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INCREASING THE QUALITY AND QUANTITY OF INCLUSIVE PRACTICES IN  
GRADES K-12

A MASTER'S PROJECT  
SUBMITTED TO THE FACULTY  
OF BETHEL UNIVERSITY

BY  
EMILY BENIDT WAKEFIELD

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
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BETHEL UNIVERSITY

INCREASING THE QUALITY AND QUANTITY OF INCLUSIVE PRACTICES IN  
GRADES K-12

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December 2022

APPROVED

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## Abstract

In the 21st century, many students with disabilities who might have previously received most of their education in a self-contained room or resource room are much more frequently in classrooms with typically developing peers. However, many general educators may be unprepared or unwilling to adapt to an inclusive classroom environment. This literature review looks at how special and general educators can better work together with their administrators to provide effective inclusive classrooms for all students, especially those with disabilities.

Examining teacher attitudes toward and awareness of inclusion is a necessary first step and also a major theme in the literature. Collaborative practices such as co-teaching are discussed as well as strategies for continuing education on the topic of inclusion.

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## CHAPTER I: INTRODUCTION

### Introduction

A recent study of more than 1300 American public-school teachers revealed that the average teacher is working 54 hours a week in the classroom in order to accomplish all necessary tasks to meet the needs of students as well as to fulfill other workplace requirements (Merrimack, 2022). This 54 hours per week is well beyond the traditional 40 hours for which they are compensated. Only 12% of teachers surveyed expressed satisfaction with the profession signaling a new low in the history of this annual survey. Eighty-five percent of respondents in this survey indicated that teachers' working conditions were not getting enough attention and 68% agreed that the issue of student mental health and trauma was also not getting enough attention. Bemiller (2019) stated that a lack of resources plus inadequate training often leads to teacher burnout and the preference to have students with disabilities educated in resource rooms. This may also explain in part why one in four teachers in Bemiller's study still thought resource rooms were the best environments for students with disabilities.

The Individuals with Disabilities Education Act (IDEA), the federal law that governs special education, requires that students in special education programs be in the least restrictive environment (LRE) that is appropriate for student needs (Lee, n.d.). Over time this has meant increased efforts to provide inclusive environments whenever possible. Data from the United States government state that, in 2019, nearly 65% of school-aged children in special education spent at least 80% of their time in a general education classroom which is a percentage that has more than doubled in the past thirty years (Riser-Kositsky, 2021).



## Rationale

Even K-12 teachers who have recently completed teacher licensure programs demonstrated a lack of understanding of inclusion and expressed a desire for more training (Sites et al., 2018). Bemiller (2019) found that the same phenomenon existed with teachers currently in the field. Of the teachers surveyed, 50% thought that inclusion meant the all-day presence of students with special needs in the general education classroom. However, 25% defined inclusion as having the student in the general education classroom for part of the day and the other 25% believed that inclusion was defined as having students in the same building but in a resource room for children with disabilities. Bemiller (2019) also noted that the definition of inclusion varied from school to school and that administrators sometimes made decisions regarding inclusion that were not only impractical, but stressful in the reality of the classroom as well.

Kirby (2016) explained that many teachers still view students in special education through a deficit lens. Tan and Thorius (2019) mentioned the phenomenon seen among some of their study participants as seeing disability as inability. This view limits what many educators think a child with a disability can accomplish. Evidence-based practices in academics, social emotional learning, and class management techniques may not be in widespread use. In addition, Kirby (2016) also pointed out that those in general education often view special education as happening elsewhere, or as being outside of their teaching domain. Bemiller (2019) noted that during her visits to the study focus schools, even some administrators confused inclusion with integration and thought that inclusion simply meant having students with disabilities being in the same building but not in the same classroom.

A study of 146 K-12 special educators conducted by Agran et al. (2017) examined teachers' attitudes about the extent and expanse of inclusion. Inclusion appeared to hit a major

roadblock when it came to attitudes about extracurricular activities. Seventy-four percent of respondents in this survey expressed that planning for or monitoring extracurricular activities for their students with disabilities was not part of their job description. While McHatton and Parker (2013) found that by the last survey of their study, 100% of their special and general educator participants stated that most students with learning disabilities should be in the general education classroom, percentages were noticeably lower for those from other disability categories. Among general educators, McHatton and Parker (2013) found that 75% believed that most students with behavior disorders or cognitive disabilities should be in the general education classroom. However, among special educators, only 58.3% believed that most students with cognitive disabilities should be in the general education classroom. Data from the National Center for Education Statistics (2022) stated that in 2020, 33.2% of students with autism and 46.5% of students with intellectual disabilities spent less than 40% of their time in a regular class. However, the same was true for only 13% of students with specific learning disabilities.

Kirby (2016) cited statistics from the U.S. Department of Education and expressed concern that a decade ago only 63.9% of students receiving special education graduated in contrast with the national rate of 81%. More recent statistics from 2017 showed some progress but a gap still existed. For the 2016-2017 school year, the rate of graduation for students in special education was 67.1% in contrast with a general rate of 84.6% (Data on disabilities, 2019, para. 7). A 17-percentage point gap was still present. Kirby (2016) posited that an environment that excludes and creates labels for students could be partially behind the disengagement that leads to exiting school before receiving a diploma.

## Definition of Terms

As the research suggests, there are varying definitions of inclusion at the local, national, and international levels (Bemiller, 2019). This thesis will define inclusive practices by combining definitions from Olson and Roberts (2018) as well as Van Miegheem et al. (2018). Olson and Roberts (2018) state that "...students with significant disabilities should access the general curriculum to the maximum extent possible and that the best way to provide access is in inclusive classrooms" (p. 369). However, schools need "...to include these students not only physically but also socially and academically" (Van Miegheem et al., 2018, as cited in Sannen et al., 2020, p. 2). For the purpose of this thesis, inclusion refers to students with disabilities (SWD). IDEA (2004) has outlined 13 disability categories of which SWDs may be a part (Lee, n.d.). The main disability categories in the literature review are specific learning disabilities, autism, and intellectual disabilities. However, the strategies explored in this literature are not limited in their effectiveness to these three disability areas. Other frequently used and/or relevant terms in this thesis are described below.

*Autism Spectrum Disorders (ASD)*: This neurodevelopmental disability area involves a combination of difficulties with social interaction and communication as well as repeated behaviors or activities (Minnesota Department of Education, n.d.).

*Evidence-Based Practices (EBPs)*: Vanderbilt University (n.d.) describes EBPs as academic practices that have both rigorous research behind them as well ones which have had positive impacts on children in the actual classroom.

*Individualized Education Program (IEP)*: According to Section 300.320 of the Individuals with Disabilities Act (IDEA) website for the United States government (2017), an IEP is a document that is put in place for each child with a disability who is receiving special

education services. Information in this document includes but is not limited to the student's present levels of academic achievement, annual goals, how goals will be measured, and plans for transition services.

*Intellectual Disabilities (ID)*: This disability is defined by the National Institutes of Health (n.d.) as one where there are deficits in intellectual functioning as well as challenges with adaptive behaviors such as social skills and life skills.

*Least Restrictive Environment (LRE)*: According to the Minnesota Department of Education, children with disabilities in both public and private schools must be educated to “the maximum extent possible” (n.d., point 2i) with nondisabled peers.

*Specific Learning Disability (SLD)*: This disability area comprises challenges for the student in understanding or using spoken or written language (Minnesota Department of Education, n.d.). Dyslexia, aphasia, and brain injury can fall under this category.

### **Statement of the Question**

Educators and advocates have made many strides over the years, but data from Kirby (2016) and the National Center for Education Statistics (2022) listed above demonstrate that there is still much room for growth in inclusive education. The guiding question for this thesis will be: How can K-12 schools encourage inclusive practices and create a better partnership between general and special educators by being cognizant of staff awareness and attitudes, supporting collaborative strategies, and offering continuing education? This thesis will involve a thorough review of recent literature on this topic. Several major themes emerged as the literature on inclusion was examined including attitudes and awareness, collaboration, and continuing education and resources. This thesis will first look at understanding teacher attitudes about and awareness of inclusion. It will then examine collaborative techniques that general and special

educators can undertake together. Lastly, the literature will be reviewed for ideas on continued education for inclusive strategies. There are many newer resources and supports available for increasing the quality and quantity of inclusive practices for special education students in a general education classroom.

