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THE EFFECTS OF INCLUSIVE CLASSROOMS ON STUDENTS WITH
DISABILITIES AND EFFECTIVE INCLUSIVE CLASSROOM STRATEGIES

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ERIN WELTER

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THE EFFECTS OF INCLUSIVE CLASSROOMS ON STUDENTS AND EFFECTIVE
INCLUSIVE CLASSROOM STRATEGIES

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Abstract

The purpose of this literature review was to research the effectiveness of inclusive classroom strategies pertaining to academic achievement and social/behavioral achievement in students with disabilities along with which inclusive classroom strategies were more effective. Twenty-five research studies based on inclusive classrooms were reviewed and summarized throughout this literature review. While there were studies that saw a positive impact on a student's academic success after being in an inclusive setting, a majority of the studies used in this literature review found no correlation between students with disabilities being included in an inclusive classroom and their academic achievement. It can also be concluded that the inclusive setting has a positive impact on a student with disabilities social and behavioral success at school. It was also found that co-teaching is an effective and widely used inclusive classroom strategy, along with differentiating instruction, scaffolding, and peer-tutoring.

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CHAPTER I: INTRODUCTION

The Debate of Inclusion

Inclusion has become more relevant in the school setting over the last 30 years and has been a topic of debate among parents and teachers as to whether it is the best way to teach students. Some feel as though all students with disabilities should be included in the general education classroom and that is where they should receive a majority of their instruction, while others feel that students with disabilities are best served in a special education classroom for their instruction. The discussions generally pertain to the students with disabilities ability to achieve academically and socially within the general education classroom. Some parents have even stated that they felt that having their child with disabilities form relationships with their peers was a more important goal for them than academic outcomes (Hamre-Nietupski, 1993). While other parents have a strong desire for their children to achieve highly in the areas of academics and question whether that is possible in an inclusive setting. As more and more schools are implementing inclusive classrooms, states, school districts, and educational researchers are questioning the benefits of inclusiveness.

Least Restrictive Environment History

Inclusion has become more and more apparent as the Least Restrictive Environment Law was passed in 1975. Congress passed Public Law 94-142, which was then known as the Education for All Handicapped Children Act. Irmsher (1996) states “a year after the Controller General reported to Congress that 60 percent of the nation’s

disabled children were not receiving appropriate schooling” (p. 1). It was also said that millions of children were completely rejected from school all together, while those that were receiving education, were not receiving an education that was appropriate for their disabilities. In 1991 the Education for All Handicapped Children Act was then renamed the Individuals with Disabilities Education Act (IDEA). This law was where the Least Restrictive Environment or LRE came about. The IDEA requires that children be taught in their Least Restrictive Environment as much as possible with their peers that are not disabled (Lipton, 1994). The least restrictive environment is a federal law that states that students with disabilities receive their education, to the maximum extent appropriate, with non-disabled peers, and that special education students are not removed from regular classes unless, even with supplemental aids and services, education in regular classes cannot be achieved satisfactorily (20 United States Code (U.S.C.) Sec. 1412(a)(5)(A); 34 Code of Federal Regulations (C.F.R.) Sec. 300.114.). The passage of this law was the start of inclusive classrooms, as students with disabilities were then included into their general education classrooms with their non-disabled peers, as stated in the LRE law.

There have been many court cases in relation to the Least Restrictive Environment, and *T.R. v. Kingwood Township*, 205 F.3d 573 (3rd Cir 2000) is one of them. In this case, T.R. was placed in an in-district preschool-aged placement where half of the children were disabled, and half were typically developing. The court had then decided that this program would be labeled as “hybrid”. With the program being a “hybrid” program it was then decided that this was not the least restrictive environment

for T.R. He was then placed in a different setting that was more fit for his least restrictive environment. Most cases pertain to the least restrictive environment side with that of the disabled children.

Before Inclusion

Before the Education for All Handicapped Children Act was passed many children with disabilities were denied access to education. Prior to the law being passed in 1975, schools were educating only one in five children with disabilities on average. Some schools even had laws that excluded students with varying disabilities. The very first advocacy groups that were made up of parents of children with disabilities started can be dated back to 1933, and it wasn't until around the 1950's when those advocacy groups began to start making waves and were being heard. By the 1960's there were multiple laws that were passed that granted funding for children with disabilities.

Inclusion History

It was after the IDEA law in 1975 that the topic of inclusion really began to come about because the LRE states that a student with disabilities is to be taught with their peers that are not disabled as much as possible. While many schools and districts have begun to implement inclusion, many times it is the parents that have to fight to have their children in their general education classrooms more (Kluth, 2002). It is too often that students are placed into a self-contained classroom upon receiving a special education label, and with it being nearly 50 years since the IDEA law has been passed, it is time to put a stop to that. Since 1975, federal courts have made it clear that the intent of the law

is in favor of the inclusion of students with disabilities in the general education classrooms (Osborne, 1996; Villa & Thousand, 2000). In the court case *Oberti v. Board of Education of the Borough of Clementon School District* (1993), the court determined that the school attended by Raphael Oberti had not supplied him with enough support and resources in order for him to be successful in the inclusive setting. It was also ruled by the judge that the school had failed to train the educators and support staff on how to support Raphael in the inclusive setting. There have been numbers of similar court cases that almost always side with the student with disabilities and not the school.

Regular Education Initiative

The regular education initiative (REI) was a movement in the 1980's that was trying to correct the limitations of IDEA by completely eliminating segregated education programs by creating one system of general education, where the students with disabilities were to attend and be supported. This initiative was introduced by Madeleine C. Will, a former Assistant Secretary of Education. REI had the idea that all educators had the responsibility to serve students with disabilities. In the Regular Education Initiative it was unclear how much the general education teacher was supposed to assume responsibility for the students with disabilities and actually led to a debate in the 1990's on the roles of special education versus the general education programming for students with disabilities. There were limitations to the success of REI, as general education teachers lacked training and professional development on how to serve students with disabilities. It also showed the special educators' lack of training on how to collaborate

and help general education teachers and provide them with the skills they needed to help the students with disabilities in their rooms (Harkin, 2012). Harkin stated, “As a result, the REI became little more than an expanded mainstreaming model, largely serving students with mild disabilities” (2012, p.3).

Co-Teaching History

In 1995, the National Study on Inclusion reported that co-teaching had become the most popular staffing model for implementing inclusion (Magiera & Zigmond, 2005). In 1997, with the Reauthorization of the Individuals with Disabilities Act (IDEA), congress again stated that the preferred place for a student with disabilities is to be in the general education classroom. Students with disabilities were to receive general education curriculum and when they were required to be taken from the general education classroom, that was to be put into their Individualized Education Plan. With this, there has been a significant increase in the co-teaching model in a variety of ways. With help of the co-teaching model, students are presented with a wider range of instruction opportunities as well as a reduction in student-to-teacher ratio with the presence of the special education teacher as well as the general education teacher.

Key Terms

The term *Inclusion* generally means ending all separate special education placement for all students and full-time placement in general education with appropriate special education support within that classroom (Garvar- Pinhas & SchmelkinPedhazur, 1989; Lipsky & Gartner, 1996). This means that students with disabilities that would

generally receive their instruction in a special education classroom are now receiving that instruction in the general education classroom with more support to help them succeed. Students with disabilities have generally received instruction in separate classrooms away from their non-disabled peers. Inclusion ensures that students with all types of disabilities take part in the general education classroom with support from the special education teacher and supporting adult staff.

