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Improving Cohesion Between General Education and Special Education Departments

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Improving Cohesion Between General Education and Special Education Departments

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ED 590: Research and Complete Capstone

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Dedication

To my parents: Thank you for the endless support. I would not be where I am today without you both. As I continue through life, I will look back on this experience with you at the forefront of my mind. This could not have been done without you. I love you!

To my cohort: Thank you for the humor, encouragement, and help as we have gone through this experience. The journey we have gone on together is a bond that we will always share. Best of luck to you all!

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Abstract

Cohesion between general education and special education departments is the idea of blending and aligning instructional methods and approaches regardless of educational discipline. This paper was written to examine how this cohesion can be improved. Educational leaders must improve cohesion between general education and special education departments to support the academic achievement and success of all students in schools. Through qualitative, quantitative, and mixed methods studies, methods to improve this cohesion were researched. The research provided insight on how general education and special education teachers feel about collaboration and how collaborative efforts can be utilized to improve cohesion. These collaborative efforts can be positively impacted through professional development decisions guided by teachers' needs. Professional development which has been selected and pursued by general education and special education teachers also provides teachers more training on specific areas of focus. An important area of focus is co-teaching to directly influence instruction and improve cohesion. Despite limitations, insights from the research provide context for educational leaders to apply these themes in educational settings and ideas for future studies.

Keywords: general education, special education, cohesion, collaboration, professional development, co-teaching, inclusion

Improving Cohesion Between General Education and Special Education Departments

Chapter One: Introduction

Almost every person, in one way or another, has needed some form of help or assistance to achieve something. Whether it be a parent teaching their child how to tie their shoes, a coach instructing a player on proper form and technique, or a supervisor showing a new employee how to follow the correct procedure, the need for assistance frequently happens all throughout one's life. In those situations, the amount and type of support will often vary from person to person. Some may only need the instruction once while others will need it repeated multiple times. For some, simply the instruction will suffice while others may require a demonstration to go along with the instruction. The difficulty lies in how different approaches are required for different individuals when teaching or helping them with something new. The instruction becomes even more difficult when the learners are together, each with different needs. In the realm of education, the same applies as this issue is enhanced by a classroom with a wide spectrum of learners and needs.

Schools are institutions of education with diverse sets of learners, so the need for specialized instruction becomes more necessary in these settings. Students who require individualized instruction can have their development and learning significantly impacted by whether they receive said instruction or not. When these learning needs are identified as being caused or impacted by a medical diagnosis, students can be evaluated for and receive special education. Special education is intended to provide the kind of individualized accommodations and support which is deemed necessary for an equal opportunity for success; however, students with disabilities are still typically about three academic years beyond peers according to data (Gilmour et al., 2019). This academic struggle is also found in general education, as it has been

reported only 40% of students in the fourth grade are proficient readers (National Center of Education, 2018). This leaves 60% of readers functioning below their grade level. While this is only one subject area, it is the first brushstroke in a much bigger picture. As students and educational needs diversify, it becomes increasingly apparent typical classroom strategies are not properly supporting the needs of special education and general education students. Educational leaders need to provide support to general education and special education teachers so they can address the needs of all of their students.

A push for inclusive education has always been present in the United States. General education teachers will continue to have a responsibility to instruct special education students while utilizing the proper instructional strategies as the special education population grows. Additionally, the need for further instructional modifications, techniques, and strategies are going to be necessary to properly support general education students who are struggling to achieve success in the general education classroom. This issue could potentially be remedied with improved cohesion between special education and general education, so this paper will analyze research to confirm the need and determine the best approaches.

Importance of the Topic

The population of students in special education is higher than it has ever been. Per data from the 2021-2022 school year, the number has more than doubled over the past four decades (Pendharkar, 2023). This growth can be attributed to better recognition and diagnosis of conditions like attention-deficit/hyperactivity disorder (ADHD) and autism, an increase in the rigor of standards leading to more support needed, and the general education classroom being unable to meet the needs and provide support to those students (Pendharkar, 2023). This final cause is why collaboration and cohesion must be improved between general education and

special education departments. General education students will face many of the same educational obstacles as special education students. Therefore, the general education classroom needs to be equipped to support all students.

The practice of involving special education students in general education instruction has been a component of the process since its inception. In its simplest terms, inclusive education is the integration of all students in the classroom so they can participate and learn together. The definition has changed over the years, expanding beyond just students who receive special education to consider all students regardless of their religious background, language, sexual orientation, or learning needs (Metropolitan State University of Denver, 2022). Some states have seen this need arising and have already begun the necessary steps to address it. The California Commission on Teacher Credentialing updated the credentialing process of special education teachers to include focuses on collaboration and co-teaching practices with general education (Jones, 2020). Through this change, students with mild learning disabilities who do not receive special education services can benefit from special education strategies implemented by their general education teachers. The effects of this change are demonstrated in the quote, “It represents a big cultural shift. It’s no longer, ‘Those are special ed. kids’ and ‘These are gen. ed. kids.’ It’s, ‘These are *all* our students” (Jones, 2020, para. 15). All students are too important to continue trying to address their growing needs individually. A collaborative, cohesive effort led and supported by educational leaders is required by all teachers from all departments to achieve success.

Scope of Research

This paper examined qualitative, quantitative, and mixed methods studies to determine how to accomplish a more cohesive partnership between general education and special education

departments. Cohesion was selected as the term to envelop the idea of integrating the disciplines of general education and special education. Research from Baglieri et al. (2011) rejected the notion that there are normal children and abnormal children who always need to be taught separately. Rather, it is imperative to engage in interdisciplinary work to truly achieve success, equity, and social justice (Baglieri et al., 2011). Through further research, three themes stood out as key factors in making the partnership between general education and special education more cohesive. The first theme was collaboration between general education and special education departments. This theme expanded on why collaboration was important and how educational departments worked together to address all students' learning needs. The second theme was professional development decisions guided by teachers' needs. Professional development and teacher input was needed to provide formal training to teachers on how they can best support students regardless of educational setting. This theme promoted cohesion between departments by aligning practices and supporting students with similar strategies across general education and special education. The third and final theme discussed co-teaching. Co-teaching is a method used to serve special education and general education students by having a teacher from each discipline instruct the class simultaneously. This theme led to cohesion by special education and general education teachers who supported the needs of all students together. Research was performed on the Concordia University St. Paul's library database. Keywords frequently included were *general education*, *special education*, *inclusion*, *professional development*, *cohesion*, *collaboration*, and *co-teaching*. Filters were set to narrow research to scholarly and peer-reviewed articles published from 2009-2024; however, one study was selected prior to these years. The subjects of the research included licensed and pre-service general and special education students and teachers at the elementary, middle, or high school levels. Subjects did not

include students or teachers at the preschool level as special education is rare at this age range. The research gathered will be used to identify the need and determine how to accomplish cohesion between general education and special education departments.

