Teacher Collaboration Time: Impact on Students with Exceptionalities

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Abstract

As schools continue to explore ways to increase student achievement and outcomes, teacher collaboration opportunities continue to come to the forefront of the conversation. With Endrew Supreme Court Case (2017), increased pressure has been placed on educators to ensure students are making adequate progress. The purpose of this study was to examine if there was a difference in Grade Point Average, Out of School Suspensions, In School Suspensions, attendance, and Aimsweb R-CBM of students with exceptionalities when teachers received regular collaboration time and when teachers received no regular collaboration time. A quantitative research study was conducted that included 524 Northeast Kansas students with exceptionalities from the 2015-2016 to 2018-2019 school year. The first two years of the studies' data represented students whose teachers did not have regularly scheduled collaboration time, while the final two years of data represents students whose teachers did have regularly scheduled collaboration time. Research was conducted utilizing the independent-samples *t* test. After the data were analyzed, the researcher concluded there was not a statistically significant difference between the students whose teachers received regularly scheduled collaboration time and those who did not.

Dedication

This dedication belongs to my husband, Kyle, and son, Ryker. Thank you for being my biggest fans and cheerleaders. To my husband, thank you for countless hours of caring for Ryker so I could embark on this endeavor. Thank you for pushing me and having faith that I could get this finished. I am finished for now; however, you know it won't be long before I am ready to embrace a new academic adventure. To Ryker, thank you for being patient with me while I completed this journey. I hope that one day you embark on your own adventure and know that I will be standing there cheering you every step of the way. To my future little one, I hope I can teach you about the importance of perseverance, grit, and the importance of hard work. I know you will be amazing at whatever you do. I love you all so much!

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Chapter 1

Introduction

With the recent Endrew Supreme Court decision, the need to ensure that students receive quality instruction that meets their individual needs is at the forefront of the educational arena (Endrew F. v. Douglas County School District RE-1, 2017). "Several societal and educational trends, including decentralization, teacher professionalism, building of community-oriented school cultures, partnerships, and the vision of the school as an organic, interconnected whole, have impacted the operation of schools" (Slater, 2004, p. 2). "Reforms based on market forces and testing take school improvement in the wrong direction, yet these ideas have dominated the policy debate over improving public education" (Rubenstein, 2014, p. 22). Schools continue to explore various ways to improve student achievement, decrease discipline problems, and increase attendance. Collaboration between educators provides a variety of opportunities within school districts. By implementing collaboration within a school, school teams may be able to meet the needs of all students through professional development, team planning, and data-based decision-making.

Special education teachers are tasked to collaborate with general education teachers and ensure that children are making progress toward their Individualized Education Plan (IEP) goals. Meanwhile, general education teachers are tasked to ensure that the child progresses through the curriculum and to include students with disabilities in their classrooms (Idol & Griffith, 1998; Ripley, 1997; Mercer, Mercer, & Pullen, 2011; Stecker, Lembke, & Foegen, 2008). To meet these tasks, teachers must work together in a collaborative effort, while leaders must ensure that a culture of learning, collaboration,

and accountability is upheld (DuFour, 2002; Ripley, 1997). Many and Schmidt (2013) noted positive results when collaboration between general education and special education occurred. McLeskey, McCray, and Pugach (2011) pointed out that there are "changes in accountability standards that have resulted in higher standards for all students, and the shared responsibility of general and special educators to ensure that students with disabilities meet these standards" (p. 4). Friend (2000) identified collaboration as "the conduit through which professionals can ensure that students receive the most effective educational services to which they are entitled" (p. 132). Evidence indicates that to meet the needs of all children, teachers must collaborate (Smith, 2012).

With more schools in the United States turning to collaboration to address common concerns and improve student learning within the buildings, the question arises as to what the impact of collaboration is regarding students with exceptionalities. "Without the sense of interdependence, community cannot exist. "Inherent within the movement to create community in schools is the process of collaboration" (Slater, 2004, p. 3). According to Donahoo, Hattie, and Eells (2018), "Success lies in the critical nature of collaboration and the strength of believing that together, administrators, faculty, and students can accomplish great things" (p. 44). By providing staff opportunities to enhance their learning, reflect on their practices, and collaborate with colleagues, increased collaboration opportunities provided on a regular basis should provide the ideal situation for student learning to occur.

Background

Friend (2018) defined collaboration as "the way in which professionals interact with each other and with parents or family members as they work together to educate students with disabilities" (p. 24). Furthermore, she goes on to explain, "Collaboration never exists as a goal in and of itself: It is the means for achieving other goals" (p. 24). Collaboration provides an opportunity for professionals to come together to work toward a goal that enhances the educational outcomes for all stakeholders.

Students with disabilities have continued to be an area of concern within education. Leaders continue to ask what strategies might be implemented to best meet the needs of students with exceptionalities. Blanton and Perez (2011) indicated that students with exceptionalities performed lower than their peers in assessments. Additionally, they indicate that students with disabilities do not experience the same post-secondary outcomes as their non-disabled peers. Lastly, they propose "The data also raise legitimate questions about the level of benefit the subgroup of students with disabilities are receiving from public education" (p. 274).

Friend (2000) indicated "Looking past the enthusiastic rhetoric, much of what passes for collaboration in schools appears to be guided more by popular belief than by careful inquiry" (p. 130). She went on to state "collaboration requires commitment on the part of each individual to a shared goal, demands careful attention to communication skills, and obliges participants to maintain parity throughout their interactions" (p. 130).

One critical element in collaboration is individuals working "toward a common goal" (Friend & Cook, 1990, p. 72; Cook & Friend, 1991, para. 11). It is by this standard collaboration is utilized in a variety of arenas within education. Berry, Daughtry, and

Wieder (2009) found "collaboration and networking among teachers is essential to developing teaching talent among existing staff within schools. Opportunities for collaboration strengthen the skills of new or struggling teachers and can make the best teachers even better" (p.7). In order to close the achievement gap and serve students with exceptionalities, leaders need to focus on implementing proven strategies to increase achievement. Through the use of collaboration strategies, educators have the opportunity to work toward improving outcomes for students.

School L is an urban school located in Northeast Kansas and was established in 1865. The high school population is approximately 1,317 students, with 11.3% of the population being identified with exceptionalities. The research group consisted of 524 students. Of those, there are 133 ninth-grade students, 147 tenth-grade students, 144 eleventh-grade students, and 100 seniors.

Statement of the Problem

With a push to increase collaboration among educators, increase student achievement, and ensure all students are successful, schools are attempting to utilize a variety of strategies. Collaboration time is being utilized by schools across America; however, little research has been done to examine the impact of educator collaboration on students with exceptionalities (Friend, 2018). Research needs to be conducted in the area of utilizing collaboration and the impact on students with exceptionalities (Friend, 2018; Poulos, Culbertson, Piazza, & d'Entremont, 2014; Schleifer, Rinehart, & Yanisch, 2017; Slater, 2004). This study examined the difference in the students' grade point average, out-of- school suspensions, in-school suspensions, absences, and reading fluency between when collaboration time is provided and without collaboration time. School L

implemented a regularly scheduled collaboration time for all teachers in the building, while also moving to a modified schedule, leading to larger class sizes. This study attempted to examine if there was a difference in outcomes for students with exceptionalities whose teachers had regularly scheduled teacher collaboration time and when there was no regularly scheduled collaboration time.

Purpose of the Study

For the 2017-2018 and 2018-2019 school year, School L implemented regularly scheduled collaboration time into the building schedule. Teachers had time allocated on a regular daily or weekly basis to meet with their subject matter teams about specific topics including data, curriculum, and students. For example, during a curriculum day, the teachers would discuss common assessments, lesson plans, alignment to standards, and other pertinent topics. Through this study, the researcher hopes to provide insight into the impact of teacher collaboration time on students with exceptionalities.