Co-teaching is a term that is used frequently throughout the research, and it is defined as the general education teacher and the special education teacher working together to ensure the success of both students with disabilities and general education students. The following are co-teaching models that can be implemented into an inclusive classroom: One teach-One support, Parallel Teaching, Alternative Teaching, Station Teaching, and Team Teaching.

Inclusion strategies is another term that is used throughout the research and can be defined as, strategies or procedures used in an inclusive classroom to ensure the success of all students, including those with disabilities. There are many different strategies that can be used in an inclusive setting to help students succeed including, co-teaching, peer tutoring, differentiation, scaffolding, just to name a few that are outlined in this research. A teacher may implement many strategies in the inclusive classroom and there is research to find which strategies are most effective.

Research Question

As a special education teacher, whose students spend parts of their day in the general education classrooms, I wanted to further consider the research conducted on the effectiveness of inclusion in students with disabilities. I have seen my students make great connections with their peers from their general education classrooms and this got me thinking, could my students achieve academically and socially in the general education classroom with the implementation of inclusive strategies? I wanted to better understand just what inclusion was and what it takes to make it successful for students with disabilities. My research focused on the following questions: How do inclusion strategies affect students with special needs? From that guiding question I would also like to research, What are inclusion strategies? How do inclusion strategies affect students academically? How do inclusion strategies affect students' behavior and socialization skills?

CHAPTER II: LITERATURE REVIEW

Literature Search Procedures

To locate the literature for this thesis searches of ERIC, EBSCO MegaFILE, Google Scholar, Academic Search Premier, and Education Journals were conducted for publications from 1988-2020. This list was narrowed by only reviewing published empirical studies from peer-reviewed journals that focused on inclusive classroom strategies, inclusive classroom effects on academic achievement, and social/behavioral success of students involved in inclusive classrooms found in journals that addressed the guiding questions. The keywords that were used in these searches included “inclusive classrooms”, “inclusive classroom strategies”, “academic success”, “academic inclusion”, “social/emotional inclusive classroom”, “Inclusion”, “effective inclusion strategies”, and “co-teaching strategies”. The structure of this chapter is to review the literature on inclusive classrooms in three sections in this order: Academic Success in Inclusive Classrooms; Social/Behavioral Success of Students in Inclusive Classrooms; and Effective Inclusive Classroom Strategies.

Academic Success in Inclusive Classrooms

When considering the effectiveness of inclusive classrooms, academic success is the main area that needs to be addressed. The following research studies look to address just that, the positive or negative effects an inclusive classroom has on a student’s academic success. Rea et al. (2002) conducted a study at Enterprise and Voyager Middle Schools to find the relationship between placement in inclusive and pullout programs in

special education in relation to academic and behavioral outcomes for students specifically with learning disabilities. Throughout this study, there were three indicators of student outcomes that were measured and those were academic achievement, behavior, and school attendance. The students' academic achievement was measured by their final course grade in language arts, mathematics, science, and social studies as well as their standard scores of the Iowa Test of Basic Skills (ITBS), and the Literacy Passport Tests (LPT).

Rea et al. (2002) found that the students with learning disabilities that were served in the inclusive classroom had gotten higher grades in all four content areas compared to the students who received instruction in the pull-out method. When taking a look at the Iowa Test of Basic Skills (ITBS) results between the two groups of students, the study found that there was a significant difference in scores on the language and mathematics subtests. But when it came to reading comprehension, science, and social studies, there was not a significant enough of a difference to note. When it came to comparing the results of the State Proficiency Test (Literacy Passport Test), the difference between mean scores in mathematics, reading, and writing in the pull-out versus the inclusive setting yielded no significant difference in scores. Rea et al. (2002) stated that there were no significant differences in scores between the students who received instruction in the inclusive setting versus the students who got instruction in the pull-out setting when it came to state assessments.

It can be concluded that in the study conducted by Rea et al. (2002), the students who received instruction in the inclusive setting had higher academic achievement when it came to end of the year grades compared to students who received instruction in the pull-out setting. But when it came to statewide assessments there was no significant difference in the scores of the two groups of students. So when considering the effects of inclusive classroom strategies from this study we can conclude that the inclusive setting had positive outcomes on grades, but no significant difference in state testing scores.

Another study that was conducted at the secondary level was conducted by Boudah et al. (1997). The study was titled, *Collaborative Instruction: Is It An Effective Option For Inclusion In Secondary Classrooms?*, and one of the main purposes of this study was to determine the effectiveness of teacher implementation of the Collaborative Instruction Model on a student's engagement and their academic outcomes. Boudah et al. (1997) defined the collaborative instruction model as a classroom that involves both a general education teacher and a special education teacher who work together. During this study, studying performance was measured by student classroom engagement, mastery of strategic skills, and content test performance.

The results for student engagement note that on average, both students with mild disabilities and students who were low achieving only engaged a mean of 2 or 3 times during any classroom observation. When it came to results for strategic skills mastery, Boudah et al. (1997) found that on only one measure of strategic skills mastery the students who achieved low performed significantly better than the mild disability

students. Results in the study when it came to test/quiz scores were as follows, there was a slight improvement in the test and quiz scores in the students who were low achieving, while there was actually a decrease in test/quiz scores in the students with mild disabilities.

The significant takeaways from this study are that during collaborative instruction, the students' rates of engagement were low, there were minimal strategic skill increases, and the test and quiz score actually decreased for the students with mild disabilities, and students who were low achieving only increased their test and quiz scores slightly. From this study, we can conclude that collaborative instruction did not have a significant effect on the students' academic achievement. This particular inclusive classroom strategy did not have any particular success on the academic achievement of the student with disabilities.

A study that is similar to those but was conducted at the high school level titled, *Academic Achievement and Class Placement in High School: Do Students with Learning Disabilities Achieve More in One Class Placement Than Another?*, was completed by Fore et al. (2008). The purpose of this study was to explore inclusive versus non-inclusive classrooms and relate it to students with specific learning disabilities academic performance. All of the students who were involved in the study took part in a test called the Multilevel Academic Survey Test (MAST). Something that was taken into consideration when completing this study was the number of general and special education classes each student was enrolled in.

The results of this study suggested that there was no statistically significant data to prove that students who participated in the inclusive setting performed better academically than the students who participated in non-inclusive classes on the MAST (Fore et al., 2008). The only data that was found that had any significant difference was between the students who participated in general education literature classes compared to those that participated in special education literature classes. This study suggests that students with specific learning disabilities who are in inclusive settings are not higher achieving academically than students with specific learning disabilities who are in a non-inclusive setting.

From this study, I get some clarification on my research question, how do inclusion strategies affect students with special needs? When looking at this particular study, it can be assumed that inclusion strategies do not negatively impact or positively impact students with disabilities. Neither group of students performed significantly better on the MAST than the other so inclusion versus non-inclusion did not impact the students with specific learning disabilities in either direction.