Research Question

In the Educational Leadership program at Concordia University, the essential question of the program is, “In light of what is known about pedagogy in the contemporary educational setting, how shall educators lead equitably and inclusively in order to positively impact student development and learning?” This question is incredibly relevant for educational leaders as they are responsible for guiding the efforts of all teachers and students regardless of the setting they teach in or come from.

The research performed in this paper was in an attempt to answer the question, “In light of what is known about pedagogy in the contemporary educational setting, how might educational leaders provide support to general education and special education departments to improve cohesion?” This question was aimed at educational leaders as they are the ones who can implement the change needed to create a more cohesive system across general education and special education departments. With the average student often benefitting from differentiated, individualized instruction, it could be argued what is considered “special education” is truly just “general education.”

Definition of Terms

Cohesion is the goal of the “interdisciplinary alliance” process to broaden inclusive practices to consider the needs of all students in special education and general education (Baglieri et al., 2011).

Collaboration is when multiple individuals with different expertise come together to find solutions to various issues (Ní Bhroin & King, 2020).

Co-teaching is a method where two teachers are paired together to provide instruction, support, and accommodations to a class simultaneously in the same classroom. This pairing is typically a general education and a special education teacher (Shin, 2016).

General education is the setting for students who do not receive supplemental or additional services from kindergarten to their final year in high school. Students that receive special education services will often spend portions of their school day in this setting (Jordan et al., 2019).

Inclusion is when students with disabilities receive all of their academic services in the general education setting (Idol, 2006).

Inclusive practices are educational programs in a school where special education students are enrolled in general education classes with fellow general education students for 100% of the school day (Idol, 2006).

Professional Development is formal training provided to teachers to improve their professional skills (Jenkins & Yoshimura, 2010).

Special education provides students with services to address their educational needs as established in an Individualized Education Plan (IEP). It may involve, but is not limited to, specialized instruction, physical accommodations, specific focus on social/emotional needs, or modifications to content (Pendharkar, 2023).

Summary

As stated previously, the need for assistance will happen throughout one's life. In education, whether it be general education or special education, students need help. As students

and educational needs diversify, intersections of students' needs occur within the classroom. As Baglieri et al. (2011) discussed, schools are a place where all students should feel a sense of community and belonging regardless of their needs. A cohesive blend between educational disciplines is important so all teachers are prepared for all the possible needs a student could display.

This paper will explain research performed to answer the question "In light of what is known about pedagogy in the contemporary educational setting, how might educational leaders provide support to general education and special education departments to improve cohesion?" This cohesion can be utilized to bridge the gaps between general education and special education. The themes of collaboration, professional development decisions guided by teachers' needs, and co-teaching have been identified as instrumental in achieving cohesion. These themes were selected after careful examination of qualitative, quantitative, and mixed methods studies and will be described in the following chapter.

Chapter Two: Literature Review

How to best approach cohesion of general education and special education departments has been a highly researched topic for years. However, the appropriateness of how to instruct special education students continues to be discussed. Additionally, general education students who do not qualify for special education continue to struggle within the general education curriculum. It is apparent they could potentially benefit from special education strategies.

This literature review will discuss research on how cohesion between general education and special education departments can be applied and result in a positive effect for school staff and instruction for students. Peer reviewed articles and journals were carefully examined and

selected to guide educational leaders in this process. Through the research, three themes became apparent.

The first theme revealed cohesion could be achieved through collaboration between general education and special education teachers. Special education and general education teachers working together and taking the time to discuss specific strategies to support different students could be a direct way to improve cohesion. This theme was supported by the studies performed by Caputo & Langher (2015), Da Fonte & Barton-Arwood (2017), Ní Bhroin & King (2020), and Idol (2006).

The second theme, professional development decisions guided by teachers' needs, helped support cohesion by guiding general education and special education teachers on best practices and determining how to deliver professional development. This theme was supported by the research from Idol (2006), Jordan et al. (2019), Jenkins & Yoshimura (2010), Bahr et al. (2023), Shady et al. (2013), Boulorian et al. (2021), and (Guise et al. 2021).

Co-teaching, the third theme, was when general education and special education teachers teach together in one classroom. Co-teaching was a direct way to improve cohesion between the departments by aligning instructional strategies and content taught. This theme was supported by studies from Tremblay (2013), Bundock et al. (2023), Arndt & Liles (2010), Stefanidis et al. (2019), and Grenier (2011).

The research for these themes will be utilized to determine how educational leaders can improve cohesion between general education and special education departments.

Collaboration Between General Education and Special Education Teachers

Enhancing collaboration between special education and general education departments was determined to be an important step to take in improving cohesion. Through collaboration

with one another, general education and special education teachers could feel more supported. The following theme discussed why collaboration between general education and special education teachers is necessary and methods to directly improve collaboration.

Collaboration between special education and general education departments was explored in an article written by Caputo and Langher (2015). This article described the quantitative research performed by the authors to assess the quality of some inclusive practices in different educational settings and the collaboration with general education surrounding these practices. The participants consisted of 276 special education teachers from grades 6 to 12 working in the city of Rome. There were 224 female teachers and 52 male teachers, all having a wide range of experience. In a single session, these teachers voluntarily completed two questionnaires, the Collaboration and Support for Inclusive Teaching (CSIT) scale and the Maslach Burnout Inventory-Educators Survey (MBI-ES), to express their perception of inclusive education and collaboration in their settings (Caputo & Langher, 2015).

