A Suburban District's Approach to Addressing the Student Drop-Out Rate

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Abstract

The research on effective post-COVID-19 academic interventions for struggling students is still new. School districts are attempting to find the right type of intervention to support students, especially considering the growing concern for stunted academic growth from students as a result of the initial COVID-19 shutdown in 2020 (Schwartz, 2023). The purpose of this quantitative study was to explore a suburban school district's approach to the rising concern of a higher drop-out rate due to the academic effects of COVID-19. The researcher explored the impact of the district's academic intervention for students in Grade 6 and Grade 9 who were enrolled in the intervention for the 2022-2023 school year. The quantitative study analyzed archival data for the effectiveness of the Transition Intervention Program, an additional academic intervention that was developed by the suburban school district using Elementary and Secondary Schools Emergency Relief funds (ESSER) provided through the federal government's COVID-19 funding. The study will contribute to the literature and local practice by providing the suburban school district and other researchers insight regarding the academic intervention and other programs that are developed to support student academic achievement by also reducing the drop-out rate. The results from the study were inconclusive but future considerations are to increase the quantity and duration of the intervention time for students so that it goes beyond Grade 6 and Grade 9, as well as master schedules that provide dedicated intervention time in the secondary level.

Dedication

This dissertation is dedicated to my husband, Jared, who has made all of this possible. Never once has he said "no" to me. No matter if it has been during my hours' long classes at night or the hours and hours of time spent on the computer writing while he is driving to and from on longer road trips, he has been there by my side through the entire process, sacrificing in his own way. He is my biggest supporter and cheerleader and always supports the passions I want to pursue in my life. My friends and my family have also been there to prop me up and push me along when I needed a bit more of a shove with motivation or just a listening ear. My dog, June, has been a fantastic companion and lap-warmer.

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Chapter 1

Introduction

An historic event took place world-wide in the spring of 2020. The World Health Organization (2020) declared COVID-19 a pandemic. Starting March 15, 2020, the United States and the world experienced a shutdown due to the spread of the COVID-19 virus (Centers for Disease Control and Prevention, 2022). Kansas Governor, Laura Kelly, was one of the first governors to announce that students would remain at home for schooling for at least 14 days (Bisaha, & Caudill, 2020). In the initial declaration, students were expected to complete schooling virtually for at least 14 school days to slow the spread of the virus (Associated Press, 2020). Students were instructed to access schools through a virtual learning platform where students logged into their computers at home, and their teachers taught remotely to their classes each day. On March 28th, 2020, the White House extended the shutdown through the end of April (Centers for Disease Control and Prevention, 2022). Kansas Governor Laura Kelly stated, "The steps we're announcing today will create the space we need at the state level … so that we can get ahead of this threat and limit its long-term impact" (as cited in Decker et al., 2020, p. 2). Schools throughout the United States ended the 2019-2020 school year with students completing coursework virtually and with no face-to-face contact (Decker et al., 2020).

As school leaders prepared for the 2020-2021 school year, COVID-19 related safety concerns were still at the forefront of school district leaders' minds. Some district leaders made the decision to remain virtual at the start of the fall semester of the 2020-2021 school year (Cleveland, 2020). Other school districts designed a hybrid approach wherein students attended in-person learning two days a week and then attended virtually

or remote three days a week (Cleveland, 2020). The hybrid approach was designed to reduce the number of students in the classroom at one time, which allowed for social distancing to happen in classrooms. The Centers for Disease Control and Prevention (n.d.) defined social distancing:

> The goal of social distancing is to limit exposure by reducing face-to-face contact and preventing spread among people in community settings. What these actions look like at the community level will vary depending on local conditions. What is appropriate for one community seeing local transmission won't necessarily be appropriate for a community where no local transmission has occurred. (p. 1)