In another study conducted by Douglas Marston, the research question was, are there differences in teacher attitudes and student performance as a function of the type of inclusion model implemented? To answer this question Marston focused on the effectiveness of each model in the area of reading instruction at the elementary school level in students with learning disabilities. In order to collect data for the study, curriculum-based measures of reading were used to test the reading growth of the

participating students during one academic year; this was found by documenting how many words a student read correctly in a minute.

For students who received instruction in the inclusion only model, the average number of words read correctly increased by 18.03 from fall to spring. With the students who were in the combined services model, the average number of words read correctly increased by 30.61. Lastly, the students who were in the pull-out only model increased by 17.77 words read correctly from fall to spring. As you can see there was an increase in reading scores across all three models from fall to spring, but the progress of score in students who received the combined instruction had a significant increase compared to the other two models. Based on the findings of this research study, we can conclude that the best teaching method for students with learning disabilities just might be a mixed method of inclusion and pull-out services. This study answers my research question of how inclusion affects students with disabilities, and it tells me that inclusion just may not be the best method for students with learning disabilities.

The study titled, *A Study of the Effects of an Inclusion Model on Students with Specific Learning Disabilities* by Madhabi Banerji and Ronald A. Dailey gave insight to my research question on the effects of inclusion on students with disabilities. This study measured the academic outcomes of 5th graders with a specific learning disability in reading and writing after being involved in an inclusive setting for a school year. Similar to the study done by Marston (1996), this study measured how many words a student

could read correctly. Writing was assessed by quality (length, vocabulary, spelling, accuracy) from writing samples from work throughout the school year.

Results from this study were as follows, both students with specific learning disabilities and normal achieving students made progress on their reading levels but there was no significant difference in achievement between the two groups (Banerji et al., 1995). When it came to writing there was no significant difference in scores with students with SLD, but there was a significant increase in the students who achieved at the average level. When looking at how inclusion strategies affect students with disabilities, from this study we can conclude that the students with specific learning disabilities who were involved in the inclusive classroom made adequate academic progress in reading throughout the year when compared to their normal achieving peers. With writing their growth patterns were not as apparent, and while there were gains, they were not as significant as the gains the normal achieving students had made in a year (Banerji et al., 1995).

Another study that compares the effectiveness of inclusion versus resource room instruction was conducted by Affleck et al. in 1988. This study involved mildly handicapped students along with average to above average general education students in the same classroom, and these classrooms have a teacher along with a part-time aide. The data that was collected was from the reading, math, and language arts subtests from the Woodcock-Johnson Psycho-Educational Battery (Affleck et al., 1988).

Students were assessed each year for three years in order to determine their academic achievement. Affleck et al. (1988) found that there were no significant differences between the integrated and resource room groups all 3 years in the subtests of reading or language. There was however a significant difference in the math subtest only during the first year where the students who were integrated achieved significantly higher than the students who received instruction in the resource room. In the two years to follow, however, there was no significant difference in scores between the two classroom models in math. When it comes to the effects of inclusive classroom strategies, this study suggests that there is no significant gain or loss between the integrated classroom and the resources room models.

Kurth et al. (2010) attempt to find the difference in cognitive assessments, adaptive behavior, and academic achievement in students with autism in an inclusive classroom versus a self-contained classroom, in the study titled, *Academic and Cognitive Profiles of Students with Autism: Implications for Classroom Practice and Placement*. For this portion of my research, we are going to focus on their finding of academic performance in these students. Like the study performed by Affleck et al. (1988), academic performance was measured with the use of the Woodcock-Johnson III Test of Achievement, using the reading, writing, and math subtests. The results for students in self-contained classrooms were compared to the results of the students who were involved in an inclusive classroom setting.

Results from this study demonstrate that students who were fully included in their general education classrooms outperformed their peers in all WJ-III subtests that were in a self-contained classroom. The students who were a part of each sample group had comparable intelligence but the students who partook in the inclusive setting made significantly greater gains in the area of academics (Kurth et al., 2010). Based on my research, I can conclude that the inclusive setting has significant positive effects on students with autism's academic achievement.

Taylor (2015) was interested in researching the effectiveness of inclusive services and attempting to close the achievement gap between students with and without disabilities, and she did so in the research titled, *The Effects of Inclusion and Academic Achievement of Students with Disabilities*. The assessments, Discovery Education Assessment and iReady were used during this study to collect data on academic achievement in the students participating. These assessments were administered at the beginning of the school year and again in the spring in order to measure academic achievement and gains for the school year. Both assessments were given to students in the inclusive setting as well as the pull-out setting.

The results of this study suggest students with disabilities did not make significant gains academically in either the inclusive or pull-out setting (Taylor, 2015). Data from both the DEA and iReady assessments indicated that students with disabilities did not make any significant gains throughout the entire school year. Based on this study I can infer that an inclusive classroom did not have a significant positive impact on the students

with disabilities. The students who were involved in the pull-out methods of teachers also did not make any significant academic gains, so it can be concluded that the inclusive setting also did not have a negative impact on students with disabilities when compared to the pull-out students.

Ware (2016) completed a similar study to Taylor (2015) where she wanted to explore students' academic success before they were in an inclusive classroom and compare that to after they were placed in an inclusive classroom and measure their progress in students with specific learning disabilities in the area of reading. Students who were in a pull-out service program were given the Tennessee Value-Added Assessment System (TVAAS) before they were transferred to an inclusive classroom setting, and they were then given the same assessment once they had participated in an inclusive setting for some time.

Ware (2016) compared the results on the TVAAS from before the inclusive setting and after to see if the inclusive setting had any significant success for the students with learning disabilities in the area of reading. There were no significant differences in scores that were determined before the students took place in an inclusive setting compared to their after-inclusion support services scores (Ware, 2016). We can then conclude that the scores did not differ significantly enough to say that the inclusion setting is vastly more successful than the pull-out programming. When looking at the results from Ware's study, I can then conclude that the inclusive setting had neither positive nor negative effects on students with disabilities as their scores on the TVAAS did not differ significantly.

Another study done at the elementary level in search of the effects of inclusion on the academic achievement of students is titled, *Effects of Inclusion on the Academic Achievement and Adaptive Behavior of Children with Intellectual Disabilities* performed by Dessementet et al. (2012). They aimed to compare the progress of students with intellectual disabilities in an inclusive setting versus strictly a special education setting. The students who participated in the study completed an academic achievement test (ANOVAS) three times over the course of two school years (Dessementet et al., 2012).

The results of this study suggested that there was no difference in progress made between the two groups in their mathematical skills, but there is a significant difference in the scores of the two groups of students when it comes to their literacy scores. The students who were placed in the inclusive classrooms were the ones where Dessementet & Morin found significantly higher scores in literacy. It should be noted that students in both groups made substantial progress over the 3-year time span in both mathematics and reading but in the area of reading it was the group of students with intellectual disabilities that were in the inclusive setting that made significantly more progress than the students in the special education setting. When looking at my research question on the positive and negative effects of inclusive education, this study points to the results that there is a positive correlation between reading achievement in students with intellectual disabilities when they take part in the inclusive classroom. In the academic area of mathematics, the inclusive setting did not have a negative or positive effect on the students' achievement.