Caputo and Langher (2015) evenly separated the groups to analyze the data and confirm the results. Through the assessment, the researchers discovered special education teachers' feelings of burnout stem highly from a lack of collegial support and collaboration. This supported the theme of collaboration between general education and special education departments. Without collaboration, special education teachers felt isolated and prepared to leave the profession. Adversely, the research showed support from staff and collaboration had a positive effect on feelings of acceptance, personal success and accomplishment, and participation. Here, the theme was supported by showing how support for special education teachers created a more accepting, cohesive environment for special education teachers. The authors (2015) also noted the study had some limitations because no general educators were

surveyed which would have provided a valuable perspective. However, the overall results showed the importance of collaboration improving cohesion from a special education perspective (Caputo & Langher, 2015).

The research by Caputo and Langher (2015) discussed the importance of collaboration between general education and special education departments. In another article written by Idol (2006), the author performed a mixed methods study of a 100% inclusion program being offered to special education students in general education settings. The study was conducted with the intent to examine, understand, and improve how schools provided instruction and supported special education students through an inclusive educational setting. Research took place at four elementary schools and four secondary schools in a large, southwestern United States school district. The data was collected in both qualitative and quantitative methods through statewide testing results and individual or group interviews with educators at the schools. Over the course of one year, the researcher spent two days at each elementary and secondary school and interviewed 299 different school staff members including principals, assistant principals, general education teachers, special education teachers, specialist teachers, and instructional assistants. The interview responses were sorted into seven distinct categories: school district policies, inclusion, modifications, special education teachers, instructional assistants, students' behaviors, and statewide test scores, and then organized based on frequencies and percentages (Idol, 2006).

With the vast amount of data collected and the different settings which interviews were conducted in, some findings stood out as prominent (Idol, 2006). The interviews with staff showed instructional methods and modifications applied to special education students were helpful to general education students who were at risk for failure. However, as predicted by staff, the overall statewide test scores were not significantly impacted. A limitation of this data was the

scores of general education students and special education students were not analyzed separately. This analysis would have provided insight on the individual educational impact through inclusive practices. Throughout the interview process, the researcher (2006) found school staff members were very positive about inclusive practices and felt a strong sense of support from administration. The majority of staff considered themselves willing and able to collaborate and believed inclusion to be beneficial for special education students and not harmful for general education students. Administrators were most successful when they adapted their practice to apply an instructional leader role in the inclusive setting. Support from educational leaders and a willingness to collaborate could be the first steps in fostering a collaborative, cohesive environment between general education and special education teachers. These details regarding administrative support, willingness to apply inclusive practices, and attitudes towards collaboration were determined to be important to improve cohesion. Overall, this research supported the idea of collaboration between general education and special education staff (Idol, 2006).

In addition to perceptions of collaboration and support from educational leaders to support collaboration, it was important to determine what teacher should specifically collaborate on to improve cohesion. A mixed methods study by Ní Bhroin & King (2020) evaluated areas for general education and special education to improve cohesion through collaboration. Data was collected from five university students in Ireland who completed a two-phase, year-long postgraduate program focused on special educational needs. Graduates were placed in five different elementary general education settings and completed questionnaires to share current practices of individual and collaborative inclusion for selected students. Then, the involved general education and special education teachers, administration, and researchers participated in

a focus group to discuss professional learning and collaborative impact on individual education planning. The selected students also participated in individual interviews to share their educational experiences in regards to their individualized education plan (Ní Bhroin & King, 2020).

Questionnaires were coded to evaluate collaborative processes and implementation (Ní Bhroin & King, 2020). Results from the coding showed collaborative processes in planning were strong. This collaboration included planning involving the general education teacher, parents, and special education teacher; however, the special education teacher almost exclusively wrote the IEP. This result demonstrated the area of collaborative planning in these particular schools was already in place and further development was not required. Collaborative implementation results were low, specifically in the general education classroom. Similarly, assessments were mainly undertaken by the special education teacher (Ní Bhroin & King, 2020). Despite the small number of participants in this study, these implementation and assessment results showed collaborative efforts in these areas would need to improve in order to improve cohesion between general education and special education teachers.

Ní Bhroin & King (2020) discovered collaboration between general education and special education teachers in instructional implementation and assessment is important to improve cohesion. In another article, authors Da Fonte and Barton-Arwood (2017) explored the perspectives of pre-service general education and special education teachers on collaboration across the disciplines. The qualitative research was conducted through two southeastern United States colleges with twenty-six pre-service teaching candidates. Using a structured activity protocol from the National School Reform Faculty, the authors gathered qualitative data on the pre-service teachers' perspectives regarding collaboration. The researchers discovered three

common themes through this process. These themes were time management, content knowledge, and communication (Da Fonte and Barton-Arwood, 2017).

The results of this research showed the importance of managing time to ensure collaboration could happen with pre-service teaching candidates. However, these pre-service teachers identified having time to collaborate with teachers across their discipline may be difficult to find (Da Fonte & Barton-Arwood, 2017). Research supported the need for all school staff, including administration, to be mindful of scheduling and making time for collaboration. This demonstrated the role educational leaders play in improving cohesion as they set teacher schedules, making collaboration more accessible. Then, when time is granted, conversations should be focused and directed toward their work with students. Results also revealed how content knowledge can lead to obstacles in collaborative work. Both general and special education teachers could make itemized “fact sheets” to share main points about IEPs or the current content of the general education class to help with this issue. Finally, the results of the research showed the most discussed need among the pre-service teachers was communication. When collaboration attempts with other teachers are made, perspectives are not always aligned and the necessary relationships may not have been formed. Language and vocabulary should be defined from both sides, communication tools like the Collaborative Teaching Introductory Worksheet could be utilized, and conflict should be addressed immediately (Da Fonte & Barton-Arwood, 2017). Through these three themes which were revealed, the concept of collaboration between general and special education teachers was made apparent and how it can be practiced was identified.