## **CHAPTER II: LITERATURE REVIEW**

### **Literature Search Process**

Literature was located for this review through multiple searches of online library databases including EBSCOhost Academic Search Premier, Education Database, Elsevier Science Direct, ProQuest, Psychology Database, Sage Premier, as well as Taylor and Francis. The search was limited to peer-reviewed materials from 2013 to 2022. The initial key word search included “inclusive practices for general education teachers.” As themes began to emerge in articles from this initial word search, more literature on subthemes was found with searches of “teacher attitudes toward inclusion,” “evidence-based practices for inclusion,” “collaboration in special and general education,” and “co-teaching in inclusive classrooms.” This chapter will review recent literature on teacher attitudes toward and awareness of inclusion, collaborative practices, and professional development as well as other resources as they relate to inclusive classrooms.

### **Teacher Attitudes about and Awareness of Inclusion**

Understanding educators’ attitudes toward and awareness of inclusion is a vital first step toward inclusive practices (Gregory & Noto, 2018). This understanding can be established before laying a more complex groundwork of collaborative strategies and evidenced-based practices. Gaining this understanding can help administrators gauge both how willing and how prepared their educators are to embrace inclusive practices. While this thesis seeks answers on how to best build a bridge between general and special educators already in the field, the literature review also examines attitudes of preservice teachers. Preservice teachers either already have arrived or will arrive in classrooms around the country bringing their attitudes and awareness (or lack thereof) with them. Some have had more instruction on and exposure to students with disabilities

than many of their general education colleagues who have been in the field longer. Others may have had inadequate or insufficient teacher training as all teacher preparation programs are not created equally. Landon-Hays et al. (2020) noted that preservice teachers are usually more focused on discipline and classroom management than they are on learning about some of the more complex nuances of differentiation. They commented that “Often, traditional field placements are high stakes settings that don’t allow our candidates to experiment and grow with ongoing feedback” suggesting that teacher candidates aren’t given enough time to practice, reflect, and try again. (Landon-Hays et al., 2020, p. 14). Understanding the mindset of some of our newest educators can help set the tone for inservice training.

### **What Pre-service Teacher Attitudes Reveal about Guiding Current Teachers**

Stites et al., (2018) conducted research on the attitudes of those just entering the teaching profession. They conducted a mixed methods study which looked at what preservice teachers felt they needed to successfully incorporate inclusive practices. Participants comprised 120 preservice teachers from both early childhood and elementary education programs at two different universities in the United States. These preservice teachers were in both general and special education programs. Quantitative and qualitative data were collected from an online survey which included a Likert scale and open-ended questions. The researchers also included informal conversational interviews.

Of particular interest to Stites et al. (2018) were the results from the six qualitative open-ended questions. The first question asked respondents to explain inclusion. Many were not able to provide an in-depth definition of inclusion in a classroom setting. Question number two examined what participants felt had best prepared them for inclusive practices. More than half of the participants stated that their coursework had best prepared them while just over one third

indicated that internship experiences had been most impactful. Question number three delved into what concerns these preservice teachers had for teaching in an inclusive setting. There were a multitude of answers given but the two most frequently noted were meeting diverse needs (28% of respondents) and practicing equity (15% of respondents). The fourth question examined what these participants felt they needed to be more prepared for teaching in an inclusive setting. More than half signaled that they needed more experience using inclusive practices. The fifth question was not directly related to this thesis. When asked the sixth question about how to ensure the success of students with disabilities, most participants indicated that they needed training in differentiation more than anything else.

While the study of Stites et al. (2018) focused mainly on preservice teacher awareness of inclusion and inclusive practices, a smaller study by McHatton and Parker (2013) of elementary and special education majors focused more on attitudes of these incoming educators. While positive attitudes toward inclusion remained higher throughout the study among special educators, their attitudes steadily decreased over time. However, their general education major counterparts saw a steady increase in positive attitudes toward inclusion. Furthermore, the belief among special education majors that inclusion was beneficial for all declined from a starting point of 56% agreeing or strongly agreeing to 40% at the midpoint to 33% at the end of the study. However, for elementary education majors, the trajectory was the opposite with 54.8% agreeing or strongly agreeing at the start of the study that inclusion was beneficial for all. At the midpoint, elementary education majors were at 67.7% agreement or strong agreement, and by the end they were at 87.5%.

There appeared to be a disconnect for some special educators between theory and practice in McHatton and Parker's study. A similar disconnect was also noted in Ko and



Boswell's (2013) study where teachers already in the field expressed that there were discrepancies between the theory learned in pre-service or inservice sessions and the actual classroom practice. McHatton and Parker (2013) did find that there was a willingness among both the general education and the special education groups to attend additional professional development sessions so that they could better serve students with disabilities.

Olson and Roberts (2018) researched the perspectives of teacher educators in institutions of higher education on how to best prepare preservice teachers for inclusive practices. As previously mentioned in the introduction, Olson and Roberts believe that the true goal for students with disabilities is access to the general education curriculum while in an inclusive classroom. In this qualitative study, 11 teacher educators from seven states were surveyed on six topics, one of which was how they prepared their teachers to provide access to the general education curriculum. One of the teacher educators stated that many of her students have "very small expectations" for students with disabilities (Olson & Roberts, 2018, p. 371). Therefore, some of this preparation work encompassed working to alter the philosophies of these teachers to be as they challenged them to think about their perceptions of intelligence, disability, and competence. Reflecting on and discussing beliefs was encouraged as well as personalizing the topic. One teacher educator asked her students to ponder what access meant to them and what they would want and need for a high-quality education.

### **Attitudes and Awareness of Current Teachers**

In a recent peer-reviewed mixed methods study, DeVault (2020) examined the attitudes of world language teachers in Iowa toward inclusion. While similar studies have been conducted in core content areas, there has been much less research in world languages (DeVault, 2020). The author posited that attitudes are interconnected with the type and quality of instruction

implemented and sought to discover what influenced those attitudes. This study comprised a quantitative survey of 41 middle and high school teachers in Iowa. The study also incorporated a qualitative interview with eight of those 41 teachers.

Participants were selected after being recruited through social media, email, and announcements placed in statewide professional publications. Participants ranged in years of teaching experience from 0 to more than 21. For the quantitative portion, participants completed an online survey which included a background survey authored by the researcher as well as the ISHST (The Inclusion Attitude Scale for High School Teachers) which used a Likert response scale. The quantitative interview included eight teachers who had also taken the survey. The interview lasted an hour, was recorded, and was listed as a semi structured interview.

The findings of DeVault's (2020) survey revealed that most of the world language teacher participants possessed positive attitudes regarding inclusive practices with students with disabilities. Attitudes were highest in the areas of cognitive beliefs about inclusion (32 positive and 8 neutral) and in behavioral responses to inclusion (all 40 were positive). The affective responses to inclusion revealed fewer positive attitudes than the other two areas. Twelve teachers expressed positive attitudes, 22 were neutral, and six were negative. Concerns were expressed about teaching students who receive special education and related services under the category of emotional and behavioral disabilities. There were medium correlations between how high a teacher ranked their knowledge of working with students with disabilities and their positive attitudes about inclusion. More negative attitudes toward inclusion were associated with viewing both pre and inservice coursework as being useless or not very useful. Likewise negative attitudes were also more common when participants viewed administrative support to be weaker.

The researcher also found that attitudes were more positive in schools where inclusion of most, if not all, students was already the norm.

Zagona et al. (2017) looked more specifically at the inclusion of students with significant difficulties who had not yet benefited from inclusive practices in the way that their peers with milder disabilities had benefited. The researchers questioned if there was a relationship between how teachers viewed their level of preparation for inclusion and four different factors. These factors included whether they were special or general education teachers, whether they had completed university level courses or had special training in inclusive practices, and if they were given support in their schools for how to implement these practices. The second research question looked at how teachers viewed the preparation process which readied them for inclusive and collaborative practices. The authors conducted a mixed methods study which consisted of an online survey and interviews for a small portion of the survey participants. The Likert-type scale survey addressed 15 skills in the areas of inclusive education and collaboration. Respondents were recruited at faculty meetings from six different elementary schools in the same district. The sample size included 43 educators for the quantitative survey and three educators for the qualitative interview.