There can be inclusive settings at the preschool level and Cole, et al. (1991) researched the effects of just that in the study called, *Effects of Preschool Integration for Children with Disabilities*. Children's brains develop at such a fast rate when they are young and this study inspects the influences of segregation and integration of preschoolers with mild to moderate disabilities. This specific study was conducted over 4 years and the children that participated were randomly assigned to either the integration or segregated classrooms. The following assessments were administered to the preschool children before they were placed into the integrated or segregated classrooms; McCarthy Scales of Children's Abilities, Peabody Picture Vocabulary Test-Revised (PPVT-R), Test of Early Language Development (TELD), and the Test of Early Reading Ability (TERA).

Upon completion of the preschool programming, students were then assessed again and those scores were compared. When looking at the results of pre-intervention and post-intervention, the results indicate that there is no significant difference between the score of preschoolers with mild to moderate disabilities when it comes to integrated classrooms and segregated classrooms (Cole et al., 1991). None of the battery test results indicated a significant difference in achievement in the students with disabilities. While there were no significant differences in the two classes, individual student profiles can directly influence that performance within the two settings. Based on the results of this study, I can come to the conclusion that there are no negative or positive effects when it comes to inclusive settings on students with mild or moderate disabilities at the preschool level.

Differentiating instruction is a strategy that many can use in an inclusive setting to meet the diverse needs of students in a classroom and can have effects on a student's academic success in that classroom. In the study titled, *Action Research and Differentiating Reading Instruction in Mississippi: Fourth-Grade Students' Reading Success* completed by Wyn Mims, she attempts to discover the effects differentiation has on a student's reading skills. Mims (2017) conducted this study in her own class which was an inclusive classroom that had both general and special education students. She assessed her students for their learning preferences and differentiated their instruction based on those preferences, and data were collected to monitor the students' academic progress using the STAR Reading Assessment.

Differentiated instruction was provided to each of the students for the year for reading instruction based on the students' needs and desires, and each week the students were assessed using the STAR Reading Assessment to monitor their progress (Mims, 2017). After 3 months of differentiated instruction, all the students had doubled their STAR test results or more in the area of comprehension using a grade-level text. Every student's score also increased in the area of fluency. From this study, we can conclude that in an inclusive classroom the strategy of differentiation has significant success with students both with a disability and without. All students had gains in their reading skills in the inclusive setting and proves that an inclusive setting can have a positive impact on students.

Reciprocal teaching is another strategy that can be used in inclusive classrooms, and its effectiveness was studied by Lederer in the study called, *Reciprocal Teaching of Social Studies in Inclusive Elementary Classrooms*. Reciprocal teaching can be defined as scaffolding instruction, where students are involved in active discussions with their peers in order to increase their ability to comprehend and monitor their understanding of a new text (Lederer, 1997).

This study involved an experimental group and a controlled group in each grade level of 4th, 5th, and 6th grade. The experimental group was the ones to receive the reciprocal teaching strategy, while the controlled group did not. In order to collect data, comprehension assessments were given to all of the students participating in the study and were given each week for the 4 weeks total that the study was conducted. The results of this study showed that there was a significant increase in comprehension skills in both the experimental group in 6th and 4th grade when compared to the controlled group of students. However, there was no significant difference in scores for the 5th-grade students in comprehension between the experimental and the controlled group. It was also discovered that students with disabilities who were a part of the experimental group significantly improved their summary skills (Lederer, 1997). From this study we can take away that reciprocal teaching in an inclusive classroom setting can be an effective strategy for teaching students with and without disabilities in comprehension skills. In this case, the inclusive classroom setting had a positive effect on students with disabilities, when reciprocal teaching is implemented.

Social/Behavioral Success of Students

While academic success is arguably the most important thing to take into consideration when looking at the placement of students with disabilities, social and behavioral success is another very important thing to consider. We want our students to feel as though they belong and succeed socially as well as academically. A study conducted by Whinnery (1995) researched just that. The main purpose of this study was to compare attitudes of students who received their services in a resource room versus students who received their services in a general education setting with co-teaching in students with learning disabilities (Whinnery, 1995). The students who participated in this study ranged in grades from 2nd grade to 5th grade. The students were given a survey with various questions about how they felt generally and how they felt about themselves. Students in an inclusive setting along with students in a resources room were given the same survey and their responses were compared in order to collect data for the study.

There were some discrepancies between the students' responses on the survey that are worth noting. The most significant difference in responses was in response to the statement, "I often feel left out of class activities." The students with learning disabilities that got services in the resource room were a lot more likely to express this opinion than the students who were receiving their instruction in the general education classroom (Whinnery, 1995). Another significant disruption was that the students who received instruction in the resources room had the opinion that their classroom teacher

embarrassed them in front of other students. One last opinion that is worth noting was that the students who received instruction in the resource room were the ones most likely to feel that they were less intelligent than their regular education peers. Those were the main discrepancies in responses to the survey, otherwise, most students felt that they were accepted by their peers, that they were important members of their classroom, and questions pertaining to self-esteem.

When looking at this study and relating it back to my research questions, I think the biggest takeaway from this particular study would be that students who partake in inclusive classrooms generally feel like they are a part of their classroom's activities. I think this is something important to consider, because we want our students to feel as though they matter and that they are an important part of the general education classroom. So this study showed that inclusive classrooms have a positive impact on a student's social and behavioral success.

In a study that was previously discussed for its academic results, this particular study also touched on a student's behaviors when it came to pull-out versus inclusion settings. This study is *Outcomes for Students with Learning Disabilities in Inclusive and Pullout Programs* researched by Rea et al. (2002). This study involved students in the 8th grade with learning disabilities, some in a pull-out program, and some in an inclusive setting. This study measured and collected data on student behavior based on the number of in and out of school suspensions the students who participated in the study had. They also looked at students' school attendance records to see if there was any discrepancy in

attendance between students in inclusive and pull out programs. This data was collected by looking at school records.

Rea et al. (2002) found that there was no significant difference related to behavior between the two different groups of students. There were 0 students from one group that received in-school suspension and 6 from the other group, and while this is a difference in suspensions, it is not significant enough to point to the setting being the cause of this behavior. When looking at school attendance however, there was a significant difference in days of school missed by the students who were in pull out programs. The students who were a part of the inclusive programs attended significantly more days of school than those that were a part of the pull out program (Rea et al., 2002).

This study does give some insight to my research on if inclusion has any positive effects on students with disabilities. I think this study proves that the inclusion program had a positive impact on the students' attendance compared to those students who were a part of a pull out program. The more days a student is in school, the more likely they are going to learn and succeed. When it came to behavior though, there was no significant impact or positive effects on a student's behavior based on the setting that the student was placed in.

Another study that was previously discussed because it touches on both academics and behavior was the study completed by Dessemontet et al. (2012). This study was done with students who were either 7 or 8 years old and all with intellectual disabilities, some in a pull out setting and some in an inclusive setting. In order to

measure the students' adaptive behavior, the Adaptive Behavior Assessment System-Second Edition was used on all of the students. This assessment was completed by the students, teachers, and parents at the beginning and the end of each of the two school years that the study was conducted (Dessementet et al., 2012).