The first purpose of the study was to examine if there was a difference in the semester grade point average (GPA) of high school students with exceptionalities between the time when teachers received regular collaboration time versus when there was no regular collaboration time. The second purpose of the research was to examine if there was a difference in the number of days of out of school suspension (OSS) and in school suspension (ISS) of high school students with exceptionalities between when teachers received regular collaboration time versus when there was no regular collaboration time. The third purpose of the study was to examine if there was a difference in the number of days of absences of high school students with exceptionalities between when teachers received regular collaboration time versus when there was no

regular collaboration time. The fourth purpose of the study was to examine if there was a difference in the scores on the Aimsweb R-CBM assessments of high school students with exceptionalities between when teachers received regular collaboration time versus when there was no regular collaboration time.

Significance of the Study

The research around PLCs and collaboration is extensive (DuFour, 2004; Eaker, R., & Keating, J., 2014; Hattie, 2015; Saphier, 2005; Vescio, V., Ross, D., & Adams, A., 2008); yet, research around the effect on students with exceptionalities has yet to be determined. This study may contribute to the overall teacher effect of collaboration on students with exceptionalities in the areas of grades, suspensions, attendance, and achievement. The results of this study may be utilized to create the further inquiry on building successful collaboration on students with exceptionalities, as well as provide a foundation for further research on the effect of collaboration for students with exceptionalities.

Delimitations

According to Lunenburg and Irby (2008), "Delimitations are self-imposed boundaries set by the researcher on the purpose and scope of the study" (p. 134). Delimitations are the elements that can be controlled by the researcher.

1. This study was delimited to archival data and current data retrieved from PowerSchool during the time window of August 2015 through May 2019.
2. The study was delimited to one high school in a Northeast Kansas school district.
3. The study was delimited to students with exceptionalities who were in the ninth grade through the twelfth grade.

4. The study was delimited to the use of five variables including GPA, suspension days, attendance, and Aimsweb R-CBM scores.

Assumptions

"Assumptions are postulates, premises, and propositions that are accepted as operational for purposes of the research" (Lunenburg & Irby, 2008, p. 135).

1. The researcher made the assumption collaboration time was implemented with fidelity.
2. The researcher made the assumption that data entered into the data retrieval systems were accurate in regard to attendance, GPA, and discipline.
3. The researcher made the assumption the Aimsweb R-CBM assessments were administered according to protocol.
4. The researcher made the assumption that the students performed to the best of their ability.
5. The researcher made the assumption teams discussed students with exceptionalities during collaboration time.

Research Questions

RQ1. Is there a difference in the semester grade point average of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

RQ2. Is there a difference in the number of days of out of school suspension (OSS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

RQ3. Is there a difference in the number of days of in-school suspension (ISS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

RQ4. Is there a difference in the number of days of absences of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

RQ5. Is there a difference in the scores of the Aimsweb R-CBM assessments of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

Definition of Terms

Aimsweb. Aimsweb is a system utilized to administer curriculum based measures and track student progress.

Benchmark. Benchmark assessments are provided to students in a variety of capacities throughout the school year. Each school district utilizes various systems under behavior and academics to monitor student progress. "Benchmark assessments are assessments administered periodically throughout the school year, at specified times during a curriculum sequence, to evaluate students' knowledge and skills relative to an explicit set of longer-term learning goals" (Herman, Osmundson, & Dietel, 2010, p. 1).

Collaboration. Collaboration is utilized within districts as a means to enhance student outcomes. While there are a variety of models, one critical element in collaboration is individuals working "toward a common goal" (Friend & Cook, 1990, p. 72; Cook & Friend, 1991, para. 11).

Exceptionalities. Exceptionalities is a term for a student with a disability.

Grade Point Average (GPA). Grade Point Average (GPA) is a measurement of the average of grades over a period of time. GPA is typically reported by semester, as well as produced in terms of an overall GPA for the student's high school career. The GPA is calculated based on student letter grades (ie. A=4.0, B=3.0, C=2.0, D=1.0, F=0).

Individual Education Plan (IEP). Individual Education Plans (IEPs) are provided to students with exceptionalities. IEPs are a team formulated document consisting of present levels, goals, accommodations and modifications, special education services, and addresses the student's area of disability.

PowerSchool. PowerSchool is the student information system that is utilized by the school district to collect and report data on metrics such as grades, attendance, and discipline.

Special Education. Special Education is federally mandated programming to provide services for students with disabilities.

SpedTrack. SpedTrack is a student system utilized to create IEPs, record student progress, and complete special education evaluations. The system reports important metrics to the state, such as student exceptionalities, special education services, etc.

Suspension. Suspensions are utilized as a form of discipline in school.

Organization of the Study

The study is comprised of five chapters. Chapter 2 is comprised of a review of literature. Chapter 3 provides an overview of the study, methodology, and research design. Chapter 4 outlines the results of this study. Lastly, chapter 5 provides a summary of the study, reviews the findings, and provides recommendations for further research.

Chapter 2

Review of the Literature

Collaboration in education is not a new concept; however, it is one with varied levels of research and support. Friend (2000) noted, "The promise of collaboration has apparently permeated every dimension of society" (p. 130). Friend (2018) continues with "the days are gone when an individual could enter the field of education and just work with students. Now a significant part of the school professionals' jobs, no matter the setting or type of position, pertains to interacting effectively with other adults" (p.25). Collaboration can occur through a variety of methods; yet, it is essential to understand the concept and its development to ensure effective implementation.

Defining Collaboration

Collaboration has transformed throughout the past few decades. According to Hernandez (2013), there is no one definition of collaboration in education (p. 482). Slater (2004) stated, "One of the key criticisms of the literature on collaboration has been that it has suffered from a lack of clarity" (p. 4). To add to this lack of clarity, Slater (2004) also noted collaboration is frequently referred to utilizing a variety of terminology including "collegiality, congeniality, cooperation, consultation, and collaboration" (p.4). With such a lack of clarity, one must look for commonalities and key characteristics to ensure the action is taking place.

According to Friend (2018), "Collaboration refers to the way in which professionals interact with each other and the parents or family members as they work together to educate students with disabilities" (p. 24). One of the critical elements within collaboration is individuals working "toward a common goal" (Friend & Cook, 1990, p.

72). Friend & Cook (1990) identified several factors within collaboration, including "(a) a mutual goal, (b) parity among participants, (c) shared participation, (d) shared accountability, (e) shared resources, and (f) voluntariness" (p. 72). Slater (2004) noted there are three common concepts that must occur for there to be collaboration, including goals, parity, and that the work must be voluntary. She goes on to note that "Collaboration is not based on like-minded consensus. Therefore, the process is characterized by these dynamics: collaborative diversity, conflict, respect, time, and hard work" (p. 9). With collaboration defined as above, there are a variety of collaboration models educators utilize.

Models of Collaboration

Collaboration exists in a multitude of forms in an education setting. Goddard, Goddard, and Tschannen-Moran (2007) noted there is a range of collaboration models utilized within schools (p. 880). Schleifer, Rinehart, and Yanisch (2017) indicated "When it comes to specific approaches to fostering collaboration, studies have found different degrees of effectiveness in improving student achievement" (p. 10). With such a variance in the types of collaboration that can occur, it is vital to define several of the methodologies.

Professional Learning Communities (PLCs). PLCs are a recent form of collaboration that is utilized within education. According to Eaker and Keating (2011), PLCs provide an opportunity for teachers to collaborate, enhance student learning, and have a positive effect on school culture. Their research goes on further to indicate PLCs help teachers meet the learning needs of all students. Tibbetts and Hector-Mason (2015) noted while there are several advantages to collaboration models, PLCs "may be more

difficult to implement but are effective because of their concentrated local nature" (p. 2). According to Eaker and Keating (2011), PLCs provide an opportunity for teachers to collaborate, enhance student learning, and have a positive effect on school culture. Their research goes on further to indicate PLCs help teachers meet the learning needs of all students.