Collaboration between special and general education departments would bring several benefits to cohesion. As it was mentioned in the Caputo and Langher (2015) article, collaborative

efforts between these departments led to higher participation rates and feelings of acceptance for special education teachers. The Idol (2006) article pointed out how administrative support and teacher willingness and attitude positively impacted inclusion and, in turn, collaboration between general education and special education teachers. When educational leader and staff support was present, Ní Bhroin & King (2020) and Da Fonte and Barton-Arwood (2017) discovered how important time management, content knowledge, and communication were to improve instructional implementation, assessment and overall collaboration. The analyzed research all pointed to the importance of collaboration between special and general education departments. In order to support collaboration and further improve cohesion between special education and general education, some professional development could be very beneficial.

Professional Development Decision Guided by Teachers' Needs

In the previous study done by Idol (2006), the author also discussed how professional development is needed to create a cohesive environment. This point came from the school with the fewest number of students with disabilities but the highest rate of inclusion practices. Twenty-one percent of the staff reported they needed further practice working with students with disabilities (Idol, 2006). While the percentage was not particularly high, it was significant. This school was completely inclusive but one fifth of teachers still believed more guidance was needed. This supported the idea that general education and special education staff would benefit from teacher input guiding professional development decisions.

In addition to the research from Idol (2006), the need for professional development decisions guided by teachers' needs was presented in an article titled from Jordan et al. (2019). This quantitative study examined a set of 34 general education and special education pre-service teachers' self-efficacy in regards to teaching reading. The study added to limited research and

provided a new measuring scale surrounding future teachers' comfort and ability to provide adequate reading instruction. The current measure, the Teacher Efficacy for the Teaching of Reading (TESTR), was modified and developed the Teaching Reading Efficacy Scale (TRES) as a result. The 34 graduate and undergraduate students completed the 28-item scale in which they ranked their confidence from 0 to 100 on various skills including early reading skills, late decoding skills, comprehension, metacognitive processes, assessment, and motivation (Jordan et al. 2019).

The results of the measure showed three areas the pre-service teachers should feel confident in and provided context for potential professional development. Self-efficacy in the nature of reading development, instruction using connected text, and using assessment to drive instruction were key results from the TRES measure (Jordan et al. 2019). While this measure was used with pre-service teachers, a similar measure can be applied to licensed teachers in general and special education to support cohesion between the departments. For example, general education teachers could complete the TRES to share their feelings of self-efficacy for teaching reading to special education students. In turn, this would guide educational leaders on areas of necessary professional development. Limitations and restrictions from this study included research based only on pre-service teachers and the variety of the classes students took which were specific to their program (Jordan et al. 2019). However, this research demonstrated the importance of professional development decisions being guided by teachers' needs in educational settings.

The necessity of professional development decisions guided by teachers' needs was apparent in the articles by Idol (2006) and Jordan et al. (2019). An article by Bahr et al. (2023) studied the collaboration between a principal, two 6th grade general education teachers, and a

special education teacher to guide professional development decisions. The qualitative research was performed at a 70% white, suburban elementary school in the Mountain West region of the United States. The study focused on the collaboration between the teachers and the professional development which could further support the teachers. Data was collected through one, 45 minute interview held with each teacher. The interview responses were coded and analyzed to determine key themes and findings (Bahr et al., 2023).

Through the interviews and coding of the responses, it was revealed there were still concerns with the success of special education students despite collaboration between the four staff members. Responses showed the teachers were feeling frustrated with disjointed approaches and having to consistently reteach content (Bahr et al., 2023). The authors of this study (2023) recommended some professional development seminars focused on pre-teaching in the inquiry based instructional model which the school utilized. The teachers and administrator all attended and noted the positive change in student engagement and success following the implementation of the pre-teaching practice. Not only was there a positive impact on the students, the teachers felt more comfortable collaborating and navigating the curriculum together after their shared experience. Without this professional development, the teachers' frustration would have continued. Instead, special education and general education teachers created a cohesive approach to improving instructional models following the professional development session. The authors (2023) noted some limitations on how the combination of the inquiry based instructional model and the pre-teaching strategy played a role in impacting student achievement and might not be representative of other school districts. The small sample size of teachers and their willingness to collaborate also impacted the outcomes. Despite these limitations, this research provided a strong

example of teachers who guided professional development decisions and how it made an impact on successful instructional models for general education and special education teachers.

Through the qualitative studies of Bahr et al. (2023), teachers expressed their desire and specific areas for professional development. Like Idol's (2006) research method, an article by Shady et al. (2013) used mixed methods research to highlight similar needs. Shady et al. (2013) performed this study to gauge teacher perceptions of inclusive practices and used those perceptions to guide further professional development decisions. In the K-5 school which implemented the first year of inclusive practices, 21 general education teachers, six special education teachers, and seven specialist teachers anonymously completed questionnaires to share their attitudes around inclusion and how it impacted time management and instruction. A smaller subset of teachers participated in a focus group and discussed necessary professional development based on results from the questionnaire. The professional development presented by Shady et al. (2013) defined inclusion and displayed the benefits of the practice, how inclusive practices can be done, specific instructional strategies, and details on co-teaching. Integrated in the professional development were discussions with teachers on what was going well and what was not in their practice. Finally, another survey was conducted at the end of the year similar to the one from the beginning of the school year (Shady et al., 2013). This year-long process was a thorough and thoughtful example of how teachers can be involved in professional development when improving cohesion between special education and general education departments.

Results of this year-long process began with concerns about how to implement inclusive practices from 81% of the staff and the long-term benefits for students from 48% of the staff (Shady et al., 2013). The focus group expanded on these concerns with specific questions about inclusive practices which directly influenced the professional development offered. Following

the first year of inclusion, staff concern about the benefits for special education students increased, but their confidence in implementation went up significantly. Implementation is important because inclusive practices can improve cohesion and benefit the general education students who demonstrate similar needs to special education students. A key result from the end-of-the-year questionnaire was how professional development needed to be an ongoing process (Shady et al., 2013). In order to continue to build a cohesive approach between general education and special education teachers, the departments had to commit to long-term professional development.

The research provided in the previous study by Shady et al. (2013) demonstrated the importance of involving teachers in the professional development decision making process to improve cohesion. Another article by Boulorian et al. (2021) similarly explored this involvement. This mixed methods study utilized focus groups to determine teachers' common perceptions towards students with autism and their preferred strategies for inclusion. 18 kindergarten to third grade general education teachers participated in focus groups to respond to prompts regarding perceptions of autism, inclusion strategies, and relationship-building. Teachers responded to prompts through listing their own thoughts, individually ranking the group's thoughts, and then discussing their rankings (Boulorian et al., 2021).