The results from the ABAS-II over the two years that it was completed resulted in no significant difference in progress in adaptive behavior between the inclusion program students and the pull out program students (Dessementet et al., 2012). Each group of students was rated by both their parents and their teachers to have made significant progress in their adaptive behavior over the 2 years, but there was no difference found in progress between the two groups. As it pertains to my research, I can conclude that the inclusive setting did not benefit nor did it negatively affect the students with intellectual disabilities. The students in the inclusive setting made progress but the students in the special education program also made progress in their adaptive behavior skills. From this, we can conclude that the inclusive setting was not the reason that the students made progress in their adaptive behavior.

Relationships being formed for students with disabilities is a very important factor of a student's school day and a study that researched that topic was *A Descriptive Examination of the Types of Relationships Formed Between Children with Developmental Disabilities and Their Closest Peers in Inclusive School Settings* by Webster et al. (2013). The main purpose of this study was to discover the features of the range of relationships that children with a disability form in an inclusive setting. Children with developmental

disabilities ranging in age from 5 to 12 were used in this study. The data was collected through interviews that were done with the students with disabilities, their 3 closest friends, their parents, and their teachers.

Each question that was asked was then fit to a different “type of friend” in order to see which type of friend had the highest number and lead to the discovery of the type of friends that children with developmental disabilities make in the inclusive setting. The questions that had the highest mean of answers were the questions that related to acquaintance type of answers meaning that the target child’s closest friends answered the questions related to acquaintance type of behavior with the highest number. The next highest mean ranking was in the category of “Regular Friend”. These types of friends are the ones that you exhibit playing together at school and doing fun things together. Another discovery that is important to note is that the questions that had the lowest mean number of responses were the questions associated with “Inclusion Child” type of relationships. This means that few children with disabilities felt as though their peers treated them differently or special due to their disability. Based on what was found from this study is that the majority of students who took part in an inclusive setting were involved in relationships that were characterized by mutual acceptance, play, and shared interests (Webster et al., 2013).

Based on this research it can be said that students who take part in an inclusive setting are positively affected, as they are able to make relationships and bonds with their peers of the same age. While none of the students were viewed as a best friend by any of

their peers, I think any type of relationship is a benefit that can be gained in the inclusive setting. Very few of the students who participated in this study felt as though their peers treated them differently based on their disability, and that is due to the inclusive setting that the student got to take part in.

Outcomes of Children Receiving Group-Early Start Denver Model in an Inclusive Versus Autism-Specific Setting: A Pilot Randomized Controlled Trial was a study that was conducted by Vivanti et al. (2019). They aimed to find if children with autism should be taught in an inclusive setting versus an autism-specific setting at the preschool level and if they benefited socially and behaviorally. This study took place over a school year and adaptive behavior was measured using the Vineland Adaptive Behavior Scales-2nd Edition, with the Adaptive Behavior Composite, the Social Communication Questionnaire, and the Repetitive Behavior Scale-Revised. Students with autism were randomly assigned to the two different classroom types; the inclusive setting and the autism-specific setting, and there were no significant differences in age, cognitive level, and adaptive behavior between the two study groups of students.

It was found at the completion of the study that while children with autism that were in the inclusive setting increased their adaptive behavior skills, but so did the children that were involved in the autism-specific classroom (Vivanti et al., 2019). There was no significant difference in increased adaptive behavior scores between the inclusive classroom and the autism-specific classroom. From this, we can conclude that while the

students increased their adaptive behavior skills, it was not in direct correlation to their setting.

Similar to the Dessemontet et al. (2012) study, I can conclude from my research that students with disabilities in an inclusive setting do in fact increase their adaptive behavior skills, but it is not dependent on them being in the inclusive setting. It should be noted that children with disabilities are likely to increase their adaptive behavior skills over time as they develop, and that is not reliant on the type of setting that they are placed in. While it is always great to have students with disabilities interacting with their peers in the general education setting, it may not help in improving their adaptive behavior.

Inclusive Classroom Strategies

When looking at inclusive classrooms, it is essential to make sure that the teachers are implementing successful inclusion classroom strategies. There are several different ways that a teacher can successfully involve both students with disabilities and their general education peers. Part of my research is finding which of those strategies is most effective and ensures success and meets the needs of all students.

Co-Teaching

In a study completed by Butler et al. (2020) titled, *Effective Approaches in Reducing Discrepancy Scores Between Students in General Education and Special Education* they attempted to examine curricular and instructional approaches in order to

help students with disabilities meet Illinois state standards on state assessments. In order to collect this particular data, Butler and Nasser identified schools that had the lowest discrepancies in scores between their students with disabilities and the general education students. Once those schools and personnel were identified they were then asked to complete an interview where they were asked about their curriculum and strategies that they used on a regular basis that might lead to their special education students having success in their classroom and on their standardized tests.

The results from this study concluded that the highest response when it came to curricular and instructional approaches were that the special education teacher also had the curriculum that the general education teachers were using in their classrooms (Butler et al., 2020). This ensured that the special education teachers knew what their students were learning in their general education classrooms and could then enhance those skills and generalize those skills across settings with their students with disabilities. Their responses on the interview also stated that the teacher implemented an inclusion or push-in model where the special education teacher would come into the general education classroom and would co-teach with the general education teacher. The teachers interviewed stated that they felt that this significantly helped the students with disabilities in the room because the special education teacher could give extra attention to those students, and could adapt and modify the lesson when needed.

When considering my research question about what inclusion strategies are, I can take away that something that worked well in this particular study is co-teaching. Another

would be allowing the special education teachers to have the same curriculum that the general education teacher has so they are covering the same material and adapting or modifying when necessary. I feel this study gave a lot of useful insight because these were teachers and classrooms where their special education students were succeeding and it proves that inclusion can work when co-teaching is implemented.

Another study that looked at the inclusive classroom strategy of co-teaching was, *Co-Teaching in Middle School Classrooms Under Routine Conditions: Does the Instructional Experience Differ for Students with Disabilities in Co-Taught and Solo-Taught Classes?*, researched by Magiera et al. (2005). The main purpose of this study was to find if there was an “additive effect” when the special education teacher was involved in instruction compared to when those same students were simply taught by just their general education teacher. The students who took part in this study were students with disabilities between grades 5-8. In order to collect data on the students' different learning experiences, an observation protocol was designed. During an observation the following codes were entered, (1) co-teaching or no co-teaching, (2) grouping size, (3) on/off-task behavior, (4) interaction with a general teacher, special teacher, other adult, or student, and (5) nature of the interaction (instruction or management) (Magiera et al., 2005).

The significant findings of this study were that students with disabilities received more individual instructional interactions under the co-teaching conditions. Another significant finding was that when the special education teacher was co-teaching with the

general education teacher, the general education teachers interacted with the student with disabilities less frequently. This implies that the student did not get more attention during co-teaching, they actually received less attention from the general education teacher when they co-taught (Magiera et al., 2005). From this, we can't conclude that the students with disabilities benefited in any way from the co-teaching method.

As it relates to my research, co-teaching is a strategy that can be used in order to have an inclusive setting, but that does not necessarily ensure a student with disabilities success. The students with disabilities who took part in this study actually received less attention from the general education teacher because the general education teachers simply allowed the special education teachers to pick up the slack. While co-teaching is a strategy that a lot of inclusive classrooms utilize, we cannot conclude that it is effective from this study.