The survey revealed that there was a significant relationship between the type of teacher and how prepared they felt to individualize and pace instruction and adapt content standards (Zagona et al., 2017). Special educators in this study felt more prepared for these expectations than general educators. There was also a significant relationship between the type of educator and three of the collaborative skills: participating in IEP teams, decision making in instruction, and working with other professionals to implement IEP goals and objectives. Once again, special educators had a greater awareness of how to undertake these tasks than did general educators. In

addition, there was a significant relationship between teachers whose university courses prepared them for inclusive practices and their readiness to implement seven out of the eight inclusive skills listed on the survey. The results did not show a significant relationship for either the connection between university courses or school instructional support and a teacher's readiness to collaborate with other professionals. The interviews revealed concerns about meeting individual students' needs, finding the right balance between a challenging activity and needed adaptations, and learning how to collaborate with peers who do not want to collaborate or who hold negative views toward inclusive education.

Tan and Thorius (2019) unearthed some, at times, very disappointing attitudes about inclusion in their three-month study which comprised a small group of six urban elementary teachers. Their overall objective was to introduce an equity-oriented math curriculum into a professional learning community while also studying what stressors and contradictions were evoked among the participants. Teachers in this group largely held a deficit focus of their students with disabilities communicating perceptions such as students who are "low will stay low" (Tan & Thorius, 2019, p. 1012) and "nobody wants them" (Tan & Thorius, 2019, p.1015) when referring to students with disabilities bringing down standardized testing averages. After watching a video clip of students participating in a group work math activity, some participants even mocked the potential of their own students as they expressed skepticism of their students' abilities to handle such an activity. One inclusion teacher also referred to her general education students as her "babies" (Tan & Thorius, 2019, p. 1014) and suggested that the few students with severe disabilities who joined her class were more like visitors who would not get her attention. This same teacher also rationalized exclusion of students with disabilities because she didn't like them. Fortunately, in reviewing the literature of teacher attitudes, this study seems to be the

exception and not the norm. Additionally, by the end of this study Tan and Thorius (2019) acknowledged that participants' attitudes were beginning to change somewhat regarding collaborative practices between general and special educators.

Bemiller's 2019 mixed methods study focused more on both awareness and attitudes and showed that 74% of the 33 teachers surveyed felt they were not trained on how to modify curriculum but almost as many were open to training (71%). Participants specifically desired training in classroom management strategies (78%) and 74% desired instruction on the three separate topics of learning strategies for students with mild to moderate disabilities, classroom instructional strategies, and sensory processing training. Results from this research yielded the following three recommendations for not just the two schools who participated in the study but for all similar schools across the country. Bemiller suggested that schools need a common definition of inclusion, continuous training, and the ability to explore alternative educational models.

Ko and Boswell's (2013) small study of seven elementary general physical education teachers also included educators who were not only very positive about inclusive practices but also truly enjoyed their inclusive classes. Despite some of this optimism, these teachers also expressed attitudes of concern about lack of collaboration, limited pre-service training on inclusive practices, a lack of both equipment and staff, and the need for continuing collegial conversations about ideas and reflections. All participants also expressed a desire for continued learning about methods they could use in their classes with their students with disabilities.

Some of the studies in recent literature cited specific inventories which measure teachers' attitudes about inclusion (DeVault, 2020; Kisbu-Sakarya & Doenyas, 2021). One recent instrument that can be used to gauge willingness about inclusion is the Attitudes Toward

Teaching All Students scale (ATTAM-mm). Gregory and Noto (2018) conducted a study to test the validity of the ATTAM-mm, their attitudinal instrument. It was found to be both valid and reliable. Gregory and Noto (2018) noted that while there had been other scales to measure attitudes about inclusion created in the 20<sup>th</sup> century, very few had been created in the first decade of the twenty-first century. Of the scales that had been more recently created, most only assessed the attitudes of preservice teachers. Gregory and Noto's (2018) instrument is meant to be used with both preservice and in-service teachers. Furthermore, their attitudinal scale also measures all three components of attitude: affective, cognitive, and behavioral.

Gregory and Noto (2018) stated, "Measuring the attitudes of educators provides information on the areas where educators feel inadequate so that professional development, as well as educator and leader preparation can be more focused" (p. 3). Children are not the only beneficiaries of differentiated instruction. The authors of this study commented that building leadership can use this scale to pinpoint their educators' needs and differentiate from there. The inventory created by Gregory and Noto (2018) is a tool that the authors feel could be used by educational leadership as a first step before planning specific professional development on inclusive practices.

### **International Findings on Attitudes about Inclusion**

International studies on educators' attitudes toward inclusion gleaned some similar data to what was found in the United States. Kisbu-Sakarya and Doenyas (2021) conducted a larger study of 763 general and special educators in Turkey. The researchers' hope was that specific training could boost teachers' willingness to instruct ASD-inclusion classes. Educators completed a 30-hour 4.5-day training on various topics such as preparing visual activity schedules and social stories and using positive reinforcement and inclusive strategies. These

educators then completed measurement scales of their attitudes toward autism, behavioral intentions, and their self-efficacy in teaching students with ASD. Results were mixed, but the researchers did find that the specific training had increased self efficacy for both general and special education teachers. That increase in self efficacy also positively affected their behavioral intentions. However, the training did not show significant positive gains where attitudes were concerned (Kisbu-Sakarya & Doenyas, 2021).

Another international study out of the United Arab Emirates conducted by Alborn (2021) focused on Master of Education Students who were going into general or special education fields. These students were exposed to both direct instruction as well as to a guided field experience through a child case study before being interviewed about their attitudes. As opposed to the study done by Kisbu-Sakarya and Doenyas (2021), this study and training took place over the course of many weeks. The researchers saw beliefs evolve and practices improve among their 17 participants. Despite the gains for some, three participants felt a sense of overwhelm regarding the time that inclusion takes. One secondary teacher exclaimed “but how can I do all that with 30 students and no support!” (Alborn, 2021, p. 5) echoing a common concern of teachers in the United States.

Lastly, Sannen et al., (2021) published a study they had conducted on 441 elementary teachers in Belgium. While the focus was largely on collaboration, some insight on teacher attitudes emerged. The authors found that teachers in highly dense school networks (defined as having a high frequency of interactions with a larger support network) tended to hold more positive perceptions about inclusion, and they also engaged in more differentiated instruction. Conversely, teachers in highly centralized schools (defined as being dominated by only one or

several people) tended to differentiate instruction less often. However, coming from more centralized schools was not a significant factor in teachers' beliefs about diversity.

Many of these studies suggest that most surveyed participants did express positivity about inclusive education for their students with disabilities especially when they had ongoing training. However, obstacles to inclusive practices do continue to exist. Simply understanding what inclusion was as it related to special education was an area of growth for some educators (Stites et al., 2018; Bemiller 2019). Two of these studies also highlighted the importance of quality preservice training (Stites et al., 2018; DeVault 2020) and the potential negative effects of insufficient training on attitudes toward inclusion (DeVault 2020; Kisbu-Sakarya and Doenyas 2021; Landon-Hays et al., 2020). Kisbu-Sakarya and Doenyas (2021) acknowledged that their 4.5-day intensive training might have failed to change attitudes because participants did not have the time to implement the newly learned strategies and reflect on them. As a result of a study on preservice teacher attitudes toward inclusion, McHatton and Parker (2013) stressed that “Purposeful preparation of both general education and special education pre-service teachers must extend beyond the university classroom and provide both with genuine opportunities to work with and learn from each other” (p. 201). Many participants in these cited studies felt a need for more training in inclusive practices including differentiation to meet diverse needs (Bemiller 2019; Ko & Boswell 2013; Stites et al., 2018; Zagona et al., 2017). While DeVault (2020) found that attitudes toward inclusion were more positive when administrative support was stronger, Zagona et al., (2017) did not find a strong connection between instructional support and the readiness of teachers to collaborate with colleagues. Collaboration via co-teaching is often a pillar of inclusive practices.