Furthermore, "The success of PLC implementation requires a systemic rather than a piecemeal approach" (p. 2). Schleifer, Rinehart, and Yanisch (2017) afforded differences in implementing PLCs could lead to different results in a variety of settings (p. 11). These variations can lead to successful experiences but can also lead to a negative view of collaboration if the PLC culture is not created effectively.

Multidisciplinary approach. Through the use of multidisciplinary teams, educators come together from a variety of roles to work toward a common goal. According to Hernandez (2013), "Even with the presence of multiple disciplines, the level of active involvement by each discipline was found to be limited within the framework of the multidisciplinary approach" (p. 484). An example of a multidisciplinary team would be an IEP team.

Co-teaching. Co-teaching can be defined as "the sharing of instruction by a general education teacher and a special education teacher or another specialist in a general education class that includes students with disabilities" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 9). Friend, Cook, Hurley-Chamberlain, and Shamberger (2010) found "Most inquiry on co-teaching has emphasized co-teachers' roles and relationships or program logistics rather than demonstrating its impact on student achievement and other key outcomes, and far more literature exists described co-

teaching and offering advice about it than carefully studying it" (p. 9). The notion emphasized with co-teaching is the ability to "make it possible for students with disabilities to access the general curriculum while at the same time benefiting from specialized instructional strategies necessary to nurture their learning" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 11). While the implementation of co-teaching with fidelity addresses a variety of student needs, there are still a variety of hurdles to overcome with the model.

Barriers to Collaboration

Perception. Leadership should be well versed in effective collaboration skills to ensure staff perception does not taint the results. Friend (2000) indicated it is critical for leaders to look at the types of communication that are occurring within an organization. Frequently, what is perceived as collaboration, is merely a conversation and therefore does not benefit the organization as a whole, especially the students served. For example, Friend (2018) noted "Educating students with disabilities as true members of a learning community requires that some professionals set aside long-held beliefs and that they change their classroom practices" (p. 24). Collaboration should lead to a change in practices and "although there has been a movement toward the development of teacher professionalism through collaborative dialogue and reflection, traditional norms of teacher isolation and autonomy must be challenged in this model of teacher-directed reform is to take place" (Slater, 2004, p. 3). For educators to collaborate successfully, "they need to be able to successfully reflect and evaluate themselves" (Eccelston, 2010, p. 41). Having established that educators must be willing to change and evolve in order to ensure student success, collaboration can provide the supports needed; however, staff

perception must be such that they believe they are collaborating effectively, and administration should be able to confirm these beliefs.

Climate and culture. The climate and culture of a school or district can impact the effectiveness of collaboration on student achievement. Wheatley (2001) contended "It's not differences that divide us. It's our judgments that do" (para 11). According to Friend (2018), "Unless principals and other school leaders actively foster a collaborative culture, set expectations for all staff members, and themselves become students of collaboration, a sense of community is unlikely to develop. And without that critical support, outcomes for students with disabilities may be disappointing" (p. 25). Green (2008) goes on to define "A school or district's climate and culture, as well as organization, communication, and political, social, and decision-making structures all help to determine the times principals and special education administrators must collaborate" (p.14).

Accordingly, educators and leaders need to be able to overcome the traditional approach to education. Poulos, Culbertson, Piazza, and d'Entremont (2014) determined "Still pervasive today, teachers tend to work independently and are often unaware of what is going on in nearby classrooms" (p.6). Waldron and McLeskey (2010) indicated "If collaborative professional development is to be effectively implemented in a school, teachers must willingly open their classroom doors and work with, teach, and learn from others" (p. 64). Donohoo, Hattie, and Eells (2018) stated "When a team of individuals share the belief that through their unified efforts they can overcome challenges and produce intended results, groups are more powerful" (p. 41). Educators must break down the barriers to collaboration and traditions in education to ensure success.

Furthermore, Poulos, Culbertson, Piazza, and d'Entremont (2014) established, "School leaders must demonstrate trust in teachers to work together without close and regular supervision, while teachers must develop trust with school leaders and colleagues to have effective discussions about instructional challenges, offer constructive critique, and use each other as resources" (p. 10). A firm belief in collaboration and support from administration will help determine its success (Sharpe & Hawes, 2003). School and district leadership should immerse their practices and beliefs in collaboration and set the climate and culture for educators.

Skills. Perhaps one of the most substantial barriers to collaboration is the lack of skills educators hold. According to Friend (2018), "Although most special educators take coursework on working with professionals and parents, the same is not necessarily true for other teachers. When expected to work together, some professionals may lack the knowledge and skills for doing so effectively and efficiently" (p. 25). Furthermore, Friend and Cook (1990) recommended general education teachers, as well as administrators, receive training in collaborative skills (p. 82). "Teacher effectiveness has less to do with individual attributes, and far more to do with the extent to which teachers work with each other and provide collective leadership for their schools and communities" (Berry, Daughtry, &Wieder, 2009, p. 2). In order to effectively promote and practice collaboration within a building, it is critical to ensure staff has the appropriate training and skills to implement the strategies (Sharpe & Hawes, 2003, p. 5). Eccleston (2010) found the following:

> Successful collaborators are thoughtful. They reflect on experiences, find their strengths and areas of need, and ultimately act to improve their practice. They

> hold specialized knowledge about procedural policies and curriculum frameworks. They know about the nature of learning, have access to resources, and have a well-developed sense of students' strengths and needs. Compassionate persons are required for effective collaboration. Successful collaborators are sincere in their sense of caring for students. The largest area of personal expertise is that in the realm of leadership and its many complexes and permutations. Successful collaboration requires high abilities in each of these four areas. (p. 41)

Friend (2000) endorsed leaders providing professional development to staff within an organization to prevent collaboration from merely being a conversation. Collaboration is a skill that requires effort, time, and practice for implementation to be effective. Teachers do not obtain training in college coursework to help ensure this skill is acquired (Goddard, Goddard, &Tschannen-Moran, 2007, p. 878). As a result of this skill not being acquired early in the career, there is often a lag time in which the teacher does not effectively collaborate in the building.

Collaboration within Education

The *No Child Left Behind Act of 2001(NCLB)* strived "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach or exceed minimum proficiency on challenging state academic achievement standards and state academic assessments" (Sec. 1001, Part A, Title I of ESEA; 20 U.S.C. 6301). Poulos, Culbertson, and Piazza, d'Entremont (2014) noted "teacher collaboration as a key element in driving school improvement, creating an environment for teachers to improve their practice, while facilitating action designed to address diverse student

needs" (p. 5). With educators searching for the most significant impact in education, many turned to the use of collaboration to meet the needs outlined in *NCLB.*

Poulos, Culbertson, Piazza, and d'Entremont (2014) described a process to collaboration in which "It is a process that has led some schools to overcome many of the challenges endemic to the urban environment and become models of practice" (p. 5). One principal during the study stated, "Teacher collaboration is the highest leverage strategy for school improvement that we have" (Poulos, Culbertson, Piazza, & d'Entremont, 2014, p.5). According to the results of Poulos, Culbertson, Piazza, and d'Entremonts' (2014) study, "Teachers universally point to the impact of teacher collaboration on student learning by improving classroom practice, promoting data use, increasing academic rigor, and supporting students' non-academic needs" (p. 20). Irwin and Farr (2004) summarized two of their prior studies in regard to collaboration in the general education setting. Within these qualitative studies, gains in student achievement were noted.

