refer to self-efficacy as belief in one's ability to achieve a goal or an objective, with the understanding that certain steps must be taken to achieve said objective. Teachers with low self-efficacy as it relates to working with students with autism in inclusive settings, may lack knowledge of ASD, (Gomez-Mari et al., 2022; Ballantyne et al., 2022), including understanding of deficit areas. My action plan recommends that schools and districts offer staff access to professional development opportunities, focusing on knowledge of ASD and effective strategies to support this population of students. More access to knowledge of ASD through professional development opportunities improves self-efficacy and in turn, teachers' attitudes towards acceptance of inclusion and

students with autism, particularly if they have distracting classroom behaviors, such as verbal or physical stimming (Gomez-Mari et al., 2022; Low et al., 2020).

At my elementary school, there has been no professional development on inclusive practices or knowledge of ASD offered in house for general educators. There has been one professional development opportunity offered to district staff and, though the all-day event was thought provoking and engaging, it served more as a springboard to acceptance of inclusion and offered less in terms of effective classroom strategies for general education teachers. Though few practical strategies, or evidence-based practices were offered, it was a way to motivate teachers in the district to begin to embrace the inclusion of all students with disabilities.

The research also indicated that self-efficacy improves with consistent support from administration and other stakeholders (Roberts & Simpson 2016; Stephenson et al., 2020). The principal at our school, previously a kindergarten teacher, understands what it takes to lead a kindergarten classroom and providing support at every level is critical, particularly for inclusion of students with autism. However, this has been challenging to fully achieve due to lack of trained or experienced staff, and the most recent budget cuts in effect across much of the nation due to the current administration's policies. Given the current overloaded rosters, our district office and school administration recognized the devastating impact on students with special needs and were able to hire a third resource room teacher for next year. Going forward, the benefits of a third certificated staff will have a significant impact on our inclusion program. This will free up more time for each special education teacher to fully plan for individual student programs.

Social Skills Interventions

My second research question was, “what are the impacts of social skills interventions for students with autism”? Researchers examined the effectiveness of social skills intervention on students with autism and found that social skills interventions improve students’ communication skills and prosocial behavior (Karkanen et al., Rose & Anketell, 2009). Social skills interventions include several evidence-based strategies such as the use of social stories. These stories help students overcome recurring challenges including keeping hands to themselves, being brave or using the bathroom at school. Social stories are useful in that they address specific challenges from a concrete approach. The special education team at my elementary school is continually authoring social stories for individual students as a first step in addressing challenging behaviors. Research also suggests that explicit instruction in deficit social areas provides students with autism opportunities to effectively engage with peers in the classroom and on the playground (Gomez-Mari et al., 2022; Ismail et al., 2022). At my elementary school, I teach students social skills through explicit instruction. This means modeling scenarios, scripting, watching videos that model expected social behaviors, and learning how to initiate conversation with a peer. Many of my students with autism benefit from the step-by-step instructions of role playing, and many of their goals are addressed during explicit instruction. Throughout my research, studies continually suggested that access to peer groups improves students' ability to apply their newly acquired social skills in a functional way (Ismail et al., 2022; Sabey et al., 2020;).

At my elementary school, a large majority of the students that I serve have social emotional learning goals in their IEPs, and they attend a social group with peers with similar goals. This provides opportunities for students to work on goals with peers such as; identifying

personal space, learning to share materials, and working collaboratively through art or board games.

Stakeholder Collaboration

My third research question was “what are the effects of stakeholder collaboration on inclusion of students with autism?” The research examined the effects of stakeholder collaboration and found that collaboration improves stakeholders’ knowledge and skills, (Vlcek et al, 2020; Petrina et al., 2017; Stephenson et al., 2021), provides opportunities to effectively align goals for improved social and academic outcomes (Petrina et. al., 2017; Majoko, 2016; Vlcek et al., 2020), and provides consistency across environments (Lynch & Ervine, 2009; Eldar et al., 2010; Stephenson et al., 2020).

At my elementary school, all special education teachers are on overloaded rosters and so are many of the general education teachers. This has a significant impact on day-to-day planning and collaboration for students with IEPs. It is particularly impactful for students with autism, who need additional support that require thorough and effective planning. Given the lack of time educators are given to plan for instruction, schools and administrators should offer a weekly rotation of grade level PLCs [Professional Learning Communities] so that special educators and grade level educator teams can have scheduled time to collaborate. Contributing more time to planning effective instruction will improve students’ social and academic outcomes.

Instructional and Behavioral Support

My fourth research question was, “what interventions successfully support the inclusion of students with autism”? The research indicates that instructional and behavior supports for students with autism are a critical component to successful inclusion program, providing

increased intrinsic motivation, and promoting independence ((Lynch & Ervine, 2009; Eldar et al., 2010; Stephenson et al., 2020), increased on task behavior and stronger engagement (MacDonald et al., 2018; Reed, 2019; Kurth, 2014) and active participation (Han & Cumming, 2022).