During the year of COVID in 2020, various versions of schooling were offered to students in the K-12 setting for the fall semester such as virtual or a hybrid approach that brought in smaller amounts of students into the building at one time, and in some smaller district cases, full-time in-person learning. Due to the educational setting being interrupted by the lack of consistent and routine in-person learning for K-12 students in the United States, some students had an educational experience and demonstrated progress that was negatively affected by the shutdown and COVID-19 measures to reduce the risk of spreading the disease (Kuhfeld et al., 2022). The in-person school environment helped students stay motivated and work on social skills (Chaturvedi et al., 2021). Dorn et al. determined that students were disengaged and were more likely to have gaps in their learning due to an unfinished school year (Dorn et al., 2020). The COVID-19 pandemic changed the world and changed how students and their families viewed school and all that goes with a brick-and-mortar school setting. Districts around the country made quick decisions at the start of the pandemic to alter how students received their education (Dorn et al., 2020). The quick pivots to a virtual learning setting, while necessary at the time, also created altered views

on what education should and could look like (DeLaRosa et al., 2022). Those different viewpoints might've been effective and productive for students who already had solid foundations with organizational skills, attendance, and academic achievement. However, for the students who might have already been on the bubble and struggling, the habits formed during the pandemic shutdown and the exceptions made to learning during that time did not help them excel and could have created a bigger void in their academic achievement and connection to school (Kuhfeld et al., 2022).

Background

The current study was conducted in a suburban school district outside of Kansas City, Missouri. The student population of the school district in 2022 was approximately 7,500 students, with equal proportions of females and males. Table 1 reflects the suburban district's student enrollment, graduation rates, the free and reduced percentages, and special education both before and after the COVID pandemic disruption.

Table 1

Demographic Information for the Suburban School District

Year	2018-2019	2019-2020	2020-2021
Student enrollment	6,242	6,292	6,187
Graduation rate (%)	91.45	92.79	89.25
Free and reduced (%)	26.30	26.70	29.20
Special education placement (%)	9.50	9.10	8.30

Note. Adapted from *District/ Charter Report Card,* by Missouri Department of Elementary and Secondary Education n.d., p. 1 (https://apps.dese.mo.gov/MCDS/Visualizations.aspx?id=29).

Due to the gaps in student learning noticed during the 2021-2022 school year after the return to a full school year, school leaders pivoted to find a way to support student academics to ensure that they have the skills necessary to proceed to the next grade level and graduate with a high school diploma. Schools also worked to put together interventions to support students and their learning loss (Moscoviz & Evans, 2022). Dorn et al.'s research showed "an estimate that an additional 2 to 9 percent of high-school students could drop out as a result of the coronavirus and associated school closures—232,000 ninth-to-11th graders (in the mildest scenario) to 1.1 million (in the worst one)" (Dorn et al., 2020, para. 22). The suburban school district's concern mimicked the same concern that Dorn et al.'s study shared. Students would be behind based on the student's exposure to academic work during the height of the COVID-19 pandemic. District leaders and administrators hired several interventionists at the district level to help with student needs and decrease academic gaps in students that were predicted by researchers throughout the pandemic. These interventionists were hired using ESSER funds (Office of Elementary and Secondary Education, 2022). The suburban school district's purpose in wanting the information for the effectiveness of the intervention program was to assess whether the suburban school district would be able to sustain the positions using district allotted money after the ESSER funds ran out in three years. The team created an intervention program to address early intervention for students who could be at risk of dropping out in high school called the Transition Intervention Program that worked with Grade 6 and Grade 9 students. The Transition Intervention Program utilized several measurements to assess whether the program was effective in identifying and intervening with students who were at-risk for dropout. Passing grades were determined by

evaluating Grade 5 and Grade 8 students and reviewing grades. Students with three or more failing grades were to be considered for the Transition Intervention Program. Throughout a six-week period, students would be enrolled in the Transition Intervention Program.

The study addresses the suburban school district leaders' concerns about student drop-out rate by implementing an intervention program called the Transition Intervention Program that would intervene and support students at a younger age. Students enrolled in the program received more intensive small group instruction at least two days a week for six weeks. The instruction included academic, behavior, and social emotional learning curriculum. Students in Grade 6 and Grade 9 were invited to participate in Grade 5 and Grade 8 by reviewing the number of passing grades. Students with three or more non-passing grades were enrolled per parent or guardian permission.

Statement of the Problem

Due to the COVID 19 pandemic, there is concern regarding the educational impact to students in the K-12 setting and their success in schools. Educational leaders are attempting to address the problem in the suburban school district by implementing an intervention program that is specific to Grade 6 and Grade 9. Staff have been tasked with implementing the intervention program called the Transition Intervention Program. There is a lack of information about the best solution for this concern.