## **Collaborative Practices**

In researching simply the theme of attitudes and awareness toward inclusion, one very prominent subtheme emerged in many of the studies: the need for collaboration. Collaborative practices are essential to inclusive education since traditionally, general educators are experts in the core content and special educators are experts in adapting that content so that it is accessible for learners with disabilities. In a study by Stites et al. (2018), one participant listed the desire to observe a teacher for a few days who was experienced in inclusive practices, and more than half of the educators surveyed stated that they needed more experience in inclusive settings. Ko and Boswell (2013) addressed their participants' wish for more time to collaborate with coworkers as well as the importance of simply communicating with them. These are all examples of collaborative practices. Beyond that though, more specific research has shown what works, what does not work, and what is needed when it comes to collaboration in inclusive settings.

## **Obstacles**

Just as it is important to be aware of what educator attitudes are toward inclusion, whether positive or negative, it is critical to understand what obstacles exist regarding successful collaborative practices. The awareness of the obstacle can serve as a red flag for administrators and teachers alike for what to try to avoid. Zagona et al. (2017) discovered that special educator participants in their study felt more prepared to collaborate than their general education counterparts did. Similarly, Stefandis et al. (2019) found that only 51% of the teachers who completed their survey had received any graduate or undergraduate training in co-teaching or coplanning. Kuntz and Carter (2021b) pointed out that general education teachers are barely involved, if at all, in implementing interventions for their students with disabilities in inclusive classes. However, in the study by Tan and Thorius (2019), special educators expressed concerns

that they were not invited to planning sessions, could not access the resources or lesson plans for co-taught classes that their general educator counterparts had, and were even left out of necessary email correspondence. Alborn (2022) listed competitive practices instead of collaborative ones as a concern. Stefanidis et al. (2019) noted that younger co-teachers on their survey held more positive beliefs about co-teaching than older co-teachers.

Lack of shared planning time was listed as an obstacle in multiple reviewed studies (Alborn 2022; Ko & Boswell, 2013; Phuong et al., 2021; Thompson et al., 2020). Participants in Ko and Boswell's 2013 study of elementary general physical education teachers noted that they needed more time to interact with colleagues in order to share, analyze, and reflect. A similar qualitative study by An and Meaney (2015) of elementary general physical education teachers revealed an appreciation for collaborative work. These teachers already worked with an adapted physical education teacher once a week, but one expressed the desire to attend the Individual Education Program (IEP) meetings of her students to be a full part of the team. They also desired more collaborative partnerships with the parents of students on IEPs. All 34 participants in the study by Able et al. (2015) stressed how critical the collaboration of general and special educators was to inclusion.

A sense that special educators and students alike were marginalized was communicated in several studies. Hackett et al. (2020) stated that some teachers felt like a "tourist" (p. 117) in a co-teaching arrangement as well as being in a "guest versus host set up" (p.118). Phuong et al. (2021) echoed this sentiment when they stated that specialist teachers can feel like an "imposition" (p. 688). Tan and Thorius (2019) expressed the concern that students with severe disabilities are often still in self-contained classes for most of the day making them more like visitors than equal members when they do join a general education class.

## **Benefits**

Despite some obstacles to collaborative practices, the literature suggests that when done correctly, collaborative practices have many more advantages than drawbacks. Two meta-analyses from the past 16 years revealed the benefits and effectiveness of collaborative practices and more specifically, of co-teaching (Scrugs et al., 2007 as cited in Altieri et al., 2015; Thousand et al., 2006, as cited in Altieri et al., 2015). Altieri et al. (2015) also conducted their own research through a survey of 82 alumni from their general and special education programs. Of the 32 general educators who stated they either co-planned or co-taught with a special educator, 73% saw increased test scores among their students and 97% stated that both behavior and participation had noticeably improved.

## **Effective Applications**

In their study on the connection between collaborative practices and beliefs about inclusion and differentiation, Sannen et al. (2021) found that teachers differentiated more when they had a wider network of colleagues with whom to consult. The fewer members in that network typically meant less differentiation among teachers. Their research suggests what many educators instinctively know: it takes the investment of all educators in a building and a “sense of ownership for all teachers” (Sannen et al., 2021, p. 9) to adapt and adopt learning models that meet the needs of all students. In fact, Olson and Roberts (2018) encouraged all school providers like custodians and kitchen staff to work together to help provide equitable access to students with disabilities.

Sannen et al. (2021) cited the work of Messiou (2019) in their suggestions for how teachers can collaborate better. Messiou’s (2019) study looked at how collaborative action research can increase inclusive practices in schools. Collaborative action research is unique in

that in some cases it brings in the students themselves as co-researchers. This three-year study included data from Spain, Portugal, and the United Kingdom in five universities and eight secondary schools and employed the lesson study approach. For this approach, educators typically work together in groups of three to plan, teach/observe, reflect on, and fine tune the lesson. In Messiou's project, students sometimes joined the educators in creating and evaluating the lesson. Educators involved in the project noted how their teaching practices changed sometimes in ways as simple yet beneficial as learning from others how to incorporate technology and student input into their lessons. Another teacher in the study noticed how the calm demeanor of one of her colleagues was positively infectious not only for the students but for that observing teacher herself. Messiou (2019) also noted that teachers noticed an increase in active student engagement in all lessons that were part of this study. Including student voices and choices further extends the "sense of ownership" of all stakeholders (Sannen et al., 2021, p. 9).

Kuntz and Carter (2021a) studied a group of general education middle school teachers to see what the outcome would be for students with significant disabilities. These teachers received support from Collaborative Planning and Consultation (CPC). There were four teacher-student pairs comprised of one general education teacher and one student with a significant disability. Two special education teachers and an intervention coach helped to support the pairs. Data on academic engagement, student interactions, teacher interactions with the focus students, and specific instructional behaviors were collected at least twice a week over the course of 11 weeks.

Kuntz and Carter (2021a) noted positive outcomes mainly in academic engagement. The four students involved in the study all increased their levels of academic engagement by at least 30 percentage points or a seven-fold gain. Some gains were made in student interactions where one student increased her peer interactions from three to 10% and her paraeducator interactions

from 46.5 to 68.1%. Two other students had minor increases with para educator interactions. One student's interactions with both peers and para educators decreased. Three of the four teachers had only minimal interaction gains with their students, but what was most noteworthy was that all four of them engaged in more deliberate instructional dialogue with their focus student than they had in the past. Prior to this intervention training these four general education teachers rarely engaged their focus students on an academic level. Regarding her focus student, one teacher commented:

Of course, I have attended her IEP meeting. I feel like a lot of times those are very general and not really specific. But [the intervention] allowed me to know specifically what she needed and how what I was doing could match up with what she needed. (Kuntz & Carter, 2021a, p. 47)

Too often, it is assumed that the IEP is the only guiding document a general educator needs to provide quality instruction to their students with disabilities. In reality, most general education teachers need and desire many more resources and supports.

Kuntz and Carter (2021a) made some additional observations and suggestions based on their research. First, they noted that the general education teachers they observed relied too much on their paraeducators. When the paraeducators were not present, teacher interaction with the focus students increased. The authors also noted that lessons need to be planned more than two days ahead of when they are presented. Lessons that were delivered a day or two after being planned typically meant that there was less interaction between the teacher and the student with significant disabilities. The authors also advocated for ongoing and scheduled overlapping planning time, resources, and a planning coach to make teacher collaboration successful.