At my school, special education staff work with general education teachers, occupational therapists, and speech language pathologists to create visual schedules, and sensory supports to create supportive environments that promote independence and self-regulation. Leveraging a student's special interests requires getting to know students and understanding their special interests is an effective and meaningful way to engage students in learning activities. I have turned many special interests into opportunities to meaningfully engage a student in a classroom activity.

Impact of Peer Models

My final question was, “what are the effects of peer models on students with autism”? The research shows that meaningful access to peer models in inclusive settings increases prosocial behavior and peer acceptance (Eldar et al., 2010; Dere, 2018), increases academic engagement, (Lynch & Irvine, 2009; Eldar, 2010) and most significantly, increases peer friendships (Mitchell, 2023; Pinto et al., 2019). Many inclusion programs across the United States and around the world have identified similar barriers to successful inclusion programs

At my elementary school, many of the students with autism who have been mainstreamed into general education classrooms require the evidence-based practices discussed in this body of research, but the district and school are limited in their ability to address these barriers and properly support the facilitators to meaningful inclusion. Districts need to provide

guidance on or provide effective models of inclusion programs for schools who have a high number of students with autism. Schools should provide professional development opportunities to increase teacher knowledge of autism and special education teachers should support general education teachers in their understanding of autism and how best to serve this group of students in the general education classroom.

Additional Analysis

During my analysis of the research, I noted several gaps between the findings and the current practices of inclusion of students with autism at my school. Though all the stakeholders at my school view collaboration as a key aspect of a meaningful inclusion program, there is currently a lack of collaborative planning time for teachers. Though the research suggests collaboration is one of the most critical components of a meaningful inclusion program, overloaded rosters at my school make consistent collaboration challenging. Much of the collaboration time outside of annual IEP meetings is done in short conversations in the hallways, through a string of emails or during instructional time with students.

Additionally, the lack of time for the training of para educators who work one to one with students with autism is a significant barrier and makes creating meaningful inclusion programs challenging. It is particularly challenging for those students who may have more significant communication deficits and may require the use of communication systems.

Implications for Schools and Teachers

Schools need to foster a culture of inclusiveness where every student feels accepted and valued for who they are. In addition to creating safe and supportive environments for all students, schools should be providing professional development opportunities focusing on

knowledge of autism and effective applications of classroom strategies for general education teachers. I strongly recommend a staff survey to address the perspectives of barriers and facilitators that future professional development opportunities could be based on. Schools also need to provide more opportunities for stakeholders to effectively collaborate so that multi-disciplinary teams can plan for meaningful inclusion of every student with autism.

Teachers should be provided with opportunities for professional development around inclusive practices so that they can gain confidence in their ability to deliver affective interventions for students with autism. Special education and general education teachers should be establishing and building positive relationships with families of students with autism, as collaboration with family is key to meaningful inclusion. Additionally, special and general education teachers should be co-planning social skills interventions that include explicit instruction, and peer social groups to address the deficit social areas of students with autism.

Implications for Future Research

Further research is needed to explore the impacts of inclusion on students with low functioning autism spectrum disorders. Additional research in this area could better address the needs of students of inclusion who are non-verbal or who have additional disorders. Because many students with low functioning autism have been historically excluded from society, it is critical to explore avenues of support for these students.

There was also very limited research on the impacts of inclusion on general education students. Because some educators and parents have expressed concerns about inclusive learning environments being disruptive due to distracting behaviors of students with autism, more research is needed to address those concerns.

More research is also needed to determine the effects of training in autism for pre-service teachers. Because knowledge of autism improves teachers' self-efficacy, exploring ways to support teachers' knowledge during their initial teacher training programs better prepares them for working with students with autism in inclusive classrooms.

Limitations of the Project

This review examined articles from 2007-2025 using the University of Washington Tacoma's online database's ERIC (EBSCO) and ERIC (ProQuest). Search terms used to identify articles included: inclusive education, autism spectrum disorders, impacts of inclusion, and engagement. Articles were then selected in this project for students with high functioning autism.

In addition to the study, there were also personal limitations I experienced during my research. The balance of time between my position as a special education teacher with a heavy caseload of students, many who have a diagnosis of autism and require the interventions addressed in the themes of this research project.

Conclusions

Schools are facing extreme challenges in supporting students with autism in mainstream classrooms. General education teachers feel underprepared to serve this group of students, which is impacting their social and academic outcomes.

In this literature review I examined key research on the topic of meaningful inclusion and identified five themes: Impact of teachers' attitudes, social skills interventions, stakeholder collaboration, instructional and behavioral supports and impact of peer models and have made recommendations that can address this critical issue.

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