The suburban school district wanted to know how to adequately address the concerns that students might be more at risk to drop out due to issues related to COVID closings. The leaders in the suburban school district created the intervention program called Transition Intervention Program at the Grade 6 and Grade 9 level in order to

address the problem. At the time of this study, the suburban district did not know if the intervention was effective and working. There is still a lack of information about the Transition Intervention Program's positive effects.

District leaders knew that the ESSER funds were provided to districts to support student learning, and the district was putting the ESSER funds to use by hiring more district-level staff to work on intervention with students (Office of Elementary and Secondary Education, 2022). The answer to the problem was important to decide whether to invest more funds for full-time employee status for the district interventionists after the ESSER funds end in 2024. Since the information and the concern about an increased dropout rate is a fairly new concern in the district, there is very little research in existence that would provide substantial information for future decisions on programs to support student academic achievement since there is a lack of research currently out regarding a program that it tailored to such specific needs for the students in the district. The usefulness of the study could drive the current intervention program or help school and district leaders determine additional educational supports for students to ensure that they remain in school and do not drop out when they get to the legal age. The suburban school district wanted to find an intervention approach that would be effective for student academic achievement that would also support student habits that would help them also build additional executive functioning skills and a closer connection to the school, so that students feel a tie to the educational system and then also make the decision to remain in school to graduate on time.

Purpose of the Study

The purpose of this quantitative study was to examine the implementation of the Transition Intervention Program within the secondary setting of the suburban school district. The reason for the additional tiered support program was to target students struggling with failing grades and who, at an older age, are at risk of dropping out of the educational setting, after the COVID-19 disruption. The quantitative data was garnered through the student information system. The rationale for conducting a quantitative study was to look at the impact of the Transition Intervention Program for students in order support their academic achievement to address the concern for an increase in the drop-out rate. The Transition Intervention Program was targeted to students at a younger age, Grade 6 and Grade 9 students, so that the intervention and effective executive functioning skills and habits could be used earlier than when students start to age up and then are able to make the decision to drop out (Rouse, 2019). An additional purpose of this study was to attempt to determine whether the relationship between students' scores, as measured by passing grades prior to and after the students had been enrolled into the intervention program for at least 6 weeks, improved.

The study's outcome will help the district with next steps in the process. The information from the study will help create new knowledge for the suburban school district to support student academic achievement and address the risk of the student drop-out rate.

Significance of the Study

The suburban school district leaders wanted to know the program's effectiveness given the additional full-time employee positions to determine the budgetary needs after the ESSER funds end in 2024. The results of the study were shared with district-level interventionists as well as district-level administrators. The information from the study also allowed school leaders to determine next steps with student needs, specifically for students who were needing additional intervention to attain academic success and reduce the drop-out rate in the district while also contributing to additional research that would better serve the district, its students, and the staff who support the programs.

The current study of the Transition Intervention Program was designed to identify factors that could help a small group of students, in an intensive and small group setting, who might be struggling academically at the pivotal grade levels to support executive functioning skills, improve grades and attendance, and make a stronger connection to their school. The district leaders decided to implement an additional intervention program so that the students could find academic success and find one answer to address and decrease the risk of drop-out of high school. The program would pull these students in with the interventionists to work on academics and study skills. The study goal was to first measure the effect of the invention prior to and after its implementation. The other study goal was the effect based on educational supports, attendance, discipline referrals, and time spent in the district.

1. prior to and after the 6-week intervention time;
2. prior to and after the 6-week intervention time based on additional educational supports;

3. prior to and after the 6-week intervention time based on attendance;
4. prior to and after the 6-week intervention time based on discipline referrals; and
5. prior to and after the 6-week intervention time based on time spent in the school district.

At the end of six weeks, students would be withdrawn from the program if they demonstrated progress. Progress was demonstrated by the number of passing grades. The criterion for students entering the program was three or more Fs. The criterion for students exiting the program was fewer than three Fs. The study is important so that the suburban school district can determine the effectiveness of the program, any additional layers to add to the Transition Intervention Program, staffing that would be needed at the secondary level, and the overall longevity of the intervention program. The study could also be used to inform future research in the area of tiered supports that schools and school districts might be interested in implementing.