Tibbetts and Hector-Mason (2015) noted "Collaboration is one key instructional approach derived from past research and practices that has been shown to address the targeted needs of students" (p. 1). Burns (2011) found the following:

> A large body of research shows that mandatory teacher collaboration, sometimes called 'professional learning communities,' gets results. The world's best school systems foster a culture of sharing what works and what doesn't. In the high-scoring schools of Finland, South Korea and Shanghai, studies show, teachers are not like private emperors in their classrooms; they make their practice public, becoming the learners of their own teaching. (para. 7)

Tibbetts and Hector-Mason (2015) indicated "teacher collaboration is critical to student success, and teachers can collaborate on lesson planning, assessments, and other activities focused on enhancing the potential for positive student learning outcomes" (p. 2). Rubenstein (2014) found "schools with the strongest partnerships also had the highest levels (density) of teacher to teacher communication, meaning that more teachers discussing performance data, curriculum, articulation, instructional practice, and mentoring with one another in stronger-partnerships schools than in weaker-partnership schools" (p. 27). "When teachers have opportunities to engage in professional discourse, they can build upon their unique content, pedagogical, and experiential knowledge to improve instruction" (Goddard, Goddard, & Tschannen-Moran, 2007, p. 880). Research conducted by Goddard, Goddard, and Tschannen-Moran (2007) indicated a strong correlation between collaboration and achievement in math and reading. They went on to state that they believed the correlation was indirect and collaboration "encourages teachers to move beyond reliance on their own memories and experiences with schooling and toward engagement with others around important questions of teaching and learning" (p. 892). Collaboration within education can help districts ensure they are meeting the diverse needs of the students they serve.

Collaboration as it Relates to Special Education

Starting with the passing of the 1975 Education for All Handicapped Children Act (P.L. 94-142), collaboration entered the arena of Special Education. Despite the intent of the act, Hernandez (2013) accentuated "While P.L. 94-142 'legislated' collaboration, this groundbreaking piece of legislation actually contributed to the creation of a separate culture and separate roles within education" (p. 482). According to Friend (2000),

"virtually every treatise on inclusive practices, whether conceptual, anecdotal, qualitative, or quantitative, concludes that inclusion's success in large part relies on collaboration among staff members and with parents and others, and that failures can typically be traced to shortcomings in the collaborative dimension of the services to students" (p. 130). Embodied within the *No Child Left Behind Act* (2002) is the use of collaboration with a variety of stakeholders. According to Green (2008), "IDEA and NCLB contribute to the development environment of uniting general and special education students by emphasizing accountability and improved academic achievement" (p.12). Friend, Cook, Hurley-Chamberlain, and Shamberger (2010) further backed the notion that these two regulations amplified the need and usage of collaboration. With the re-authorization of IDEIA (P.L. 108-446), it became clear collaboration was needed to enhance the services and education of students with exceptionalities (SEC. 662). Rubenstein (2014) reinforced the need for state and federal supporting by stating "Innovations in collaboration will not be replicated or sustained, or become institutionalized, without widespread support from state and federal policy" (p. 28). Over the past four decades, State and Federal policies have guided educators to improve the services provided to children by challenging teachers and administrators to utilize collaborative techniques.

Collaboration within special education has continued to be a topic of interest among educators. Eccleston (2010) stated the following:

> Because students with special education needs are increasingly being placed in general education classrooms, collaboration between the general classroom teachers and the special education specialist teacher has become critically

> important and is the most common method for planning for the success for students with exceptionalities in inclusive settings. (p. 40)

"The shift in professional roles and sheer complexity of inclusive special education, make collaboration the best tool for solving problems that promote student learning" (Eccleston, 2010, p. 40-41). Bonati (2018) further backs this notion by indicating "collaborative planning between special education teachers and general education teachers that focuses on curriculum, instruction, and assessment can improve learning outcomes for students with and without disabilities" (p. 139). "Not surprisingly, collaboration has become a crucial dimension to the planning, delivery, and evaluation of inclusive special education and related services" (Friend, 2018, p. 24). Gartland and Strosnider (2017) levied collaboration is critical for the success of students with learning disabilities. Waldron and Mcleskey (2010) determined "further research is needed to provide additional understanding regarding how successful school improvement efforts are developed and sustained over time. This is especially the case about the development of effective, inclusive services for students with disabilities" (p. 70).

"When employees are allowed to contribute meaningfully to solving problems and making decisions, better solutions are found" (Rubenstein, 2014, p. 23). McLeskey, et al. (2017) indicated collaboration is one of the many high-leverage strategies utilized in special education. Furthermore, collaboration should occur with all school staff to "support students' learning toward measurable outcomes and to facilitate students' social and emotional well-being across all school environments and instructional settings" (p. 17). According to Friend (2018), "collaboration has become a dimension to the planning, delivery, and evaluation of inclusive special education and related services" (p. 24).

Collaboration in special education provides an opportunity for educators to enhance their practice; therefore, improving the opportunity to increase student achievement.

Impact of Collaboration

Student achievement. The current set-up in many schools can be described as the "'egg-crate' model: compartmentalized, lonely and not optimal for students or teachers" (Schleifer, Rinehart, & Yanisch, 2017, p. 3). In an effort to increase student achievement and enhance the learning experience, many schools have challenged this model, advocating for change and creating a more collaborative model within their programs. Poulos, Culbertson, Piazza, and d'Entremont (2014) support the notion that "Teacher collaboration is a key factor in improving student learning" (p. 16). Slater's (2004) research supports the notion that teachers felt collaboration enhanced student achievement (p. 13). While further research is yet to be completed, initial indications would lead one to believe there is a positive impact of collaboration in education.

Capacity building and teacher retention. "School capacity refers to the infrastructure and resources available within a school to address student needs. Capacity includes concrete and tangible elements such as finances, personnel, and scheduling as well as intangible elements such a school climate and vision" (Waldron & Mcleskey, 2010, p. 69). To increase the capacity of a district, teacher retention must be at the forefront of its core beliefs and goals. Schleifer, Rinehart, and Yanisch (2017) indicated collaborative cultures could increase teacher retention (p. 3). "Teachers report that the reflective conversations they have with other teachers — both in team meetings and informally with peer teachers – are critical to improving their classroom practice" (Poulos, Culbertson, Piazza, & d'Entremont, 2014, p.16). "Many high-needs schools are

likely beset by ineffective teaching. However, many of those ineffective teachers never were sufficiently prepared or supported to succeed in high-needs classrooms — and simply removing poor performers will not ensure that effective teachers will be waiting in the winds to replace them" (Berry, Daughtry, & Wieder, 2009, p. 8). Collaboration provides an opportunity for educators to fine tune their skills, increase their knowledge base, and can ultimately increase teacher retention.

Teacher development. Collaboration provides an outlet for teachers to gain knowledge in a variety of ways. "Collaboration may build the knowledge base among teachers in a school" (Berry, Daughtry, & Wieder, 2009, p. 3). While self-reflection helps teacher development, it is important teachers have the skills and resources to ensure they are able to effectively reflect on their practice (Eccleston, 2010). Slater's (2004) study indicated "participants in this study saw their collaborative work as leading to the achievement of personal and professional outcomes that result in or continue to student learning and school improvement" (p.13). "But what may be most important is adequate time to work with colleagues and professional development that focuses on systemic, sustained, and collective study of student work where peers critique and help each other teach more effectively" (Berry, Daughtry, & Wieder, 2009, p. 8). Collaboration in one pathway to ensure a sustained level of professional growth occurs in educators.