The teacher rankings and responses discussed above were coded by the researchers to determine common categories. One of the key findings was three fourths of the participants had never participated in a development program which addressed perceptions of autism, inclusive strategies, or supporting relationship-building (Boulorian et al., 2021). The authors (2021) noted cohesion could be improved in these areas between special education and general education through professional development. Other findings included social disconnect as a common

perception of autism, job responsibilities as an inclusion strategy, and taking an interest in student interests to support relationship building could help guide future professional development (Boulorian et al., 2021). These findings were important to help determine future professional development guided by teachers' needs and perceptions to improve cohesion.

The theme of professional development decisions guided by teachers' needs is discussed in another qualitative study by authors Jenkins and Yoshimura (2010). In this article, the authors (2010) used focus groups and observations to pursue answering the question of how general educators could build their confidence in addressing the needs of their students with disabilities. The article followed the experience of a student support coordinator who wanted to help support teachers who felt a lack of knowledge and training in special education. The student support coordinator embarked on a mission to determine exactly what the general education teachers desired in their training. The 6 week professional development which followed took place at an elementary school of 270 students and 18 general education teachers. Approximately two thirds of the teachers chose to participate in the professional development (Jenkins and Yoshimura, 2010).

The student support coordinator interviewed teachers and referenced literature to determine the professional development needed to be tiered by readiness, planning, training, implementation, and maintenance (Jenkins & Yoshimura, 2010). This research provided a guideline on how cohesion can be improved through a gradual, tiered implementation of different levels of professional development. Through this professional development, it was learned the teachers were much more engaged in the content when they had the choice to participate or not. The teachers who did choose to attend were able to engage in productive, effective discussions and training. For schools which do not have a student support coordinator,

it would be necessary for staff in other roles like a special education department head, a special education teacher who serves in a consulting teacher role, or a committee responsible for professional development activities to facilitate the training. This research supported the idea of educational leaders utilizing teacher input to guide professional development decisions (Jenkins & Yoshimura, 2010). This helped cultivate cohesion in schools, but, ultimately, it was up to the teachers to participate.

Like the Jenkins and Yoshimura (2010) article discussed, it was important for teachers to make the decision to pursue their own professional development to improve cohesion. A method of this self-selected professional development in educational settings is through instructional coaching. An article by Guise et al. (2021) studied the effectiveness of professional development through coaching between general education and special education co-teachers. Co-teaching is also a theme which will be discussed in greater detail later. This article qualitatively studied three pre-service secondary general education teachers and the effects of co-teaching coaching to support them and their in-service co-teachers. Each pair of co-teachers met with the co-teaching coach three times over a ten week period together. Each coaching session focused on progress towards the co-teaching goals, reflection on co-teaching methods, and next steps to continue progress. Data was collected and coded through identifying themes in the coaching sessions, instructional observations, recordings of co-planning sessions, and reflections from the pre-service teachers (Guise et al. 2021).

The data collected showed how the professional development method of coaching enhanced cohesion with educators from different settings (Guise et al. 2021). In two of the co-teaching pairs, coaching supported collaboration, adaptive practices, communication, and shared reflection. One pair achieved lower levels of co-teaching success, potentially due to

coaching failure (Guise et al. 2021). This study was limited in relation to the research question due to involving only general educators. However, the study did provide an example of a method which supports promoting cohesion between educators of different backgrounds. This method could potentially be applied to general and special education teachers as they work towards improvement of cohesion through professional development and co-teaching. Overall, this study supported the theme through teachers that pursued professional development.

Professional development decisions guided by teachers' needs played a significant role in supporting cohesion and success in special and general education. As the Idol (2006) article mentioned, exposure to and practice working with special education students was not enough for general education teachers. There needed to be formal training in order to learn best practices. Research from Jordan et al. (2019), Bahr et al. (2023), Shady et al. (2013), Boulorian et al. (2021), and Guise et al. (2021) provided some guidance on how teachers could be involved in professional development decisions and coaching practices to support cohesion. Through focus groups, questionnaires, and various other methods, teachers shared professional development they desired. However, it could be more helpful when teachers are able to make the decision to participate themselves (Jenkins & Yoshimura, 2010). When professional development was pursued, teachers felt more comfortable applying the learned strategies so students can succeed per Bahr et al. (2023). However, the process was long and required teachers to continue even when faith in the process began to dwindle (Shady et al., 2013). All of this research supported the idea that professional development decisions guided by teachers' needs was a necessary component to promote cohesion and between general education and special education departments. Professional development was also often necessary when implementing a unique instructional method: co-teaching.

Co-teaching

Co-teaching was defined as the practice where a general education teacher and a special education teacher simultaneously teach in the same classroom (Shin, 2016). Co-teaching could be difficult to implement due to the blending of different personalities and teaching styles, time required to co-plan, and students and teachers adapting to a new method of instruction. However, it was also proven to be an effective teaching method which can support the success of cohesion as it was shown in the Guise (2021) article. The third theme will discuss research on how co-teaching could be an effective method to improve cohesion between general education and special education.

While co-teaching was demonstrated to be effective in improving cohesion in the previous section, educators often approached it with hesitation. In an article by Arndt and Liles (2010), the authors qualitatively studied the perceptions of co-teaching from the perspectives of pre-service special education and social studies teachers in elementary and secondary settings. The participants were partnered up to collaboratively plan, teach, and assess a co-taught lesson following instruction on co-teaching. Following the lesson, participants completed a written reflection and oral presentation on the learnings and process of planning and implementing a co-taught lesson. They also participated in a focus group to share their final thoughts on co-teaching (Arndt & Liles, 2010).