Brendle et al. (2017) completed a study that also relates to co-teaching titled, *A Study of Co-Teaching Identifying Effective Implementation Strategies*. This study differs slightly from the other studies I have touched on already because it takes a look at co-teaching from the teacher's perspective and gains their insight. Information was gathered from two general education teachers and two special education teachers from a rating scale, interview, and classroom observations.

One of the big takeaways from this research and the interviews and rating scale was the number of teachers who reported their lack of knowledge of co-teaching models and best practices. An alarming number of teachers also reported they rarely planned or

implemented appropriate co-teaching models that have previously been described by research in order to get effective results. The two most important aspects of co-teaching that the teachers reported were essential were collaboration and communication. All of the teachers involved also stated that they felt the most important reason for co-teaching would be to provide special education students instruction in the general education classroom (Brendle et al., 2017). One last significant finding in the study was that all teachers reported that they felt they needed more training and ongoing support in order to effectively implement co-teaching strategies.

Based on my research, I think it is safe to say that co-teaching is a great strategy to use in an inclusive classroom and it is something that teachers are willing to do if they get the time to plan and the training to learn how to effectively implement it. If teachers don't feel comfortable and aren't given the time to collaborate with their co-teachers then I don't see how co-teaching would be effective for students with disabilities. This is only an effective inclusive classroom strategy when both the teachers know their role and are confident they know how to implement it successfully.

Other Inclusive Strategies

A study that took a look at a different inclusive classroom strategy other than co-teaching is the study that was also discussed when considering the academic success of students in inclusive settings. This study is *Reciprocal Teaching of Social Studies in Inclusive Elementary Classrooms* studied by Lederer (1997). His study looks at the effectiveness of reciprocal teaching in social studies in 4th, 5th, and 6th-grade

classrooms. Reciprocal teaching is also known as scaffolding the teaching so that the students become more independent in their learning and are forced to work with one another to comprehend their reading assignments for their social studies class. Students were separated into either the experimental group or the control group, with the experimental group receiving the reciprocal teaching strategy in their instruction.

The results indicated that the students who took part in the reciprocal teaching strategy significantly increased their reading comprehension skills. It was also found that the students with learning disabilities in the experimental group increased their comprehension ability significantly more than the students with learning disabilities in the controlled group. My takeaway from the findings of this study is that reciprocal teaching is an effective inclusive classroom strategy when it comes to students with learning disabilities. This may not have the same effect on students in other disability categories but reciprocal teaching showed significant success in the students with learning disabilities at the elementary level.

Another idea of inclusive classroom strategies is differentiating instruction for the many different types of learners that you have in your classroom, and this can not only benefit students with disabilities but it could also benefit general education students. Mims et al. (2017) completed a research study titled, *Action Research and Differentiating Reading Instruction in Mississippi: Fourth-Grade Students' Reading Success*, and this study was previously discussed in the academic success portion of my research as well. The study included two different groups of students, one group with no students in

special education and the other group included students in special education and was considered an inclusion classroom, and they were pre assessed using the STAR Reading Assessment. The students were also given an assessment to better understand how each student best learned, and that information was then used to differentiate instruction based on their preferences.

It was found that the students more than doubled their scores on the STAR Reading Assessment in both of the classes. This goes to show that differentiating instruction not only works for students with disabilities but also for students who are not disabled. The study further proves that differentiating instruction is an effective strategy to use in an inclusive classroom. This study relates to my research because it shows that differentiating instruction is effective for students with disabilities when they are involved in an inclusive classroom.

Buli-Holmberg et al. (2016) completed some research in order to find effective teaching practices for children with disabilities in an inclusive setting. In order to find the answer to their research questions, they conducted many observations across many different settings because the inclusive classroom can't be classified into just one single setting. Their observations focused on three different types of criteria and those include interactions, support, and adaptation (Buli-Holmberg et al., 2016). The observations were also conducted in the following classroom settings; traditional teaching, one-to-one support outside of the classroom, one-to-one support within the classroom, small group outside of the classroom, and variety and flexible practice (Buli-Holmberg et al., 2016).

Many observations were conducted in all of the settings to collect accurate and reliable data.

Based on their observations it led to the discovery that all of the instructional practices have the potential to help better the inclusive classroom setting, but just at different degrees of level for children with special needs. Another discovery from this study was that an important issue to help promote in children with disabilities is interaction. Interaction can benefit not only children with disabilities but those without as well. It allows the students to learn from their peers and promotes peer acceptance, peer guidance, and peer tutoring (Buli-Holmberg et al., 2016). In order for students to succeed in an inclusive setting, it is essential that the students with disabilities receive support from both the general education teacher and the special education teacher. The biggest finding from this study is that flexible and creative practice was the best that met the needs of students with disabilities. Flexible and creative practice met all three criteria; interaction, support, and adaptation.

Throughout my research in finding effective inclusion strategies, I find being flexible and creative practice would fit into each and every strategy that I have found. It takes a lot of thought and creativity to meet the needs of all of your students, especially when students with disabilities are involved. If you as a teacher are able to be flexible and creative then you can take any lesson or material and adapt it to ensure all of your students' success.

Another strategy that can be used in the inclusive classroom is peer tutoring, and McDonnell et al. (2001) completed research titled, *Supporting the Inclusion of Students with Moderate and Severe Disabilities in Junior High School General Education Classes: The Effects of Classwide Peer Tutoring, Multi-Element Curriculum, and Accommodations*, to find the effectiveness. This study involved 3 students with disabilities, 3 students without disabilities, a special education teacher, and a general education teacher. In order to measure student engagement, The Code for Instructional Structure and Academic Response-Mainstream Version (MS-CISSAR) was used. Another measure that was studied was the students' academic success and that was measured by weekly post-test scores.

The peer tutoring groups generally included one student with disabilities, one student who was at an average performance level, and one student who was above average performance level (McDonnell et al., 2001). These peer tutoring sessions took place two times a week for 15 minutes each. Each member of the tutoring team had a specific role they were supposed to follow which included tutor, tutee, and observer.

The results from this study showed that all three students with disabilities increased their academic responding and substantially decreased their competing behavior rates. When it came to the weekly post-test, Student 1 had no increase in scores, Student 2 almost doubled her weekly test score, and Student 3 had a slight increase in weekly test scores. From this, we can conclude that the use of peer tutoring, multi-element curriculum, and accommodations, increases the level of academic

responding, decreases competing behaviors and there is not enough evidence or data to conclude that it either positively or negatively affected the post-test scores (McDonnell et al., 2001).

From this research and relating it to my own research, I can confidently say that peer tutoring, multi-element curriculum, and accommodations help students with disabilities in the areas of academic responding and competing behaviors. This method may also help the students feel as though they are an important part of the general education classroom, as they all take turns being the tutor so the students with disabilities would have the opportunity to “teach” their peers. Accommodations are also necessary when including students with severe disabilities like in this study. Special education teachers along with general education teachers can work together to adapt materials and lessons so that the students with disabilities are able to follow along and be an active participant in the general education classroom.