Recommendations

According to Green (2008), "Educators must commit to exchanging information with one another and feel safe in sharing assumptions, prior experiences, and fears" (p. 14). Rubenstein (2014) discussed the importance of gaining support at all levels of government, not just the local stakeholders. In this, leadership and local stakeholders

should advocate to state and federal stakeholders to ensure policy is developed to support the continuation of collaboration in the school setting. Waldron and Mcleskey (2010) recommend school leadership utilize distributed leadership to foster the heart of collaboration (p. 66). Waldron and Mcleskey (2010) noted the following:

> Collaborative forms of professional development are designed with a constructivist approach to adult learning as a framework and assume that teachers actively participate in all aspects of professional development, including the determination of the topics that will be addressed and delivering the professional development. (p. 63)

Poulos, Culbertson, Piazza, and d'Entremont (2014) recommended the following process to ensure effective collaboration is utilized:

> First, schools must implement structures, routines, and protocols to establish and facilitate teacher interaction focused on instructional issues. Second, specific attention must be devoted to nurturing school-wide behavioral norms that undergird collaborative practices, such as collective responsibility for student learning. In such a school environment, a more holistic view of student learning can emerge where all students are committed to working together to achieve commonly-held goals. (p. 8)

Hernandez (2013) provided the following guidance to ensure effective collaboration:

> The development, acquisition, and maintenance of the skills needed to effectively collaborate and encompass a variety of ingredients. These components include the perspectives and attitudes pre-service teachers have on collaboration along

> with the training and professional development they receive before they enter the profession. Additional components of collaboration include the professional expertise and efficacy of collaborators as well as their interpersonal skills. Finally, the contextual setting in which collaboration is occurring must be considered when attempting to understand the process. (p. 495)

Last, due to the wide variance in leadership styles, building and district climate and culture, and teacher background knowledge, it is important for leadership to have a plan for how to ensure effective collaboration is occurring. Hernandez (2013) noted ". . . when one talks about collaboration, one needs to be conscious of the multiple variations that exist and the variables they create" (p. 486). Leadership should ensure the appropriate supports are in place to ensure the success of collaboration.

Summary

Collaboration has been circulating throughout education at all levels and constructs; however, it continues to be a concept that evolves. Despite many methodologies, collaboration continues to be grappled with by educators while it is determined how best to succeed in the endeavor. While there is some evidence of collaboration increasing student achievement and enhancing the learning environment, questions remain about the impact of collaboration for students with exceptionalities.

Chapter 3

Methods

The purpose of this study was to examine if there was a difference in GPA, OSS, ISS, attendance, and Aimsweb R-CBM of students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time. Chapter 3 provides several sources of information: (a) research design, (b) the selection of participants, (c) measurement, (d) data collection procedures, (e) data analysis and hypothesis testing, and (f) limitations.

Research Design

A quantitative research study was conducted to examine if there was a difference in GPA, OSS, ISS, attendance, and Aimsweb R-CBM scores of students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time. A quasi-experimental study was conducted, using archival data. Archival data included the 2015-2016 through 2018-2019 GPA, in school suspension days, out of school suspension days, attendance, and Aimsweb R-CBM Scores. The independent variable in the study was collaboration time. The dependent variables were the students' GPA, suspension, attendance, and Aimsweb R-CBM Scores.

Selection of Participants

The population for this study included high school students with exceptionalities. The sample for this study included all students with exceptionalities in grades nine through twelve at one Northeastern Kansas high school who were enrolled between the 2015-2016 school year and the 2018-2019 school year. Purposive sampling was utilized.

Lunenburg and Irby (2008) defined purposive sampling as "selecting a sample based on the researcher's experience or knowledge of the group to be sampled" (p. 175). GPA, ISS and OSS days, and attendance data were available for all students with exceptionalities at the high school level. A total of 524 students' data were included for RQ1 to RQ4. Students with exceptionalities in reading fluency were administered the Aimsweb R-CBM. Aimsweb is not utilized for non-disabled students, or for children with exceptionalities who have no academic deficits. A total of 218 students with identified academic deficits in reading were included for RQ5.

Measurement

Collaboration time. The independent variable, collaboration time, was identified as a categorical variable, being either the teacher had regularly scheduled collaboration time or they did not have regularly scheduled collaboration time. The school bell schedule and the district calendar were utilized to calculate the number of minutes provided for collaboration. During the 2017-2018 and 2018-2019 school years, teachers were provided with 51 minutes three times per week and 95 minutes 1 time per week of collaboration time. In comparison, during the 2015-2016 and 2016-2017 school years, teachers were provided with no regularly scheduled common collaboration time on a daily or weekly basis.

According to Lunenburg and Irby (2008), "Validity is the degree to which an instrument measures what is purports to measure" (p. 181). Collaboration time was measured utilizing the school schedule and school calendar. The staff have agendas for their collaboration time to ensure staff accountability.

According to Lunenburg and Irby (2008), “Reliability is the degree to which an instrument consistently measures whatever it is measuring” (p. 182). Collaboration time was documented through the use of agendas and the collaboration time model utilized at the school. School administrators attended these meetings to ensure these meetings were conducted with fidelity over time.

Student GPA. Student GPA was figured by accessing the student’s transcript, which is contained in PowerSchool. During the course of the semester, teacher’s enter grades based on student performance. These grades are recorded in PowerSchool. When a student completes a course, the counselor’s document the letter grade in the student’s cumulative folder. At the end of the semester, PowerSchool transfers all student grades to the electronic transcript and historical grades sections in PowerSchool. The GPA of students were measured by grade letters of A, B, C, D, and F. Each letter receives a numerical point value (A-4, B-3, C-2, D-1, F-0). The GPA of a student for a semester is calculated by adding the points and dividing this number by the number of courses the student was enrolled in. This system has been maintained across the district for the length of this study.

Validity for student GPA is established by having GPA discussed at all levels of leadership. Grades are discussed as part of department meetings, Building Leadership Team, and District Leadership Teams. During these meetings, validity is addressed by discussing the topic of grading, specific assignments, planning assisgnments and rubrics, etc. During the course of the semester, teacher’s enter grades based on student performance. These grades are recorded in PowerSchool. When a student completes a course (s), the counselors document the grade in the child’s folder. At the end of the

semester, PowerSchool transfers all student grades to the child's electronic transcript and historical grades sections in PowerSchool. This system has been maintained across the district for the length of this study.

Reliability for student GPA is established by utilizing the same procedure for calculating GPA. The district and KSDE provides guidelines in terms of student GPA. School L has utilized consistent procedures for calculating GPA.

Out of School Suspension. Out-of-school suspension (OSS) days were measured by utilizing archival data from PowerSchool. When a student is given an OSS, the administrator writes a formal letter to the parent. A copy of this letter is provided to the secretary, who enters the OSS into PowerSchool. When an OSS is given, data are entered in PowerSchool as OSS on the attendance page, incident age, and log entry page of the program. This procedure provides multiple checks for accuracy, which established the validity of OSS data. This system has been maintained during the length of this study. Reliability for OSS data is established by utilizing the same procedures for recording OSS into the PowerSchool.

In School Suspension. In-school suspension (ISS) days were measured by utilizing archival data from PowerSchool. When a student is given an ISS, the administrator notifies the secretary, who enter the ISS into the district's data management system. When an ISS is given, data are entered as an attendance mark, log entry, and incident report. This procedure provides multiple checks for accuracy, which established the validity of ISS data. This system has been maintained during the length of this study. Reliability for ISS data is established by utilizing the same procedures for recording ISS into the PowerSchool.

Absences. Absences were measured by accessing the student's archival attendance records in PowerSchool. Attendance is recorded hourly for students at School L. Each hour, teachers record absences. The teacher enters the absence in PowerSchool. The school secretaries check attendance for accuracy, and an automated system calls parents to notify them their child is absent. Students can only receive a total of ten excused absences per year. On the eleventh absence, or on an absence in which the child's parent did not contact the school, an unexcused absence is recorded. In order to measure absences in the current study, attendance records were reviewed to obtain the total number of absences a student had each semester, including both excused and unexcused absences. Archival data were utilized for the school years of 2015-2016 to 2018-2019. This system has been maintained for the length of this study. Reliability for absence data is established by utilizing the same procedures for recording absences into PowerSchool.