The results of the study highlighted two themes (Arndt & Liles, 2010). One theme was that pre-service teachers were extremely open minded about co-teaching. The idea of co-teaching was positively viewed by many of the pre-service teachers; however, concerns remained about administrative support and a mutual commitment to co-teaching. These concerns highlighted the educational leaders role in cultivating an environment to support co-teaching to promote

cohesive improvement. The second theme was the concern that co-teachers were coming from completely different disciplines. These differences in instructional approaches and content knowledge created a lot of opportunity for students to succeed, but it also caused obstacles in collaboration. Therefore, teachers may have to spend more time collaborating to understand each others' disciplines when pursuing co-teaching (Arndt & Liles, 2010). Overall, co-teaching was displayed as a practice which was approached positively by pre-service teachers and could improve cohesion when administrative support was provided and the appropriate time was taken to implement.

Like the Arndt & Liles (2010) article demonstrated, general education and special education perceptions of co-teaching were important in implementation of the method. In an article by Stefanidis et al. (2019), the authors similarly performed a quantitative study to observe contextual factors which influenced general education and special education teachers' perceptions of co-teaching. After reviewing literature, the authors compiled three hypotheses. These hypotheses were high levels of co-planning, parity, and relationship quality would positively influence perceived benefits of co-teaching. The authors (2019) evaluated these hypotheses with 147 general education and special education teachers across the United States who were recruited online through two phases. The participants completed the Co-teaching Questionnaire which shared their experiences and perceptions about co-teaching.

Upon obtaining the results, the data was analyzed and compared to the proposed hypotheses (Stefanidis et al., 2019). Results showed co-planning positively correlated to positive perceptions of the benefits of co-teaching. This result was shared in regards to the quality of relationships between co-teachers. This finding was consistent with the open-mindedness of the pre-service teachers discussed in the Arndt & Liles (2010) article. The data analysis showed

parity between co-teachers had no positive effect on the perceived benefits of co-teachers. The authors (2019) noted an environment where special education teachers are reduced to a lesser role than the general education teacher is not cohesive. While time to co-plan and build relationships were shown to be important, general education and special education teachers had to understand instructional roles should be equal in a co-taught classroom in order to improve cohesion.

Perceptions of co-teaching were shown to be important in the previous studies. The applied effectiveness of the co-teaching model was studied in an article by Tremblay (2013). In this article, a two-year quantitative study was conducted to examine outcomes in reading, writing, math, and attendance starting with four first grade classes over the course of two years. In the first year, the first grade classes were divided into two groups: co-taught and solo-taught with pull-out special education services. This grouping continued into the second year when a new class of first grade students joined the study as a control group. It is important to note the special education qualifications for the students receiving services were limited to specific learning disabilities (Tremblay, 2013).

Results of this study were mixed. There were no significant improvements in the area of mathematics for any of the students (Tremblay, 2013). In reading and writing, general education students who were taught through a co-teaching method showed significant improvement in reading and writing from the beginning of first grade to the end of second grade. Specifically, this improvement was seen in the general education students scoring the lowest. The article stated, “The student rank analysis shows that in grade 1, the noticeable progress made by the included students in reading/writing pertained to those students with the lowest scores” (Tremblay, 2013, p. 256). It can be surmised this occurred for general education students due to

the benefits of the special education strategies utilized in a co-taught classroom. The achievement gap also closed between special education students and general education students in the area of reading and writing in a co-taught setting more than through solo-taught special education (Tremblay, 2013). These findings suggested co-teaching was highly beneficial for students with and without disabilities in the academic areas of reading and writing.

Students did not improve significantly in mathematics due to co-teaching in the Tremblay (2013) study. Qualitative research discussed in the article by Bundock et al. (2023) directly examined how co-teaching can benefit students with and without disabilities in mathematics. In this study, the authors examined the Utah State Board of Education's (USBE) Co-Teaching Project in its sixth, seventh, and eighth years of implementation. This project was set forth to try and improve mathematics achievement for students with disabilities through co-teaching. Participants in the three-year study included a total of 281 students and 19 teachers from nine different schools (Bundock et al., 2023). The USBE created a pre/posttest which the researchers examined to determine student achievement growth.

The research revealed seven of the nine classes studied made significant improvement on the pre- and post-test (Bundock et al., 2023). Additionally, students who received special education services in eight of the schools made significant improvements. There was a variance between the amount of students who received special education services in each class which did not appear to correlate with the success in closing the achievement gap between general education and special education students. Therefore, further research is required to determine if the percentage of special education students in a class affected the gains of students. These variables, along with resources, instructional strategies, etc., needed to be considered in this study when results were evaluated. It was also important to note the main focus of this study

monitored implementation and teacher perception of the USBE Co-Teaching Project professional development (Bundock et al., 2023). However, the findings supported co-teaching as a practice to improve cohesion between special education and general education, specifically in the content area of mathematics.

While co-teaching was proven to be effective in improving cohesion and student achievement in academic content areas like reading, writing, and mathematics, it was not limited to these. In a qualitative study by Grenier (2011), factors which influenced co-teaching in an inclusive physical education program were explored. Two general physical education (GPE) teachers and one adapted physical education (APE) teacher participated in this study. Twice a week over a 16-week period, the teachers participated in interviews about co-teaching methods, instructional practices, and modifications (Grenier, 2011).

Field notes and interviews were coded to identify three main themes (Grenier, 2011). The first and second of these themes was that co-teaching relied on community building and core values of trust and respect. This theme correlated with the findings regarding relationship quality from the Stefanidis et al. (2019) article and co-planning from the Arndt & Liles (2010) article. The third theme was to create a natural support structure. Like the Arndt & Liles (2010) article discussed, the differences in disciplines could be a significant benefit. Unlike Arndt & Liles (2010), this theme from Grenier (2011) also discussed utilizing general education students in a supporting role for special education students, but the improvement in cohesion following support and collaboration was apparent. Themes represented in previous studies and the research performed by Grenier (2011) were examples of how to promote co-teaching to improve cohesion between general education and special education departments.

Co-teaching was demonstrated as a valuable method to improve cohesion between general education and special education departments. Co-teaching puts teachers in the position to directly collaborate with one another and align instructional methods. The presented studies showed many teachers expressed a desire to implement co-teaching in their practice. Despite concerns about potential obstacles, the pre-service teachers in the Arndt and Liles (2010) article expressed an open-mindedness and enthusiasm about co-teaching. Similarly, the study from Stefanidis et al. (2019) found teachers considered co-planning and quality relationships to positively affect the benefits of co-teaching. These benefits of co-teaching were displayed in the work of the physical education teachers from the Grenier (2011) study. Co-teaching was proven to benefit students academically in reading and writing in the Tremblay (2013) study and mathematics in the Bundock et al. (2023) article. Educational leaders have a responsibility to recognize the benefit of co-teaching and to promote proper co-teaching practices to improve cohesion between general education and special education teachers.