Delimitations

"Delimitations are self-imposed boundaries set by the researcher on the purpose and scope of the study" (Lunenburg & Irby, 2008, p. 134). This study was delimited by:

1. The research was conducted in a suburban school district in the Kansas City, Missouri Metro area.
2. Students going into Grade 6 and students going into Grade 9 were a part of the Transition Intervention Program.
3. The intervention time within Transition Intervention Program, 30 minutes twice a week, was built into the daily school schedule.

4. Academic performance was only reviewed twice.
5. Parent permission had to happen in order for students to opt-in to the Transition Intervention Program. So, there could be students who were eligible but did not participate in the intervention.

Assumptions

Lunenburg and Irby (2008) defined assumptions as the "postulates, premises, and propositions that are accepted as operational for purposes of the research" (p. 135). The following assumptions were made concerning this research study:

1. Students put their best effort in class and completed work to the best of their ability.
2. Teachers followed Tier I strategies and protocols with fidelity.
3. Students lacked prior knowledge and skills of the content needed to achieve passing grades.
4. Teachers had the necessary skills and training to provide Tier I strategies to the students during the time they were in the Transition Intervention Program.

Research Questions

The purpose of this section is to state the research questions of the quantitative study. The research questions address the effects of the 6-week Transition Intervention Program as it relates to the number of passing grades prior to and after the intervention, and also examines the student progress based on categories including additional educational supports, discipline referrals, and time spent in the district, and attendance.

RQ1

To what extent is there a difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program?

RQ2

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by additional educational supports?

RQ3

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program affected by time spent in the school district?

RQ4

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program affected by discipline referral status.

RQ5

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program affected by attendance status?

Definition of Terms

This section provides definitions of terms used throughout the current study to prevent misunderstanding. Terms have been defined in the current study when clarity of language was needed for those outside the field of expertise.

Additional Educational Supports

Additional educational supports are designated for a student in the district Transition Intervention Program who might have an IEP, 504 plan, or ELL designation. This term is used solely for this study to encompass the various educational supports.

English Language Learner

Students living in native English-speaking countries whose first and primary language is not English are often defined as English language learners (Farver et al., 2013)

Interventionist

An educator who specializes in working with students in smaller groups and with more intensive educational supports in either academic, behavioral or social emotional learning. The goal of the interventionist's work is to support student growth.

Individualized Education Program

Pendharkar (2023) defined an Individualized Education Program, or IEP, as a program tailored to meet the individual needs of students with disabilities. The program is written in collaboration between a child's school district, parent or guardian, and sometimes, the student. The document outlines the special educational needs based on the student's identified disability (para. 8).

Section 504

Section 504 requires recipients to provide to students with disabilities appropriate educational services designed to meet the individual needs of such students to the same extent as the needs of students without disabilities are met. An appropriate education for a student with a disability under the Section 504 regulations could consist of education in regular classrooms, education in regular classes with supplementary services, and/or special education and related services. (Missouri Department of Elementary and Secondary Education, 1973).

Organization of the Study

Chapter 1 provided the introduction for the study, the background and the why behind the research and what is beneficial to the work that the suburban school district desires to do to provide more supports for students at a younger age who could be at risk to drop out once they get into high school. The research questions were included in Chapter 1 as well as any delimitations, assumptions to the study, and defined terms. In the proceeding chapter, the study will expand information that relates to the additional educational supports that can be provided within a school setting, why those could be provided for students in the school setting, tiered support models, attendance and characteristic of students who disengage in school. Chapter 3 provides the research questions and hypotheses that relate to each research method. Chapter 4 provides the results of the hypothesis tests using the archived data from the study. Chapter 5 includes a summary of the findings and provides guidance on next steps for the school district as it determines the continued implementation of the Transition Intervention Program and

future intervention programing for at-risk students in the school district even when the ESSER funds are no longer available to school districts.

Chapter 2

Review of the Literature

In this chapter, research findings are presented that examine the topics applicable to this study. First, research is presented on the development of tiered supports to meet student academic needs in a suburban school district. Second, research is presented about the approaches to tiered support such as Positive Behavior Interventions and Support (PBIS), Multi-tiered Systems of Support (MTSS), and Response to Intervention (RTI). Next, research is presented from investigating school experiences with tiered supports. Finally, research is presented on the suburban school district's approach to implementing the Transition Intervention Program.