Aimsweb. Aimsweb R-CBM measures student growth in the areas of reading fluency. The R-CBM measure is a one-minute timed reading fluency assessment. The test is administered by a trained adult. The student receives a copy of the fluency probe, in which they read the story aloud. The adult marks any missed words, misread words, etc. for the duration of the minute. The assessment is scored based on the number of words read correctly in one minute. Through the duration of the four years of data, Aimsweb and Aimsweb Plus were utilized. The only difference in the administration of the R-CBM measurement is the format of teacher scoring. Aimsweb was scored via paper and pencil by the teacher, versus Aimsweb Plus being scored electronically by the teacher. Error reporting, scoring methodology, and student administration remained the

same between the two assessment formats. School L does not administer Aimsweb 1.0 or Aimsweb Plus to students without a disability. This assessment system reports scores as a student's relative grade level of performance. In the current study, scores will be obtained to measure student growth in the area of reading fluency during the school years of 2015-2016 to 2018-2019. Growth will be reported in terms of the number of grade levels of growth made each year. This system has been maintained across the district for the length of this study.

According to NCS Pearson (2015), "The National Center on Intensive Intervention (NCII) requires predictive validity coefficients of .70 or higher to obtain the maximum rating . . ." (p. 45). Table 1 and Table 2 showed the composite score of predictive and concurrent validity coefficients. Aimsweb utilizes 8th grade norms for high school students. Based on the mean coefficients of composite scores, the reading assessment is valid.

Table 1

Reading Composite Score Predictive Validity Coefficients, by Grade and Criterion Measure

			Correlation		
Criterion	Grade	n	Unadjusted	Adjusted	Mean
ISAT	8	202	.72	.80	
MAP-GLA	8	218	.69	.76	.78

Note: Adapted from *Aimsweb Plus Technical Manual* (p. 50), by NCS Pearson, 2015. Retrieved from https://cdn2.hubspot.net/hubfs/559254/Pearson%20CAP/aimswebTechResources/aimswebPlus-TechnicalManual.pdf?t=1508260912467.

*ISAT: Illinois Standards Achievement Test

*MAP-GLA: Missouri Assessment Program Grade Level Assessment

Table 2

Reading Composite Score Concurrent Validity Coefficients, by Grade and Criterion Measure

			Correlation		
Criterion	Grade	n	Unadjusted	Adjusted	Mean
ISAT	8	202	.72	.79	
MAP-GLA	8	218	.69	.72	.76

Note: Adapted from *Aimsweb Plus Technical Manual* (p. 50), by NCS Pearson, 2015. Retrieved from https://cdn2.hubspot.net/hubfs/559254/Pearson%20CAP/aimswebTechResources/aimswebPlus-TechnicalManual.pdf?t=1508260912467.
*ISAT: Illinois Standards Achievement Test
*MAP-GLA: Missouri Assessment Program Grade Level Assessment

Aimsweb R-CBM assessments are utilized for students with exceptionalities in the area of reading. Teachers receive training on test administration. This training has maintained consistency across the years, and is administered to new teachers within the first two months of schools. Aimsweb R-CBM assessments are administered to students one time per week to monitor student progress toward his/her IEP goals. Assessment administration has been maintained through the length of the study. According to the reliability information provided by NCS Pearson (2015), reading composite scores are a reliable measurement of student achievement, with a reliability coefficient of .89. The Aimsweb R-CBM Assessment Alternate-Form Reliability is a .91 correlation for the Fall and Winter benchmarks, and a .90 correlation for the Spring benchmark (NCS Pearson, 2015, p. 22). These measures indicate the assessment is reliable.

Data Collection Procedures

The first step in completing the quantitative study was to obtain permission from School District L to conduct the study. In order to obtain permission, the high school principal was contacted and asked if the topic would be supported. Next, the Director of Teaching and Learning was contacted via email for permission to conduct the study (see Appendix A). The Director of Teaching and Learning provided a written email that provided permission (see Appendix A). Next, the Baker University Institutional Review Board process was completed (see Appendix B). Once permission was granted from the Institutional Review Board, the data collection process began.

The data collection procedure involved three steps. First, SpedTrack was utilized to comprise a list of participants with exceptionalities and their disabilities. These data were collected and provided to the researcher by the director of special education. Second, PowerSchool was used to search the identified participants and their grades, attendance, and discipline data. These data are considered archived data for the 2015-2016 and 2016-2017 school year. These data were collected and provided to the researcher by the principal of the high school. Third, the Aimsweb assessment data was collected utilizing archival Aimsweb records and student progress reports in SpedTrack.

Data Analysis and Hypothesis Testing

Lunenburg and Irby (2008) described the research questions and hypothesis testing section as a guide for the research. The research questions and hypothesis testing section outlined below provides information on how the researcher planned to answer the research questions.

RQ1. Is there a difference in the semester grade point average of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

***H1*.** There was a statistically significant difference in the semester grade point average of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time.

An independent-samples *t* test was conducted to address RQ1. The two sample means were compared. An independent-samples *t* test was chosen for the hypothesis testing as it examines the mean difference between the semester grade point average of high school students with exceptionalities when their teachers received regularly scheduled collaboration time and when the teachers received no regular collaboration time, and both means of two groups are continuous variables. The level of significance was set at .05. When appropriate, an effect size is reported.

RQ2. Is there a difference in the number of days of out of school suspension (OSS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

H2. There was a statistically significant difference in the number of days of out of school suspension (OSS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time.

An independent-samples *t* test was conducted to address RQ2. The two sample means were compared. An independent-samples *t* test was chosen for the hypothesis testing as it examines the mean difference between the number of days of OSS of high

school students with exceptionalities when their teachers received regularly scheduled collaboration time and when the teachers received no regular collaboration time, and both means of two groups are continuous variables. The level of significance was set at .05. When appropriate, an effect size is reported.

RQ3. Is there a difference in the number of days of in-school suspension (ISS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

H3. There was a statistically significant difference in the number of days of in-school suspension (ISS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time.

An independent-samples *t* test was conducted to address RQ3. The two sample means were compared. An independent-samples *t* test was chosen for the hypothesis testing as it examines the mean difference between the number of days of ISS of high school students with exceptionalities when their teachers received regularly scheduled collaboration time and when the teachers received no regular collaboration time, and both means of two groups are continuous variables. The level of significance was set at .05. When appropriate, an effect size is reported.

RQ4. Is there a difference in the number of days of absences of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

H4. There was a statistically significant difference in the number of days of absences of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time.

An independent-samples *t* test was conducted to address RQ4. The two sample means were compared. An independent-samples *t* test was chosen for the hypothesis testing as it examines the mean difference between the number of days of absences of high school students with exceptionalities when their teachers received regularly scheduled collaboration time and when the teachers received no regular collaboration time, and both means of two groups are continuous variables. The level of significance was set at .05. When appropriate, an effect size is reported.

RQ5. Is there a difference in the scores of the Aimsweb R-CBM assessments of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

H5. There was a statistically significant difference in the scores of the Aimsweb R-CBM assessments of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time.

An independent-samples *t* test was conducted to address RQ5. The two sample means were compared. An independent-samples *t* test was chosen for the hypothesis testing as it examines the mean difference between if progress was made on the Aimsweb R-CBM assessment of high school students with exceptionalities when their teachers received regularly scheduled collaboration time and when the teachers received no

regular collaboration time, and both means of two groups are continuous variables. The level of significance was set at .05. When appropriate, an effect size is reported.

Limitations

According to Lunenburg and Irby (2008), "Limitations are factors that may have an effect on the interpretation of the findings or on the generalizability of the results" (p. 133). The outcome of the research could be impacted by the following limitations.