The study performed by Mackey (2014) is unique in that it involves general education teachers with inclusive classrooms who have not received much if any prior training on how to effectively implement inclusive classroom strategies. It also takes a unique perspective as it takes a look at how the teachers include the students with disabilities and the data isn't taken on students' success in the classroom. The teachers that took part in this study were selected based on if they used the following, 1) Students with disabilities received their education services in the general education classrooms with appropriate in-class supports, 2) Cooperative teaching was utilized, 3) Curriculum

and instruction that demonstrated differentiated instructional strategies. The following qualitative techniques were used, interviews, observations, and teaching experience.

Each teacher implemented different strategies in order to include the students with disabilities based on what they personally felt was best for the students with needs in their classrooms. The following findings were discovered from the research, all three teachers felt as though their undergrad education did not provide them with enough support or knowledge on how to include students with special needs. Two of the three teachers had attended grad school and they expressed that they felt that schooling had better prepared them, as they have a few more courses that taught them strategies. The teachers also expressed that they need to better understand the expectations of the students with special needs in their classrooms. Another thing that came up in the study was that the teachers would like more time to collaborate with the special education teachers and better know how to support the in-class support, such as paraprofessionals. They also expressed a need for more planning time to modify their instruction to meet the needs of the students with disabilities. Lastly, their different inclusion strategies were outlined in the study. They varied from visuals, multiple problems, hands-on activities, supplemental reading materials, alternating between whole group, small group, and individual work time, giving quizzes orally, and using a predictable lesson schedule (Mackey, 2014).

My biggest takeaway from this study as it related to my research is that the three teachers involved felt as though they had not had enough training or classes on inclusive

classroom strategies, and they were kind of left on their own to figure it out. The more we move toward inclusion, the more opportunities we need to allow our teachers to learn about inclusion strategies so they feel comfortable in implementing them. Some inclusion strategies that worked for these teachers were scaffolding learning, hands-on activities, visuals, predictable schedules, supplemental reading materials, and giving quizzes orally. I feel those are all effective strategies and the more strategies teachers implement, the more successful students with disabilities will be in general education classrooms.

This last study focuses not so much on inclusion strategies, but the skills that teachers need in order to have an effective inclusive classroom. The study titled, *Developing Student Growth Through Effective Inclusion Skill Sets in the Rural Black Belt Region of Alabama and Mississippi* completed by Griffith et al. (2019) was an online study that was sent to administrators in the Black Belt region of Alabama and Mississippi to get their perceptions on which skill sets both general education and special education teacher needs to have an effective inclusive classroom. The survey was composed of 35 questions including demographics, training, and experience related to working with individuals with disabilities, principals' perceptions of inclusion and inclusive practices, knowledge of the six inclusive classroom environments, and special and general education inclusion skill sets (Griffith et al., 2019).

The results from this study are vast as there were 35 questions covering many topics of inclusion, but one of the biggest findings was that a majority of administrators had said that they feel their teachers need more time to collaborate in order to have an

effective inclusive classroom. There are so many aspects to an inclusive classroom and the general education teacher and the special education teacher need the time to collaborate with one another in order to have clear expectations on how the classroom is going to be run and what is expected of the student. Another finding was that most administrators were only aware of the one teach-one assist model and that there is a need for more training and use of programs where the teachers co-teach effectively. The data that was collected from this study will be used to provide insight on what training is needed to help teachers with their inclusion classrooms and improve the achievement of students with disabilities.

The study done by Mackey (2014) and the study done by Griffith et al. (2019) have similar findings, in that the teachers simply need more training and information on inclusion strategies in order to run an effective inclusive classroom. In order to make sure that our students are successful both academically and socially/behaviorally, we need to make sure that our teachers feel confident in their knowledge of effective inclusion strategies. If our teachers, both general and special education, don't have the strategies or knowledge on how to run an effective inclusive classroom then our students will not be successful in that setting in any manner.

CHAPTER III: DISCUSSION AND SUMMARY

Summary of Literature

Academic success of students is something that is strongly researched when it comes to the inclusive setting. There were several studies that found that the inclusive setting had no significant difference in academic skills in students with disabilities across several different disability categories and ages (Cole et al., 199; Fore et al., 2008; Rea et al., 2002; Taylor, 2015; Ware, 2016). They compared the academic success of those students with disabilities in the inclusive setting to the students in a pullout setting and found that the inclusive setting had no significant difference on the students' academic achievement compared to those in the pull out programming. While different assessments, ages, and disability categories were studied, the data that was collected could suggest that the inclusive setting does not have a significant impact on a students with disabilities ability to achieve academically (Cole et al., 199; Fore et al., 2008; Rea et al., 2002; Taylor, 2015; Ware, 2016).

While the previous studies came to the conclusion that the inclusive setting did not have a significant impact on a student with disabilities academic achievement, there were studies that suggested otherwise. Some studies found that the inclusive setting had a positive impact on a student's academic success in either one or more subjects (Affleck et al., 1988; Banerji et al., 1995; Dessemontet et al., 2012; Kurth et al., 2010; Martson, 1996). Once again, different ages, disability categories, and assessments were used during

these studies, but the research suggests that the inclusive setting had a positive effect on the students' academic achievement in one way or another.

Some studies found that the inclusive setting had a positive effect on students' reading achievement specifically and no academic gain in other subject areas. (Banerji et al., 1995; Dessemontet et al., 2012) While other studies found the opposite, positive effects in mathematics but no significant gains in the subject area of reading. (Affleck et al., 1988) All of the studies researched the impact of the inclusive setting across varying ages and disability categories and found a positive impact on academic success in varying subject areas.

One final study that compared inclusion, pullout, and a combination of both was completed by Martson (1996), in students with mild disabilities and their academic achievement. It was found that the mixed method was where the students succeeded the most academically. When looking at a student with disabilities academic success in an inclusive setting versus pull out programming, results vary. Some found positive results, and some found no significant difference in academic success. It is possible that the most effective solution would be a combination of inclusion and pull out as researched by Martson (1996).

Social and behavioral success of students in inclusive settings is another area to consider when looking at inclusive classrooms. There were studies that found that the inclusive setting had a positive impact on students with disabilities social outcomes (Webster et al., 2013; Whinnery, 1995). The studies found that students felt like they

were more a part of their classroom in the inclusive setting and that the inclusive setting led to students with disabilities being able to form bonds with their non-disabled peers. From these studies, we can conclude that the inclusive setting has a positive impact on a student with disabilities social outcomes (Webster et al., 2013; Whinnery, 1995).

There were also studies that were conducted that found no significant differences in students with disabilities behaviors when they were involved in an inclusive setting versus those in a pull out program (Dessementet et al., 2012; Rea et al., 2002). Once again, different ages, assessments, and disability categories were studied but they found similar results. It can be assumed based on these studies that an inclusive classroom does not have a positive effect on students with disabilities behaviors (Dessementet et al., 2012; Rea et al., 2002).

Lastly, as it pertains to behavior, there was a study done that found that students with disabilities adaptive behavior improved when involved in the inclusive setting. (Vivanti et al., 2019) However, it was also found that the students in the study that were not involved in the inclusive classroom also improved in adaptive behavior so it can be assumed that the inclusive setting was not the cause of the improvement. From these studies, we can conclude that an inclusive setting can have a positive impact on a student with disabilities social outcomes, but no effect on behavior (Dessementet et al., 2012; Rea et al., 2002; Vivanti et al., 2019; Webster et al., 2013; Whinnery, 1995).