History of the Development of Tiered Supports

Bailey and Duquette's 2014 study reviewing early attempts to intervene and help students who struggle with academics can be tracked back to the "War on Poverty," an initiative that President Johnson started in 1965. In his first State of the Union address in January 1964, President Lyndon B. Johnson asked Congress to declare an "unconditional war on poverty" and to aim "not only to relieve the indicator of poverty, but to cure it and, above all, to prevent it" (Johnson, 1964, para. 27). This was a multiyear effort from the federal government to challenge societal apprehensions with poverty and racial disparities. Congress approved legislation that transformed American schools, launched Medicare and Medicaid, and expanded housing subsidies, urban development programs, employment and training programs, food stamps, and Social Security and welfare benefits (Bailey & Duquette, 2014). This is when the Elementary and Secondary Education Act of 1965 was created.

The Elementary and Secondary Education Act of 1965 stipulates federal funding to primary and secondary education institutions, with funds authorized for professional development, instructional materials, resources to support educational programs, and parental involvement promotion. The individuals involved with the literature of the act emphasized equal access to education, aiming to lessen the achievement gaps between students by providing federal funding to support schools with children from impoverished families (Elementary and Secondary Education Act of 1965).

In 1973, Section 504 of the Rehabilitation Act was enacted to support students with disabilities and ensure they were not discriminated against due to their disabilities. Public schools were mandated to abide by the act in order to receive federal funding. The purpose of a student's 504 plan is intended to level the playing field regarding classroom academics. This is general education support but based on a diagnosis and team decision; students can receive modifications and accommodations in the classroom (United States Department of Education, n.d.-a)

In 1975, President Gerald Ford signed into law an act that provides protection for students with special education needs, the Education for All Handicapped Children Act. The law was also named Public Law 94-142, most commonly termed the Individuals with Disabilities Act (IDEA). This act would guarantee Free and Appropriate Education (FAPE) to all students in the United States' public schools. Services for students needed to be based on their Individualized Education Program (IEP), developed by the team, including parents, general education teachers, and special education teachers, and be in the least restrictive environment (Griffith, 2015).

Because not all students in public schools would meet the requirements for an IEP, public schools also required the use of data-based decision-making (DBDM) when determining the best educational supports. Ikemoto and Marsh (2007) used the following broad definition of DBDM: teachers, principals, and administrators systematically collecting and analyzing data to guide a range of decisions to help improve the success of students and schools (p. 108). Using student data in a systematic approach as it pertains to the students' existing and future achievement became a proven way to accurately identify student academic needs, therefore helping educators make informed decisions for instruction.

Turner and Coburn (2012) stated that all interventions to promote data use are rooted in the principle that if the right data are collected and analyzed, they will provide answers to key educational questions and inform actors' decisions, and better educational outcomes will follow (Turner & Coburn, p. 2). However, as described earlier, few causal studies on the effects of data use are available, and the existing literature does not always provide us with the answer to the questions when and under what conditions data use interventions lead to the ultimate outcomes-improved student achievement.

Researchers found staff needs enhanced DBDM professional development that allows educators to get time provided to review student data with their colleagues. They also need processes, protocols, and standardized documents that can be used to synthesize and analyze the student data and the entire team of professionals involved with the student data need to participate in the work of DBDM (Van Geel et al., 2016). DBDM must be done methodically and honestly. DBDM must be a collaborative effort between colleagues in an interconnected fashion. Educational professionals must have confidence

in one another and have conversations that lead to change based on the data sets that are presented and the outcomes the team of teachers desire to achieve based on the current data and the change in instructional practices that need to be made to improve students' achievement in the educational setting.

Approaches of Tiered Support: MTSS, PBIS, and RTI

Various approaches have been employed in schools that are tied to research-based tiered supports. PBIS, MTSS, RTI are some of the more common systems that schools utilize to reach students who are struggling either academically or behaviorally.

The first approach, PBIS, is a framework of intervention practices and organizational systems for establishing the social culture, learning and teaching environment, and individual behavior supports needed to achieve academic and social success for all students (Center on PBIS, n.d.). Scherer and Ingle's study (2020) on PBIS implementation examined the history behind the start of PBIS. That work dates to 1997 when Congress reauthorized IDEA and put more protections in place for students to decrease the exclusions from school based on disability. PBIS then continued to gain momentum and was largely implemented in schools around the country, more so in elementary schools than secondary schools according to research (Bohanon et al., 2006). PBIS is used by school leaders to also transform the school culture to enhance academic achievement and ease behavior issues by increasing supports for students at three different tiers (Sugai & Horner, 2009).