While Kuntz and Carter (2021a) addressed collaborative practices that put the general education teacher in the lead and the special education teacher or coach in a support position, Hackett et al. (2020) addressed more effective ways for general and special educators to work together in the same classroom through a practice called co-teaching. Altieri et al. (2015) explained that co-teaching can be done in various ways such as the one teach/one assist approach, station teaching, team teaching, and parallel teaching. Hackett et al. (2020) described co-teaching as “The woefully under theorized and researched arrangement (that) involves multiple certified teachers- general and special educator- sharing a classroom space and increased spectrum of student learning needs” (Hackett et al, 2020, p. 103). Their two-year study involved four general educators, one special educator, and a paraeducator in an elementary school in the Pacific Northwest of the United States. The school desired to move from a system dependent on resource rooms to one that embraced co-teaching and inclusion. Based on feedback from the surveyed educators, Hackett et al. noted that the practice of going from a resource room to a general education room for a student was “disjointed” (p. 115) and placed the onus on the student of transitioning and understanding the two different systems. Hackett et al. referred to overall research that has found that negative behavior witnessed in resource rooms can be the result of students feeling stigmatized and isolated not only from general education but from positive peer role models.

Hackett et al. (2020) sought to find what themes emerged during the study as well as to evaluate how educator risk-taking and psychological safety factored in. They also wished to determine the level of effectiveness of the Co-Teaching Implementation Framework. In the first year of the study, despite a desire to welcome co-teaching, tensions arose, teachers returned to older and less effective practices, and one of the participating teachers quit the research study

and took a leave of absence from her job. One of the issues of greatest concern to the participants was the awkwardness for one teacher (usually the special educator) entering another teacher's class (usually the general educator). The one entering often feels unwelcome and the host educator frequently feels as if they are being watched and judged. In the researchers' field notes it was mentioned that the special educator was typically in the back of the class working only with students in special education. By the end of the first year, the special educator decided it would be better to work with her students back in the resource room.

In year two of the 2020 study by Hackett et al., the special educator had been assigned to work with a different general educator. Together they worked on more heterogeneous groupings of students to allay the stigma and labels of the special educator only working with the students with disabilities. The study participants worked on sharing their apprehensions with one another and then supporting one another as a team to work through issues. The authors of this study stress the necessity of discussing issues and concerns between general and special educators. The authors also advocate viewing special education as a service and not as a setting to avoid the "your students/my students" phenomenon.

Phuong et al. (2021) built on the "your student/my student" phenomenon by looking at the labels and stigmas that teacher collaboration can create especially among students who are both English language learners and in special education. They noted that ableism/what or who is "normal" tends to define special education and how services are delivered. Just like Hackett et al. (2020), they mention how "disjointed" those services can become which in turn hinders teacher collaboration (Phuong et al., 2021, p. 686). The authors outlined the experience of one specialist teacher (and an author of this article) who echoed what teachers said in the study by Hackett et

al. (2020). This specialist teacher worried about interfering in and interrupting the general education classrooms she supported. She also expressed feeling unwelcome. The authors insisted that successful co-teaching pairings mean being open to other ideas, being willing to serve all students, and going “from separate but unequal entities to an integrated equal unit” (Phuong et al., 2021, p. 690).

Stefanidis et al. (2018) researched which factors might positively affect a teacher’s view of co-teaching. In their study of 147 general and special educators from around the United States, the authors looked to see whether co-planning, parity, and relationship quality would each respectively affect the positive perception of co-teaching. Parity was described as both teachers feeling as if they were equal leaders of the classroom. The authors found that increased amounts of coplanning time led to a more positive perception of the co-teaching process. Stefanidis et al. (2018) also found that when the relationship between the two co-teachers was strong, the perceived level of benefits of co-teaching was higher. The authors of this study did not find a significant correlation between parity and a positive perception of co-teaching. This finding on parity conflicts with several other reviewed studies (Hackett et al., 2020; Phuong et al., 2021). However, Stefanidis et al. (2018) acknowledged that there may have been a disconnect between what the observing researchers viewed as parity versus how the co-teachers interpreted it.

Jortveit and Kovac (2021) reiterated the idea that Hackett et al. (2020) expressed about co-teaching being under researched. Jortveit and Kovac (2021) conducted qualitative research where they interviewed eight special and general educators who had been identified as exemplary co-teachers. The authors sought to understand what co-teaching practices were the most effective. Feedback from the interviewed educators in the first category included building relationships with one’s students, believing that all students both contribute to the class but also



have something to gain from being there, and sharing a common vision. Indeed, in Zagona et al.'s 2017 study, they noted that their study participants expressed uncertainty about working with colleagues who had different philosophies. The second category of feedback included "mutual recognition, shared enthusiasm and emotional flexibility in terms of teaching" (Jortveit and Kovac, 2021, p. 8). This finding coincided with Bemiller's (2019) suggestion that schools place the teachers who are most enthusiastic about co-teaching into inclusive classrooms. In addition, Jortveit and Kovac's (2021) study participants expressed the importance of being able to both give praise to and accept constructive criticism from one's counterpart. The participants in Jortveit and Kovac's (2021) study also viewed co-teaching not just as a strategy but as a beneficial resource.

### **Continuing Education and Resources**

In reviewing the literature about collaborative practices, one intangible but critical resource emerged over and over: time. The special educator participants in the study done by Tan and Thorius (2019) felt that they had less time to plan than their general education counterparts. These special educators found they often helped students or teachers during electives instead of using their assigned planning time. Another portion of a different study mirrored these results with the special educator participants feeling like they did not have the time to collaborate (Phuong et al., 2021). Lack of shared planning time was listed as an obstacle in three other studies (Able et al., 2015; Alborno, 2022; Thompson et al., 2020). In order to undertake co-teaching or the process of a collaborative practice like Lesson Study, much time is needed, and it often must be overlapping time between the schedules of two or more educators (Kuntz & Carter, 2021a). A review of the literature in this section looks at inservice topics, resources, and ideas which might help teachers make better use of the precious commodity of time as they strive

to support all learners. This section also reviews approaches that appear to be effective at increasing inclusion and engagement for students with intellectual disabilities who have some of the lowest rates of presence and participation in general education classes.

Altieri et al. (2015) noted that co-teaching most often occurs in reading and mathematics classes. It is much less common to have a co-teaching arrangement in elective courses. When co-teaching is not an option for a general or special education teacher, those educators need other guiding resources including ones which could be focused on during professional development sessions. When participants were asked in the study done by Stites et al. (2018) what they most needed to ensure the success of students both with and without disabilities, differentiation training was the most common response. The second most often selected need was “curricular resources” when respondents were asked about their students with disabilities (Stites et al., 2018, p.32). The participants in the study done by Ko and Boswell (2013) stated that they needed continued learning opportunities and hands-on experiences to learn how to better serve their students with disabilities who were in inclusive physical education classes.

### **Evidenced Based Practices**

Olson and Roberts (2018) interviewed teacher educators about various topics including which practices allowed for best access to the general education curriculum. One of three major categories that emerged was “implementation of specific evidence-based practices” (Olson & Roberts, 2018, p. 370). Some of the evidence-based strategies mentioned were direct/explicit instruction, differentiation, embedded instruction, peer supports, and inquiry-based learning. However, the most mentioned necessary practice was Universal Design for Learning (UDL) which was also cited as a useful strategy in Tan and Thorius (2019). According to Posey (n.d.), UDL is a proactive framework that allows for flexibility in how lessons are taught and in how

knowledge is demonstrated. The goal of UDL is to find a way to engage all learners by removing obstacles in the learning environment (Posey, n.d.).

### **Universal Design for Learning (UDL)**

Lowrey et al. (2017) used a narrative inquiry to determine what Universal Design for Learning (UDL) themes emerged from their survey of seven general educators in the United States and Canada. Criteria for this study included having used UDL for at least a year in a school where UDL implementation was widespread. Teachers in this study also needed to have at least one student with a moderate or severe intellectual disability in their general education classroom. Data from the National Center for Education Statistics (2022) stated that in 2020, 46.5% of students with intellectual disabilities spent less than 40% of their time in a regular class making students with intellectual disabilities some of the least included in general education.

Lowrey et al. (2017) asked the teachers nine interview questions about their use of UDL in the classroom. The authors stated, “All of the teachers shared stories about the ways in which the UDL framework allowed them to address various students’ needs, provide options, and plan on overcoming barriers in instruction and assessment through intentional planning” (Lowrey et al., 2017, p. 6). One teacher created a spreadsheet with a list of students and their respective barriers for an easy reference during lesson planning. Another teacher in the study by Lowrey et al. (2017) allowed her students voice and choice when approaching how they show their knowledge. This same teacher mentioned that sometimes the students would generate a new idea which sparked their creativity and motivated them to demonstrate their understanding of a topic. Teachers in this study also commented on the use of digital technology and peer mentors to support the learning of students with disabilities.