When looking at inclusive classrooms, it is essential to find inclusive classroom strategies that are effective and work for all students. An effective inclusive classroom

strategy that was found was providing the special education teacher with the same curriculum that the general education teacher had. (Butler et al., 2020) Another effective inclusive strategy was co-teaching when the special education teacher would come into the general education classroom and assist in teaching the students. Students with disabilities succeed in an inclusive classroom setting when co-teaching is taking place. (Butler et al., 2020; Magiera et al., 2005) Students with special needs were found to receive more individual attention when co-teaching was taking place. (Magiera et al., 2005)

Teachers feel that co-teaching could be an effective way to teach students with disabilities and their non-disabled peers if they had more time to collaborate and were given more professional development opportunities to learn more inclusive strategies. (Brendle et al., 2017; Mackey, 2014) We can conclude that co-teaching is an effective strategy to implement in an inclusive setting if teachers are given more opportunities to learn and collaborate with one another (Brendle et al., 2017; Butler et al., 2020; Griffith et al., 2019; Mackey, 2014; Magiera et al., 2005). Based on these studies, students succeed when co-teaching strategies are implemented.

Other inclusive strategies that have proven to be effective are giving the students more responsibility in their learning and allowing them to teach one another and work more independently. (Lederer, 1997; McDonnell et al., 2001) Through scaffolding and peer tutoring, students are able to apply their knowledge to teach one another and take more responsibility for their own learning. Differentiated instruction and flexible and

creative practice are also inclusion strategies that are effective for students with disabilities (Buli-Holmberg et al., 2016; Mims et al., 2017). The more we differentiate instruction and get creative with our ways of teaching, the more success we are going to see in not only our students with disabilities, but also our non-disabled students. Other inclusive strategies that were found to be effective were scaffolding, hands-on activities, visuals, predictable schedules, and giving quizzes orally. (Griffith et al., 2019) There are many inclusive strategies that are effective, and those that work best for your students could vary. With time to collaborate and more education surrounding inclusion, teachers can best meet the needs of all of their students.

Limitations of the Research

There are vast amounts of studies that are related to inclusive classrooms, so it was vital that I limited my research into specific parameters to encompass what I was wanting to research. The first limitation that I required was only reviewing published empirical research studies from peer-reviewed journals. This ensured that the studies I was including were reliable. Another limitation that I required of the studies was that they were completed in the last 35 years.

The resources used were found using the key terms, “inclusive classrooms”, “inclusive classroom strategies”, “academic success”, “academic inclusion”, “social/emotional inclusive classroom”, “adaptive behavior”, “Inclusion”, “effective inclusion strategies”, and “co-teaching strategies”. The resources were also limited to studies that focused on the effects inclusive classrooms had on students with disabilities

in the areas of academics and behavior and not on the students without disabilities. The studies involved in my research included students between the ages of 3-17.

There were limited research studies that looked at the positive or negative effects of an inclusive classroom on a student with disabilities and their social abilities. One study was included that focused on students with disabilities relationships in inclusive classrooms, but I failed to find any other studies that researched a similar topic. Another theme I was unable to find was the effect of a student being placed in an inclusive classroom at a young age and the impact that had on their later life, either academically or socially.

Implications for Future Research

As I had stated in the limitations of the research area, I would like to see more research done on what effects inclusive classrooms have on students later in life, either socially or academically. I personally would find it interesting to see if students who took part in an inclusive classroom early in their academic career were more likely to succeed or fail as the years progressed. To continue with that same topic, it would be interesting to see how those students with disabilities that took part in an inclusive classroom were succeeding into adulthood and if that inclusive classroom setting had any effect on a person's success into adulthood.

Another question I had after completing my research was, does an inclusive classroom have more benefits to a student with disabilities in the area of math or reading?

It also left me questioning if there were benefits to students taking part in an inclusive classroom in Pre-K versus Elementary versus Middle school versus High school. The curriculum and students' abilities change so drastically from school level to school level so I would be interested in seeing more research being completed on the effects of inclusion at different levels. Similarly to that, I would be curious to see if students who took part in an inclusive classroom at an early age were more likely to succeed in that setting than those who maybe were changed to an inclusive setting later in their academic career. Inclusion is relatively new, and more and more schools are implementing its strategies so the more research that is completed the more we will learn about it and its effects.

Implications for Professional Application

As I previously stated, inclusion is a relatively new concept, and it wasn't until recently that students with disabilities were being included in their general education classrooms. I think that it is safe to say that complete segregation of special education students is neither fair nor ethical and no matter the disability we need to be as inclusive as possible. I am currently a special education teacher and I think my students gain so much both academically and socially from being included in their general education classrooms as much as possible. I find this research to be important for both general education and special education teachers because if we want our inclusive classrooms to be effective for all of our students we need to work together as a team to ensure that happens.

With that being said, I believe that there needs to be more training and opportunities to collaborate with one another to make sure that this is possible and effective for our students. In my research, I found that teachers who were involved in an inclusive classroom felt that they did not have the time or the knowledge to effectively implement any inclusion strategies. There was not enough time for the general education teacher and the special education teacher to collaborate and understand what their role in the inclusive classroom was. If we want to include our students with disabilities in the general education classroom more than we need to provide our teachers with the resources and professional development in order to make sure that they feel comfortable and prepared for that to happen.

Something else that I think can be taken away from this research is that the more inclusive strategies we implement and the more we differentiate our instruction, the more likely not only our students with disabilities, but all of our students will succeed. We as educators should be aware that all of our students learn in different ways and the best way to meet the needs of all of our diverse students is to have different modes of instruction and diversify our instruction as much as possible. While this task may seem daunting at first, the more you practice and implement it, the easier it is to implement it.

I think it is safe to say that all special education teachers just want their students with disabilities to feel like they belong and are an essential part of any classroom. If we are given the opportunity to collaborate with our students' general education teachers then we can work together to find ways to adapt and modify instruction to meet the needs of

our students. If we meet the students where they are at then they will grow and progress and continue to gain confidence in themselves that they can succeed in the general education classroom.

I think if inclusive classrooms are going to be implemented more and we want them to flourish then we need to start at the administrative level and there needs to be more professional development around this topic. The success of inclusion relies on the teachers and their knowledge and strategies they implement, and if they are given the resources to do so then it will work. The more confident a teacher feels, the better a student is going to do and the more achievement we will see in that student.

Conclusion

To answer my research question of how inclusion strategies affect students with special needs, I think that it is safe to say that they positively affect a student's behavior and social skills by increasing peer role models and peer interactions. Based on the studies that I have found I find it hard to come to the conclusion that inclusive strategies have a positive impact on a student's academic performance all the time. Academic performance and placement really differ from student to student, and while one student may excel in the inclusive setting, another may need more one-on-one instruction and would benefit from a resource room. I have found many effective inclusion strategies and again, I feel that different inclusion strategies may work for some classes while the same strategy does not work for another. A teacher should take the time to get to know her class, test out different strategies, and figure out which strategies best work for that

specific class. While there is a current push for more inclusive classrooms, it may not be the answer for all.

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