Review of the Proposed Problem

In light of what is known about pedagogy in the contemporary educational setting, how might educational leaders provide support to special and general education departments to improve cohesion? This question led to research which revealed three key themes: collaboration between general education and special education teachers, professional development decisions guided by teachers' needs, and co-teaching. Implementation with these themes under consideration are instrumental to support cohesion between general education and special education. Without collaboration, professional development decisions guided by teachers' needs, or co-teaching, special education and general education would continue to frequently be

disjointed and lacking cohesion. Educational leaders have a responsibility to address this issue to support cohesion between special education and general education.

Review of the Importance of the Topic

Through analysis of research, it has been revealed special education is steadily expanding (Pendharkar, 2023). With a push for inclusive education, the needs of special education students would have to be met in the general education classroom. Additionally, the needs of general education students, whether it is a language barrier, undiagnosed or unserved disabilities, or various other academic, physical, or social/emotional needs, make the importance of cohesion between educational departments more dire (Metropolitan State University of Denver, 2022). As educational needs grow, teachers in the general education and special education classrooms have to be equipped to address them. Without the proper support and cohesion between general education and special education teachers, students will struggle to reach grade level expectations. Educational leaders have a responsibility to determine methods and practices to assist teachers and students to find success and to improve cohesion between general education and special education.

Summary of Findings

In order to support this cohesion, research was performed to determine key themes. The articles by Caputo & Langher (2015), Da Fonte & Barton-Arwood (2017), Ní Bhroin & King (2020), and Idol (2006) highlighted the first of these themes: collaboration between general education and special education departments. Insight gained from these articles included the importance of how collaboration could improve staff morale, participation, and instructional success. Feeling supported by administration and fellow educators when complex student needs

were navigated was important. When time was granted for collaboration on planning, implementation, and assessment between teachers, cohesion greatly improved.

The second theme, professional development decisions guided by teachers' needs, was discovered through the research of Idol (2006), Jordan et al. (2019), Jenkins & Yoshimura(2010), Bahr et al. (2023), Shady et al. (2013), Boulorian et al. (2021), and (Guise et al. 2021). Through this research, the value of professional development decisions guided by teachers' needs was thoroughly discussed. Through professional development, student achievement, staff collaboration, and teacher efficacy were positively impacted. This impact was increased when teachers made the decision to pursue specific subjects, guide professional development decisions, and take accountability for their professional development. It was important for educational leaders to note time and consistency in professional development are significant to produce desired results in cohesion.

Finally, the articles from Tremblay (2013), Bundock et al. (2023), Arndt & Liles (2010), Stefanidis et al. (2019), and Grenier (2011) discussed the third theme, co-teaching. Through this research, the impact of this method where a general education and special education taught simultaneously was revealed. General education students with learning needs experienced a high level of support in co-teaching. Special education teachers and students felt included and more aligned with the general education content. Co-teaching was also demonstrated as a flexible method which can be applied in classrooms of many different content areas. Cohesion between general education and special education was directly improved through co-teaching.

Conclusion

Based on the above research, cohesion between general education and special education was improved through collaboration between general education and special education

departments, professional development decisions guided by teachers' needs, and co-teaching. Educational departments were discovered working together to support student needs regardless of the services they receive. This support began with the teachers collaborating which was often supported by professional development. This collaboration and professional development led to a co-teaching practice to further support student achievement. Educational leaders played an important role in improving cohesion by implementing these practices in schools.

The following chapter will discuss insights gained from the research in greater detail. These insights will be expanded on to share applications in educational settings. Additionally, ideas for future research will be discussed to continue improving cohesion between general education and special education departments.

Chapter Three: Discussion and Application

The research conducted included studies from elementary and secondary educational settings. Some of the study participants were pre-service teachers while others were licensed, in-service teachers across the country and around the world. Cohesion between general education and special education departments were applied in any setting where general education and special education services are offered. Therefore, any educational setting will be considered as insights and applications from the three themes are discussed. This chapter will also discuss limitations to the studies researched and implications for future research.

Insights Gained from Research

Three main insights can be drawn from the research. The first of these insights is collaboration between general education and special education teachers takes equal effort from all involved parties. In order to improve cohesion, educational leaders need to support the teachers in finding opportunities for collaboration. Additionally, these educational departments

have to work together to improve cohesion. General education and special education teachers need to demonstrate parity and share problem-solving decision making equally. Utilizing the expertise of all teachers through collaboration will make each department stronger and more cohesive.

The second theme of teachers' needs to guide professional development decisions provided a second insight. This insight is general education and special education teachers will find more value in professional development they have direct influence over. There is less interest and feeling of responsibility when teachers are told what they should work on. When teachers have authority over what professional development they participate in, it is more beneficial for themselves, students, and the cohesion of general education and special education departments. Educational leaders need to allow teachers to share their opinions on professional development and provide opportunities for staff to pursue those interests.

The final insight was provided by the research on the third theme of co-teaching. This insight is that co-teaching positively benefits student achievement in general and special education and directly improves cohesion between general education and special education departments. General education students and teachers benefit from co-teaching by working with special education teachers and being exposed to additional instructional support and strategies. Special education students and teachers benefit from co-teaching by being included in the general education classroom and acquiring new knowledge in different content areas. Co-teaching is a method general education and special education teachers can utilize to improve cohesion.

One obstacle is intertwined within all of these insights: time. In order to collaborate with one another, general education and special education teachers must commit time from their busy

schedules to make the necessary plans to improve cohesion. Professional development requires time and commitment with the understanding issues will not be solved immediately and cohesion will not be accomplished overnight. Co-teaching asks general education and special education teachers to take extra time to get to know one another, align plans, and deliver instruction and assessment cohesively. As application of these insights is explored, ideas to utilize time effectively and successfully improve cohesion will be discussed.