Beyond some of the more common strategies listed above, a review of the literature revealed some newer and/or lesser-known methods, resources, and approaches that could be useful in increasing inclusion and breaking down barriers between special and general education. As a potential option for some situations, Bemiller (2019) mentioned reverse mainstreaming where typically developing peers join resource rooms and self-contained classrooms. Bemiller also mentioned using resource rooms to support students whether they are on an IEP or not.

### **Mursion**

As previously referenced in the section on attitudes and awareness, a review of the research on inclusion revealed a disconnect between theory and practice (McHatton & Parker, 2013; Ko & Boswell, 2013). To help bridge the gap between theory and practice, Landon-Hays et al. (2020) recommended using Mursion which is a simulated learning environment. While Landon-Hays et al. studied the Mursion experience of 37 graduate students in general and special education programs, the same simulation strategy could be applied in professional development sessions for current teachers. Mursion is a virtual classroom where students participate as avatars in simulations that mimic real life classroom situations.

Data from the study done by Landon-Hays et al. (2020) showed that most participants increased their “perceived self-efficacy in explicitly explaining and modeling content between initial and final sessions” (p. 9). Half of the participants improved their ability to apply teaching strategies, and 60% became more cognizant of checking for student participation, understanding, and engagement. Most noteworthy was that 100% of the educators in the training increased their ability to adjust lessons. In their reflections, both general and special educators in this graduate program exhibited more awareness of the importance of collaborative practices.

## **Cue Cards**

After first citing previous promising research on the use of cue cards in their scholarly article, Conderman and Hedin (2015) outlined some practical applications for this inexpensive method. While their article aimed to help teachers differentiate instruction for middle school students with disabilities, many of the suggestions can be applied at other grade levels as well. The authors noted that cue cards help with memory recall, organization, self-monitoring, and even self-regulation skills if the card includes a checklist. Conderman and Hedin described the five different types of cue cards: steps-or examples-only cards, visual display cards, two-column cue cards, three column cue cards, and think sheets. The steps-or examples-only cards are simple in nature and help a student remember the steps of a process or illustrate an example of a concept. Visual cue cards, as their names suggests, allow students to connect an image with a concept. Conderman and Hedin explained that with two-column cards, students can list the steps in one column and check them off in the second column. Students can also provide an example in the second column of the step listed in the first column. Three column cue cards are similar, but as Conderman and Hedin explain, they include the step, an example, and a check off column for the student to use when they have completed the task. Think sheets allow the students more autonomy to evaluate their own learning and thinking by questioning themselves about the learning process. “Who am I writing for?” “What do I know about my topic?” and “How can I organize my ideas?” are all examples of this process (Baker et al., 2003, as cited in Conderman & Hedin, 2015, p. 5).

## **Response Cards**

Clarke et al. (2016) researched the use of response cards among students with intellectual disability (ID). Students with ID are in one of the most underserved disability areas in relation to

inclusion with only 17.3% of students spending most of their day in the general education classroom (Disabilities, Opportunities, Internetworking, and Technology, 2021). Clarke et al. (2016) cited many previous studies done on response cards but noted that their effectiveness with students with intellectual disabilities had not yet been evaluated. They wanted to see if the use of response cards would increase student participation and on-task behaviors in five 3<sup>rd</sup> grade students with both intellectual disabilities and speech language impairments. These five students were in general education science and social studies classes in the rural Midwest.

The first phase of the study conducted by Clarke et al. (2016) involved a baseline to see how many students participated simply by raising their hands. The overall mean for this first phase was 7.40% for participating through hand raising. Next, every student, both typically developing and the five with ID in the study done by Clarke et al. (2016) received picture response cards that were linked to major concepts from their unit of study. The teacher would ask a question, allow 10 seconds for students to find their card, and then ask them all to hold up their cards before confirming the correct answer. The researchers noticed that this time there was 100% participation from all five students in the study. The authors noted that for the baseline, students ranged from 70 to 99% for on-task behavior, whereas during the response card phase, students were at 100%. When completing the post intervention survey, the classroom teacher noted that not only had participation and engagement increased, but the answers provided by her students with ID were often correct. She had previously assumed they were not understanding the material. This strategy can serve as a type of formative assessment for all students.

### **Peer Tutoring**

In another study looking at those with Intellectual Disability (ID) and the use of visual cues to increase engagement, Malone et al. (2019) delved into how peer tutoring could help

support inclusive education for students with significant cognitive disabilities. Three typically developing peers and three students with cognitive disabilities participated in this study. All six students were in junior high and were supported by a paraeducator and by both a general and special education teacher. The peer tutors received training ahead of the intervention phase of the study. These tutors also received a visual checklist to prompt their partners when verbal redirecting did not work. Malone et al. recorded a 75% average increase in student engagement from the baseline phase (no peer tutor support) to the intervention phase (peer tutor support in place). Each of the three students with cognitive disabilities saw increases of engagement of 40-50 percentage points. The authors of this study also noted that the participants maintained engagement even after the intervention phase had concluded. While it was mentioned that the peer tutors received training, it was not explained what type of training the educators had in how to oversee peer tutoring.

### **The Supports Intensity Scale-Children's Version assessment (SIS-C)**

In their qualitative study, Thompson et al. (2020) also looked at how to better support students with intellectual disabilities (ID) by using a tool to discern what supports might work best with individual students. From the authors' perspective, the least restrictive environment for students with ID often ends up being a self-contained classroom. For that reason, Thompson et al. (2020) interviewed 33 teachers from six elementary schools in three states to find out how they planned individualized supports as well as to gather opinions on what they found effective and how they felt about using a "systematic problem-solving process" (p. 27). The problem-solving process to which they refer is SIS-C, or the Supports Intensity Scale-Children's Version assessment. Several of the authors of this article created the SIS-C assessment which is described by the American Association on Intellectual Disabilities (2022) as "a standardized assessment

tool designed to measure the pattern and intensity of supports that a child aged 5-16 years and older with intellectual and developmental disabilities (IDD) requires to be successful in age-appropriate community settings” (para. 1).

As they surveyed their participants, Thompson et al. (2020) found that the way the teachers planned supports for students with ID in general education settings was usually unstructured and informal. Words like “haphazard” and “piecemeal” were used to describe the current process (Thompson et al., 2020, p. 32). Participants also explained that their problem-solving techniques regarding student supports were usually reactive in nature instead of being proactive. Teachers also commented that it was usually the special education teachers who had the burden of work to complete in terms of supports. The participants felt the status quo methods were not particularly effective, and they desired a system that would give them thorough information on both the student and on the general education setting. Special educators in the study who were helping to support students in inclusive classrooms wanted to know more about the attitudes, teaching styles, and behavioral expectations of the general education teachers.

When asked to evaluate the efficacy of the SIS-C assessment, teachers in the study by Thompson et al. (2020) felt it could be a useful tool for planning supports but that it did not go far enough. However, they did support the idea of using such a problem-solving system when planning student supports. They valued a system which might include an app that would provide a “running record” (Thompson et al., 2020, p. 36) of supports for each child which would move with the child from year to year. While background information on the SIS-C and how to use it to support students is something that schools could use immediately in professional development sessions, the feedback about the app/ student profile idea from participants in the study by Thompson et al. (2020) could also be taken into consideration by school leadership.



## **Educator Feedback to Guide Future Inservices and Practices**

Just as in the study by Thompson et al. (2020), participants in Able et al.'s (2015) research wanted to know more about how teachers individualize lessons. However, this time it was geared more toward students with autism spectrum disorder (ASD). More than 30 general and special education teachers in one school district in the southern U. S. participated in this one-year study. They came from a combination of six elementary, middle, and high schools. This study focused more on the specific types of inservice training teachers desired as opposed to a particular method or resource.