1. Student effort could impact student performance on achievement test and grades. If the child is ill, absent, or experiencing other life events, it is possible that they may not perform to their ability on the assessment.
2. A teacher's fidelity to following the student's IEP could impact the outcomes of student grades and discipline. If a teacher does not follow the accommodations and modifications for behavior, it could lead to a student being suspended. Students who have academic accommodations and modifications may perform differently, whether academically or behaviorally, depending on if the IEP was followed.
3. The topics covered during the team's collaboration time may limit the understanding of the impact of collaboration. Teams who do not discuss student improvement and achievement may have a different impact on students.

Summary

The research methods utilized for this study were presented in chapter 3 and included (a) research design, (b) information on the selection of participants, (c) how the data were measured, (d) data collection procedures, (e) data analysis and hypothesis testing, and (f) limitations. A quantitative research study was completed. The

measurements used for the study included archival data. The data utilized were grades, attendance, in school suspension, out of school suspension, and the Aimsweb R-CBM Scores. A review of the validity and reliability was provided for all identified variables in the study. The results of the study are provided in chapter 4.

Chapter 4

Results

Presented in chapter 4 are the descriptive statistics results and data analysis for each hypothesis within the study.

Descriptive Statistics

Grade point average, suspension data, and attendance data were available for all students with exceptionalities at the high school level. For RQ1, a total of 235 students were in the without collaboration group, while 245 students were in the with collaboration group. For RQ2 and RQ3, a total of 258 students were in the without collaboration group, while 266 students were in the with collaboration group. For RQ4, a total of 234 students were in the without collaboration group, while 245 students were in the with collaboration group. For RQ5, a total of 107 students were in the without collaboration group, while 111 students were in the with collaboration group. The sample size for the students in RQ5 is smaller than RQ1 through RQ4. This can be explained by looking at the measurement utilized for reading fluency, which is the Aimsweb R-CBM. The school district only utilizes this probe for students with exceptionalities in reading. The Aimsweb R-CBM is not utilized for non-disabled students, nor is it utilized for children with exceptionalities who have no reading deficits.

Hypothesis Testing

Hypothesis testing was utilized in this section to test each hypothesis based on the research questions. Each research question (RQ) is stated in this section, along with the results of the RQ.

RQ1. Is there a difference in the semester grade point average of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

No outliers were detected. The results of the independent samples *t* test indicated there is not a statistically significant difference between the two means, $t(478) = -1.17$, $p = .244$. The mean of the semester grade point average (GPA) for the group without regular collaboration time ($M = 2.29$, $SD = 0.91$, $n = 235$) was not different from the mean of the semester GPA for the group with regular collaboration time ($M = 2.39$, $SD = 0.88$, $n = 245$). The research hypothesis was not supported. The mean of the semester GPA between the group without regular collaboration time and the group with regular collaboration time is the same.

RQ2. Is there a difference in the number of days of out of school suspension (OSS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

The results of the independent samples *t* test indicated there is not a statistically significant difference between the two means, $t(522) = 0.14$, $p = .888$. The mean of the Out of School Suspension (OSS) days for the group without regular collaboration time ($M = 2.45$, $SD = 9.759$, $n = 258$) was not different from the mean of the OSS days for the group with regular collaboration time ($M = 2.30$, $SD = 13.53$, $n = 266$). The research hypothesis was not supported. The mean of the number of days of OSS between the group without regular collaboration time and the group with regular collaboration time is the same.

RQ3. Is there a difference in the number of days of in-school suspension (ISS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

The results of the independent samples *t* test indicated there is not a statistically significant difference between the two means, $t(488.79) = 1.86$, $p = .063$. The mean of the In-School Suspension (ISS) days for the group without regular collaboration time ($M = 1.22$, $SD = 2.65$, $n = 258$) was not different from the mean of the ISS days for the group with regular collaboration time ($M = 0.83$, $SD = 2.10$, $n = 266$). The research hypothesis was not supported. The mean of the number of days of ISS between the group without regular collaboration time and the group with regular collaboration time is the same.

RQ4. Is there a difference in the number of days of absences of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

50 outliers were detected and removed from the following analysis. The results of the independent samples *t* test indicated there is not a statistically significant difference between the two means, $t(477) = -1.22$, $p = .223$. The mean of the absence days for the group without regular collaboration time ($M = 2.29$, $SD = 0.91$, $n = 234$) was not different from the mean of the absences for the group with regular collaboration time ($M = 2.39$ $SD = 0.88$, $n = 245$). The research hypothesis was not supported. The mean of the number of absences between the group without regular collaboration time and the group with regular collaboration time is the same.

RQ5. Is there a difference in the scores of the Aimsweb R-CBM assessments of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

The results of the independent samples *t* test indicated there is not a statistically significant difference between the two means, $t(216) = -.57$, $p = .569$. The mean of the scores of the Aimsweb R-CBM assessments for the group without regular collaboration time ($M = 0.29$, $SD = 0.57$, $n = 107$) was not different from the mean of the scores of the Aimsweb R-CBM assessments for the group with regular collaboration time ($M = 0.33$, $SD = 0.56$, $n = 111$). The research hypothesis was not supported. The mean of the scores of the Aimsweb R-CBM assessments between the group without regular collaboration time and the group with regular collaboration time is the same.

Summary

Chapter 4 outlined the descriptive statistics and the results of hypothesis testing for all five research questions. The results outlined in hypothesis testing utilizing the independent sample t test indicated that there was not a statistically significant difference between the groups with collaboration and the groups without collaboration in all five of the research questions. Chapter 5 includes a study summary, findings as it relates to the literature, and conclusions.

Chapter 5

Interpretation and Recommendations

Study Summary

This study looked at the possible impact of a high school implementing regularly scheduled collaboration time for the teaching staff. The purpose of the research was to determine if there was a statistical difference between students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not. The research looked at the areas of GPA, ISS, OSS, attendance, and reading fluency.

Overview of the problem. As educators continue to be pushed to increase student achievement and ensure all students are successful, the use of collaboration time has continued to grow. Collaboration time allows educators to discuss student concerns, areas for growth, and to implement a problem-solving model. In addition, collaboration time provides educators with the opportunity to align their lessons with the standards and grow professionally. The study attempted to examine if there is a difference in outcomes for students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not.

Purpose statement and research questions. The first purpose of the study was to examine if there was a difference in the semester grade point average of high school students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not. The second purpose of the research was to examine if there was a difference in the number of days of suspension of high school students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not. The third purpose of the study was to examine if there was a difference in

the number of days of absences of high school students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not. The fourth purpose of the study was to examine if there was a difference in the scores on the Aimsweb R-CBM of high school students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not. In order to determine if there was a difference in GPA, OSS, ISS, attendance, and reading fluency scores, the researcher addressed five research questions: (1) Is there a difference in the semester grade point average of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time? (2) Is there a difference in the number of days of out of school suspensions (OSS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time? (3) Is there a difference in the number of days of in-school suspensions (ISS) of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time? (4) Is there a difference in the number of days of absences of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time? (5) Is there a difference in the scores of the Aimsweb R-CBM assessments of high school students with exceptionalities between when teachers received regular collaboration time and when teachers received no regular collaboration time?

Review of the methodology. A quantitative research study was conducted utilizing four years of archival data from a Northeastern Kansas High School between the years of 2015-2019. The independent variable in the study was collaboration time. The dependent variables were the students' GPA, suspension, attendance, and Aimsweb R-CBM Scores. The population for this study was high school students with exceptionalities. Purposive sampling was utilized. A total of 524 students were included in RQ1 to RQ4. Students with exceptionalities in reading fluency were administered the Aimsweb R-CBM. 218 students were included for RQ5. An independent samples *t* test was utilized for RQ1 through RQ5.