Application

The insights gained from the research provided valuable perspectives on how cohesion can improve in an actual educational setting. In elementary and secondary settings, general and special education services will always be offered. With inclusive practices growing, educators have to be able to support all students they have in class. With the consideration of time needed, general education and special education teachers are able to collaborate, develop their professional skills, and, in some instances, co-teach to produce cohesion between their respective departments.

One way to apply the research surrounding the improvement of cohesion for general education and special education departments is by providing more time and encouragement for members of those departments to collaborate. When teachers have to plan instruction and assessment for students in their own disciplines, it can be difficult to allot additional time to address cross-discipline needs. Educational leaders have a responsibility to provide available time for teachers to collaborate. This can be done by aligning teachers' prep times or implementing collaborative opportunities into professional development days.

Continually, professional development decisions guided by teachers' needs is another area where the discussed research can be applied. Professional development is an important step

in improving cohesion between general education and special education departments. It provides teachers with strategies and opportunities they can implement to collaborate with one another. The effect is maximized when teachers are given a responsibility in advocating for their desired focus. For example, if general education teachers and special education teachers feel they are prepared to effectively collaborate with one another, the time should be given to them to work together rather than instructing them further on how to work together. Furthermore, if teachers do not feel adequately prepared to collaborate with one another, specific areas of need can be provided through questionnaires, focus groups, or instructional coaching. Professional development does not always have to be one instructor teaching content selected by administration. It is a flexible, malleable design which can support cohesion in many ways.

Finally, co-teaching is a direct way for teachers to collaborate, promote student success, and improve cohesion together. Co-teaching can be applied in any classroom setting where there are general education and special education students; however, professional development is often required to implement successfully. When co-teaching is accomplished properly, student outcomes are proven to improve. Having a special education teacher present in the general education classroom aligns content knowledge between teachers and provides additional support to special education students and general education students who display similar needs. The general education teachers get a direct way to collaboratively instruct with the special education teacher and observe special education strategies at work, strengthening their practice. Educational leaders can improve cohesion through implementing co-teaching practices in the classroom

While there are ways to apply the research on improving cohesion between general education and special education departments, future research is still needed. The following section will discuss opportunities for future studies to expand the knowledge of cohesion.

Future Research

Future studies to support educational leaders in improving cohesion between general education and special education departments should involve best practices in how to implement the ideas which the research supported. While it is known that time to collaborate and communicate can improve cohesion between general education and special education departments, research on implementation methods is limited. Much of the research provided on collaboration was based on teachers' perceptions and what they believed was best practice. Further research which applies these collaborative efforts to determine which are most successful would be beneficial.

Co-teaching was proven to improve cohesion but, again, implementation methods remain unclear. A safe assumption is that professional development could be utilized to develop co-teaching between general education and special education, but further research is required in this area. For example, are different co-teaching methods and development needed for different grade levels or content areas? Would instructional coaching or whole-school development provide the most benefit? These are questions which could be answered through future studies (Bundock, et al., 2023). Of course, collaborative opportunities and professional development will vary between school districts, but determining a best practice for implementation through research can provide guidance to educational leaders.

In addition to professional development to support co-teaching, research which focuses on improving the academic achievement for special education students through co-teaching can

be expanded. Through the research performed, it was found co-teaching had the greatest impact on the academic achievement of general education students. Meanwhile, the feeling of inclusion for special education students was the main improvement. Special education teachers may not feel co-teaching to be necessary if the students they have a responsibility to support receive little to a negative academic impact through co-teaching. Therefore, research has to be performed to determine how special education students can benefit from a co-taught environment.

The proposed future research was inspired by the research performed to improve cohesion. Despite the thorough research, some limitations were still apparent. Through these potential studies, cohesion between general education and special education can continue to improve.

Conclusion

In summary, it is obvious that improving cohesion between general education and special education departments is necessary. Through cohesion, inclusive practices help support student achievement in general education and the ever-growing special education population. Additionally, general education and special education teachers feel more supported by their colleagues when they collaborate on cohesive approaches. The research presented in this literature review expands on why and how this cohesion is important.

Improving cohesion begins with a commitment to collaborate between general education and special education departments. Research suggests time and effort to collaborate will improve instructional strategies, student achievement, and teacher attitudes. To build collaboration, educational leaders should provide guidance and consider teachers' needs to guide professional development opportunities. The guidance and development has to be implemented with the teachers' preferences in mind to be effective. Following professional development, teachers will

be more equipped to improve cohesion. An important skill for teachers to develop is co-teaching. Co-teaching has been proven to improve student achievement and feelings of inclusion. In regards to teachers, it benefits relationships between general education and special education departments and overall cohesion.

In conclusion, the benefits of improving cohesion between general education and special education departments cause a ripple effect on teacher success and student achievement. Through collaboration, professional development decisions guided by teachers' needs, and co-teaching efforts, cohesive effects spread throughout a school. These effects are clearly explained through the quote, "We believe that engaging with others both within and outside the academy is essential if we are to forge change toward achieving access, equity, and social justice" (Baglieri et al, 2011, p. 25). Simply put, regardless of background, all teachers should be equipped to support all students.

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Appendix

Article Tracking Matrix

Articles	Method	Collaboration Between Special Education and General Education Teachers	Professional Development Decisions Guided by Teachers' Needs	Co-teaching
Arndt & Liles, 2010	Qualitative			X
Bahr et al., 2023	Qualitative		X	
Boulorian et al., 2021	Mixed Methods		X	
Bundock et al., 2023	Qualitative			X
Caputo & Langher, 2015	Quantitative	X		
Da Fonte & Barton-Arwood, 2017	Qualitative	X		
Grenier, 2011	Qualitative			X
Guise et al., 2021	Qualitative		X	X
Idol, 2006	Mixed Methods	X	X	
Jenkins & Yoshimura, 2010	Qualitative		X	
Jordan et al., 2019	Quantitative		X	
Ní Bhroin & King, 2020	Mixed Methods	X		

Shady et al., 2013	Mixed Methods		X	
Stefanidis et al., 2019	Quantitative			X
Tremblay, 2013	Quantitative			X