Able et al. (2020) found that teachers wanted Individual Education Programs (IEPs) to be shorter, yet to include more helpful hints for the general education teachers. As was communicated in the study by Thompson et al. (2020), the participants interviewed by Able et al. (2015) wanted to be able to share helpful information between teachers. Some practical implications to consider when planning inservice sessions emerged from the ideas generated during this study. Teachers would like to know more about how and when to intervene with behaviors and how to best group students. They expressed the desire to learn more about how to scaffold social skills, how to help typically developing peers to better understand students with ASD, and how to encourage implementation of a peer buddy system as well as parent and teacher advocacy.

Phuong et al. (2021) closed their scholarly article on ableism with a list of questions for administrators to consider. Some of the most noteworthy questions involved asking administrators to reflect on inclusion as it relates to both students and teachers. They recommended that administrators make sure they fully communicate with specialist teachers about everything including often neglected topics like assemblies and absences. The authors also

asked that administrators question their educators on what their experiences with co-teaching have been like as well as what they feel they need for professional development, collaborative planning time, and support for collaborative practices. Taking this step may help to avoid the “tourist/host” phenomenon mentioned by Hackett et al. (2020) where one teacher feels like they are in charge and the other feels as if they are an outsider. One last crucial recommendation from this study was that administrators should conduct an audit on their teachers’ schedules to assure that they are being deliberate about how they are asking teachers to spend their time.

At the conclusion of their article, Phuong et al. (2021) posed some useful questions to educators asking them to examine their own beliefs on inclusion. They asked teachers to reflect on whether they were seeing the whole student or just seeing the deficit. They reminded teachers to be deliberate about how they planned and communicated with other collaborators such as co-teachers. Perhaps most importantly, they asked how teachers were self-verifying that they “have an open stance to collaboration and are open to suggestions and critique” (Phuong et al., 2021, p. 691).

This literature review sought to understand how staff working within K-12 schools could encourage inclusive practices and create a better partnership between their general and special educators. In a review of recent research on the topic of inclusion of students with disabilities, a few themes emerged in multiple studies. The prevalent themes included the importance of teacher attitude and awareness, collaborative practices, and continuing education on effective strategies.

## CHAPTER III: DISCUSSION AND CONCLUSION

### Summary of the Literature

Much of the recent literature has focused on teacher attitudes about and awareness of inclusion. These stances can both positively and negatively affect the effort to include as many children as possible in the general education classroom. Studies on the attitudes and awareness of preservice and in-service teachers were reviewed as well as several studies from other countries on the same topic. Understanding the attitudes about inclusion of preservice teachers can shed light on how to structure professional development sessions for newer teachers (Gregory & Noto, 2018). Landon-Hays et al. (2020) found that preservice teachers were often more focused on discipline than they were on differentiation. The survey conducted by Stites et al. (2018) revealed that preservice teachers desired more training in differentiation and were often unclear about what inclusion entailed. McHatton and Parker (2013) found that the special educator candidates they worked with had a higher overall positive attitude about inclusion than their general educator candidates did. However, as they carried out further sessions of their study, they noted that positive attitudes of their preservice special educators continued to decrease, whereas the reverse was true for their preservice general educators. Olson and Roberts (2018) interviewed educators who prepare their students to become teachers. Their research suggested that teacher candidates often have low expectations for their students with disabilities, so these teacher educators worked with their students on reflection and empathy exercises.

DeVault (2021) sought to discover what influenced current teachers' attitudes about the inclusion of students with disabilities. Although overly positive, attitudes of her respondents tended to be more negative when administrative support was weaker and when teachers viewed

in-service trainings on inclusion as being useless. Attitudes tended to be the most positive in schools where inclusion was already the norm. Zagona et al. (2017) found that their special educator respondents felt more prepared than general educators to adopt inclusive practices such as pacing instruction and differentiating lessons. As was the case in the 2018 study by Olson and Roberts of preservice teachers, Tan and Thorius (2019) also found that their in-service teachers held low academic expectations for their students with disabilities. Bemiller's 2019 study exposed more positive findings. While nearly three quarters of the respondents in this study did not feel prepared for inclusive practices, almost as many were amenable to in-service training to help them improve their approach. Ko and Boswell's (2013) study revealed that while their teacher respondents expressed optimism and enthusiasm about their inclusive classrooms, they expressed concerns over having access to the time, resources, and personnel support that help make those inclusive classrooms successful.

Findings from international studies on teacher attitudes about inclusion echoed many of the results from the United States. Kisbu-Sakarya and Doenyas (2021) conducted a study of general and special education teachers in Turkey and provided an intensive 30 hours of training on how to best provide inclusive education to students with autism spectrum disorder (ASD). The inventory that Kisbu-Sakarya and Doenyas had their participants complete revealed that while positive attitudes had not increased much, behavioral intentions and self-efficacy had. Alborn (2021) conducted a study in the United Arab Emirates which provided general and special educator candidates various trainings on inclusion over many weeks. Despite communicating a sense of feeling overwhelmed, the author saw improvements in practice and an evolution in beliefs in all 17 participants. Sannen et al.'s (2021) study out of Belgium revealed a finding similar to that of DeVault's (2021) study. Positive attitudes about inclusion

were more common in schools where others were not only supportive of inclusive practices but also personally used them in their classrooms.

Successful inclusion involves the effort and dedication of all school staff (Olson & Roberts, 2018; Sannen et al., 2021). Even if all are involved, it must be a coordinated effort. Collaborative practices, whether through co-teaching or the sharing of information and ideas is an integral component of inclusion largely because special educators feel more prepared for inclusive practices than do general educators (Zagona et al., 2017). Obstacles to collaboration include inadequate shared planning time (Alborno, 2022; Ko & Boswell, 2013; Phuong et al., 2021; Thompson et al., 2020) and the marginalization of special educators (Hackett et al., 2020; Phuong et al., 2021).

Despite some obstacles to collaborative efforts, many benefits exist. Altieri (2015) conducted a survey of general education teachers, 73% of whom saw increased student test scores as a result of coplanning or co-teaching with a special educator. Nearly 100% of them saw improvement in behavior and participation among their students. Kuntz and Carter (2021a) observed increases in academic student engagement as a result of collaborative planning and support. Kuntz and Carter also noted that the teachers in the study had increased their deliberate academic engagement with their focus students.

The literature on collaborative practices yields some specific suggestions for effective implementation. Hackett et al. (2020) mentioned that heterogeneous groupings of students in inclusive classrooms help reduce the stigma of being in special education. These groupings also allow the special educator in a co-teaching arrangement to work with all students. Phuong et al. (2021) referred to this as going from “separate but unequal entities to an integrated equal unit” (p. 690). Stefandis et al. (2019) found that increased amounts of coplanning time coupled

with a strong relationship between co teachers created a better environment for co-teaching. Bemiller (2019) suggested that teachers who are most enthusiastic about co-teaching be put into inclusive classrooms. Jortveit and Kovac (2021) stressed the importance of being able to both give praise and accept constructive criticism. These are all factors administrators should consider when grouping and preparing educators for co-teaching.

Even with widespread school supports, classroom teachers may often find themselves alone in a classroom or with a group where there are multiple student needs (Lowrey et al., 2017). The literature on the topic of inclusive classrooms focuses on needed resources and evidence-based practices such as Universal Design for Learning (Posey, n.d.). Some newer and/or less researched ideas such as Mursion and SIS-C are also discussed (Landon-Hays et al., 2020; Thompson et al., 2020). These techniques and strategies could all be demonstrated and discussed in continuing education sessions.

One very needed but intangible resource in the world of education, specifically in inclusion, is time. The topic of needing more time was mentioned in multiple studies (Able et al., 2015; Alborn, 2022; Kuntz & Carter, 2021a; Phuong et al., 2021; Tan & Thorius, 2019, Thompson et al., 2020). Teachers need time to plan together, reflect, communicate, and learn new techniques. Beyond that vital need, the literature explores other techniques about which teachers can learn.