Major findings. The results of the study indicated there was not a statistically significant difference between the group of students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not using the metrics of GPA, suspension, attendance, and reading fluency. The mean of the scores for all five metrics between the group without regular collaboration time and the group with regular collaboration time is the same; therefore, the research hypothesis for RQ1 through RQ5 were not supported.

Findings Related to the Literature

The following section contains the findings of the current study in relation to previous studies on collaboration and its effects on students. While literature was unavailable in relationship to the specific effects of collaboration and students with exceptionalities in the areas of GPA, suspensions, absences, and reading fluency, there is research to support collaboration efforts, as well as research to suggest collaboration efforts still have not been fully explored.

Collaboration requires a sense of community and teachers moving away from self-isolation. Teachers and leaders must be open to a reflective process and be willing to change their strategies and techniques to meet the individual needs of students. According to Friend (2000), leaders must look at the communication that occurs within an organization. Communication is essential for collaboration success. Friend (2018) continues with the notion that staff must be open to change and reflection in order to provide an impact for students with exceptionalities. Furthermore, Meyer (2022) found administrators need to undergo professional development to develop skills to enforce change, as well as "Principals need to know how they can distribute tasks to teacher teams and equip them with the right tools to fulfill these tasks" (p. 25). Washington (2022) found "lack of equality in the classroom," "co-planning time needed for effective coteaching," "Importance of relationships in coteaching," and "not enough administration involvement" to all serve as common barriers to the successful impact of collaboration on students. Her study went on to indicate "Eighty percent of the participants I interviewed shared their concerns about the importance of 'administration involvement' in improving the collaboration between co-teachers" (p. 79). Students with exceptionalities need to be viewed as part of the student body, rather than a subset.

The research conducted in this study indicated there was not a statistically significant difference between the group of students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not in regard to the metrics of GPA, suspension, attendance, and reading fluency. Recent research by Mora-Ruano, Heine, & Gebhardt (2019) on the effects of "three forms of collaboration on student achievement were non-significant" (p. 8). The research study found that two of

the methodologies "yielded no direction whatsoever and a negative direction, respectively" (p. 8). These authors went on to describe the complexities contained around collaboration and its' impact on research outcomes (p. 8). Hernandez (2013) noted ". . . when one talks about collaboration, one needs to be conscious of the multiple variations that exist and the variables they create" (p. 486). Various authors have indicated that the impact of collaboration on students with exceptionalities needs to continue to be explored (Friend, 2018; Poulos, Culbertson, Piazza, & d'Entremont, 2014; Schleifer, Rinehart, & Yanisch, 2017; Slater, 2004). According to Friend (2018), "Unless principals and other school leaders actively foster a collaborative culture, set expectations for all staff members, and themselves become students of collaboration, a sense of community is unlikely to develop. And without that critical support, outcomes for students with disabilities may be disappointing" (p. 25). Research suggests there are mixed results with teacher collaboration.

Conclusions

Results from this study indicated there was not a statistically significant difference between the group of students with exceptionalities whose teachers collaborated on a regularly scheduled basis versus those who did not in regard to the metrics of GPA, suspension, attendance, and reading fluency.

Implications for action. This research study provides educators information about the possible impact of collaboration in regard to students with exceptionalities in the areas of GPA, suspension, attendance, and reading fluency. Based on the study results, it was determined that there was not a statistically significant difference between

the group of students with exceptionalities whose teachers had regularly scheduled collaboration time and those who did not.

Although the research study did not yield a positive outlook for teachers participating in regular collaboration regarding students with exceptionalities, it is important to note that additional factors may play a role in the impact. For example, outside variables, such as student enrollment, staff turnover, class size, length of collaboration time, etc. could have impacted the outcome of the scores. This study did not look at the impact of collaboration on students without disabilities. Leaders looking to employ a regularly scheduled collaboration time should consider developing a professional development around collaboration, develop a systemic method for collaboration, and monitor the fidelity of collaboration. Leaders should be present during collaboration efforts and monitoring the effects of collaboration utilizing various tools and measurements frequently.

Recommendations for future research. While this study focused on the impact of collaboration at one Northeastern Kansas High School, further research is warranted across the state and country utilizing similar metrics, as well as broadening the metrics utilized to ensure all aspects of student success are monitored.

This quantitative study focused on GPA, suspensions, attendance, and reading fluency as areas of measurement; however, there are additional metrics that should be utilized to look at the impact of collaboration. Metrics such as math computation, reading comprehension, truancy rate, student achievement growth over time, staff retention, and student mental well-being could be considered. Qualitative research may be beneficial in determining teacher satisfaction, teacher mental health, teacher self-

efficacy, and collective efficacy. Furthermore, research around the amount of professional development provided for collaboration methodologies and models should be conducted.

Finally, additional research in the area of collaboration would be beneficial in determining which methodologies yield the highest rate of return for students with exceptionalities, as well as all students. With the variety of methodologies for collaboration ever growing, leaders would benefit from obtaining which methods yield a high rate of return, as well as what leads to this high rate. This research would allow educators to make decisions on professional development, areas to work on, and how to implement the methodology.

Concluding remarks. Educators have continued to advocate for the increase in teacher collaboration time with the belief that it has a positive impact on student achievement and outcomes. Metrics such as GPA, suspension, attendance, and reading fluency were utilized to measure the effects of collaboration regarding students with exceptionalities. The findings of this study indicated there was not a statistically significant difference between the group of students with exceptionalities whose teachers were exposed to regularly scheduled collaboration time and the group of students who were not exposed to regularly scheduled collaboration time in regard to the metrics of GPA, suspension, attendance, and reading fluency. Further research is warranted in the areas of implementation and methodologies.

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Appendices

Appendix A: District Approval

Re: Research project [redacted]

1 message

Laura Batson <laura.batson@[redacted] Thu, Dec 5, 2019 at 8:52 AM
To: Rebekah Varvel <rebekah.varvel@[redacted]

Rebe[redacted]

[redacted]USD is happy to have you complete this research and will be excited to hear your findings once your dissertation is complete.

Sincerely,
Laura Batson

On Thu, Dec 5, 2019 at 8:30 AM Rebekah Varvel <rebekah.varvel@[redacted]

> Hello Laura,
>
> My Dissertation Topic "Teacher Collaboration Time: Impact on Students with Exceptionalities" has been approved by Baker University. To move forward, I need either an email or letter granting me permission to move forward with the research. I have attached a copy of my IRB to this email. Should you have any questions or concerns, please do not hesitate to contact me.
>
> Rebekah Varvel
> --
>
> Rebekah Varvel
>
> Principal
>
> [redacted]
>
> CONFIDENTIALITY NOTICE: This message is from the [redacted] School District. The message and any attachments may be confidential or privileged and are intended only for the individual or entity identified above as the addressee. If you are not the addressee, or if this message has been addressed to you in error, you are not authorized to read, copy or distribute this message or any attachments. We ask that you please delete this message and any attachments and notify the sender by return email or by phone[redacted]
>
> [redacted]

--
Laura Batson Ed. S.
Director of Teaching & Learning
[redacted]

Appendix B: Baker University IRB Letter

BAKER UNIVERSITY
Own Confidence

Baker University Institutional Review Board

December 4th, 2019

Dear Rebekah Varvel and Harold Frye,

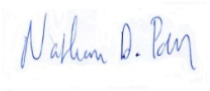
The Baker University IRB has reviewed your project application and approved this project under Exempt Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.
6. If this project is not completed within a year, you must renew IRB approval.

If you have any questions, please contact me at npoell@bakeru.edu or 785.594.4582.

Sincerely,



Nathan Poell, MLS
Chair, Baker University IRB

Baker University IRB Committee
Scott Crenshaw
Sara Crump, PhD
Jamin Perry, PhD
Susan Rogers, PhD