A frequently mentioned evidence-based practice in the literature is Universal Design for Learning (UDL) which is a framework created to help engage all learners while removing barriers (Posey, n.d.). Lowrey et al. (2017) researched the use of UDL in inclusive classes where there was at least one student with a moderate or severe intellectual disability. Teachers in this study not only expressed how effective UDL had been for their students but also

explained how they used digital technology, peer tutors, and student-generated ideas within the UDL framework.

Lesser-known techniques and applications are also discussed in the literature on inclusion. Landon-Hays et al. (2020) discussed the beneficial applications of Mursion, a simulated learning environment which can help to bridge the gap between theory and practice. The most noteworthy benefit outlined in this study was that all participants increased their ability to adjust lessons. While Mursion is a higher tech resource, cue cards and response cards are relatively simple and inexpensive strategies that teachers can use with their students. Conderman and Hedin (2015) explained the different applications of cue cards, whereas Clarke et al. (2016) highlighted the use of response cards. The research conducted by Clarke et al. revealed that response card use increased both on-task behavior and participation to 100% for all students observed in the study.

An increase in student engagement was also noted in the study done by Malone et al. (2019) on having peer tutors use visual cues with their partners. Thompson et al. (2020) highlighted how the use of the Supports Intensity Scale- Children's version (SIS-C) tool could help teachers be more intentional about what supports they were using with individual students. As previously discussed in this thesis, students in the intellectual disability category are often the least involved in general education classrooms. Response cards, tutor cues, and SIS-C were all methods used to try to increase the participation of students with intellectual disabilities in inclusive classrooms.

Landon-Hays et al. (2020) mentioned the importance of ongoing feedback for preservice teachers, but the same holds true for in-service teachers and administrators. Able et al. (2020) and Phuong et al. (2021) in their respective works provided educators and

administrators alike with important feedback. Able et al. sought feedback from educators about what they specifically wanted professional development sessions to cover in relation to working with students with autism. Educators communicated needing to know more about differentiation strategies, when to intervene for behavior, how to group students, and how to scaffold information. Phuong et al. (2021) encouraged administrators to seek feedback from their educators to find out what their needs and experiences were like regarding collaborative practices. Phuong et al. also encouraged educators to give self-reflective feedback on their own views of inclusion and collaboration.

### **Professional Application**

Educational theory, research, and data are both influential and necessary components of effective teaching. However, many educators can become overly saturated with statistics and data-driven strategic plans. Teachers who have been in the field for a number of years have seen several if not many initiatives based on research that fall flat in the classroom. The research frequently answers the compelling “why,” but it rarely offers the “how.” Several studies refer to this as the theory to practice gap. Educators often simply want to know how to transfer those big thoughts, findings, and goals into something reasonable to teach and palatable for the students to learn. While some of the strategies listed in theme three of the literature review involve higher tech or training needs, some like cue cards and response cards can be easily created and applied the very next day in the classroom. Continuing education sessions that highlight quick and simple strategies help teachers to see the “how” as well as to make efficient use of their time.

The literature on inclusive strategies offers some beneficial guidance to both educators and administrators. While teachers are often in charge of crafting their lessons, administrators set the schoolwide tone for expectations. Administrators need to understand the attitudes about



and awareness of inclusion that are held by their staff so that they can tailor professional development to the needs of their staff. The literature explains how even newer teachers who have had more training on disabilities and differentiation than previous generations are often not ready to teach in inclusive classrooms (Sites et al., 2018). This suggests that many teachers who have been in the field for many years may also feel unsure of how to support their students beyond simply trying to comply with the Individualized Education Program (IEP). The difference in results between the study done by Kisbu-Sakarya and Doenyas (2021) and Alborn (2021) suggest that ongoing training and support for inclusive practices may be more effective than an intensive back to school professional development session that has little or no follow up.

The expressed need for time stands out more than anything as a professional application. Teachers need more time to plan, collaborate, and build relationships with students and parents alike. Administrators need to take the need for time into serious consideration when creating schedules as well as when structuring professional development sessions. Another professional application involves the importance of feedback on all levels. It is essential that administrators listen to their staff, but teachers, in turn, must listen to their students. Teachers also need to be willing to accept constructive criticism from their coworkers, especially from those with whom they coteach or coplan lessons.

### **Limitations of the Research**

While a thorough review of the literature was accomplished, it was not an exhaustive one. Furthermore, most of the research cited in this literature review were qualitative and not quantitative studies. While the qualitative studies lend a personalized, real voice to the topic, it is harder at times to glean an idea of the prevalence of some themes or the widespread

effectiveness of certain practices. Some of the quantitative studies included fewer than ten participants or were limited in their demographics also limiting the scope of the research. In addition, the subtopic of co-teaching is still quite under researched despite its prevalence in many schools (Hackett et al., 2020) thus finding a plethora of hard data on its effectiveness was not possible at this time. Lastly some of the resources mentioned such as Mursion and the Supports Intensity Scale-Children's Version assessment are newer and/or have minimal research behind them so they are not yet confirmed Evidence Based Practices as they relate to inclusion of students with disabilities.

### **Implications for Future Research**

While many strides have been made in inclusive education, research has not always kept up with educational trends. Both Jortveit and Kovac (2022) and Hackett et al. (2020) expressed how under researched the practice of co-teaching has been. Further studies could be conducted to assess what co taught classrooms see more success amongst their students and why. The literature also seems lacking on studies about peer tutoring/mentoring as well as on in-school advocacy efforts for students with disabilities. While there is much that educational staff can do to break down the walls between general and special education, efforts must extend beyond academics and further into the social realm. In addition, none of these studies included survey data from or interviews with the students themselves perhaps further marginalizing a large group of young learners. Future research could and should include student voices in the data.

Multiple studies mentioned a theory to practice gap (Ko & Boswell, 2013; Landon-Hays et al., 2020; McHatton & Parker, 2013). It would be interesting to see research on some specifics of where that gap is. What is lacking in both preservice and inservice educator

programs? How can the sense of overwhelm or feelings of being unprepared be lessened for teachers? McHatton and Parker (2013) noted that there was a decrease in positive attitudes about inclusion among the special educators throughout the course of their study. Do special educators believe resource rooms and self-contained rooms might often be more appropriate for their students or is this their preference because they feel general educators are unwilling, unprepared, and/or unsupported where inclusion is concerned?

It would also be beneficial to see a study on teacher attitudes about inclusion before an intervention as well as after. The intervention period could include giving more planning and coplanning time than is the norm as well as providing them with instructional support for easy to apply strategies in the classroom as well as reflective or coaching time. Lastly, while Universal Design for Learning (UDL) is frequently mentioned in many of the studies on inclusion, there appears to be a scarcity of recent research on its efficacy. The current research elaborates on some of its applications as well as anecdotal evidence of its success, but there does not appear to be any more recent hard data indicating if it is effective with students in the 2020s.

Lastly, a study that could provide further beneficial research to the topic of better inclusive practices would be one which explores the use of Evidence-Based Practices (EBPs) in general education classrooms. Are all educators aware of what EBPs are and beyond that, do they know which ones are most effective for their subject area? Do they know where to look for ideas on EBPs to use in their classrooms? It would also be helpful to see within a given school or district, how many teachers were using EBPs with fidelity.

## Conclusion

This literature review sought to answer the question of how K-12 schools could encourage inclusive practices while also helping to create a stronger partnership between general and special educators. The main theme of inclusion revealed the sub themes of the need to assess teacher attitudes and awareness as well as to collaborate. Understanding educators' attitudes toward and awareness of inclusion is a crucial preliminary step toward building more inclusive practices (Gregory & Noto, 2018). Collaborative techniques such as co-teaching are frequently mentioned in the literature on classroom inclusion. One survey found that of the general educators who either co-planned or co-taught with a special educator, nearly three-fourths saw increased test scores among their students and almost 100% witnessed noticeably improved behavior and participation (Altieri et al., 2015). Continued education on evidence-based practices and tools which increase engagement and enhance learning for students with disabilities is also vital. Techniques and tools such as Mursion, cue cards, and Universal Design for Learning all show promise toward creating more equitable general education classrooms where all students can access the curriculum in a meaningful way (Conderman & Hedin, 2015; Landon-Hays et al., 2020; Posey, n.d.).

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