RTI, the second approach, was created in 2004 with another reauthorization of IDEA. RTI primarily focuses on the academic component of supports for struggling students (Arias-Gundín & García Llamazares, 2021). The components of RTI are

"quality classroom instruction, universal assessment, continuous monitoring of student progress, researched based interventions, and fidelity of interventions by the teacher" (Arias-Gundín & García Llamazares, 2021, p. 1). Neal, T. (2012) conducted research that affirmed that to be efficient, teachers would need training to differentiate between instructional strategies that are above and beyond and would be considered an accommodation tied to an additional educational support and what would be a Tier 1, which is an instructional strategy for all students in the general education classroom.

MTSS is an approach that targets both academic and behavior supports for struggling students. MTSS is intended to be used as an integrated, preventative, and problem-solving method for supporting students (McRel Institute, 2015). MTSS focuses on making sure that the problem-solving for students is approached holistically and done by reviewing data on both academics and behaviors. MTSS uses a tiered approach. For many years, PBIS and RTI were used to address the diverse needs, behavioral and academic, and eventually, MTSS is now considered the transformational umbrella for both PBIS and RTI and expanded to include supporting student social emotional needs (Sailor et. al., 2021).

The Three Tiers of Interventions and Supports

The introduction of tiered instructional strategies in the field of special education originated through two lines of research and development, one concentrated on the development of a pedagogy addressed to behavior problems impeding the learning process, and the second addressed to the remediation of problems associated with learning to read. In the case of behavioral instruction, a program of research and development funded by the U.S. Department of Education, and led by Horner at the

University of Oregon, was launched in the mid-1980s to provide educators with pedagogical practices that would obviate the need for “aversives,” which were becoming more common in public schools (Sailor, as cited in Horner et al., 1990; reviewed in Dunlap et al., 2009).

The model has three tiers: Tier 1, Tier 2, and Tier 3. Tier 1 is considered a universal tool for all students. The first tier is classroom instruction for all. A menu of additional interventions for those who continue to struggle comprise Tier 2. The final tier, Tier 3, is reserved for those who continue to display severe deficiencies or lack significant progress in Tier 2 programming (Scherer et al., 2020). The more quality instruction students experience through Tier 1, the regular classroom experiences, the less they will struggle and need Tier 2 interventions (Rich, 2010, p. 26). This means that a majority of students in a classroom should respond to the instruction and behavioral supports within the classroom. Students who qualify for Tier 2 are ones who do not respond to the instruction and behavioral supports of the core class and need additional practice and reinforcement of either the academic or behavioral supports (Center on Response to Intervention at American Institutes for Research, 2013).

Table 2

Three Tiers of Support

Tier	Instructional setting	% of Students
1	Universal, whole group	80 or more
2	Secondary, small group	10-15
3	Tertiary, intensive individualized	1-5

Note. Adapted from *What is PBIS, by Center on PBIS* n.d, p. 1. (https://www.pbis.org/pbis/what-is-pbis*)*

Evolution of MTSS in Schools

Starting in the 1960s and extending through 1975, the category of learning disability began to emerge as a more common definition in the educational system vocabulary. Mercer and Hallahan (2002) found the following:

> It was during this period that (1) the term learning disabilities was introduced; (2) the federal government included learning disabilities on its agenda; (3) parents and professionals founded organizations for learning disabilities; and (4) educational programming for students with learning disabilities blossomed, with a particular focus on psychological processing and perceptual training. (p. 3)

In 1963, unhappy with a distinct and somewhat demeaning term that had been used as a designation to their student with a disability, a parent advocate group in the US with the support of the Association for Brain Injured Children met in Chicago and considered the renaming of the label that had previously been set for their students of "brain injured." The original term brain injured dates to the 1940s and was adopted by the neurologist-educator Alfred Strauss. Strauss, who believed that students with the label of

brain injured could learn with specialized instruction (Kirk, 1977). Kirk (1977) was against using brain injured when referring to students with special needs because in his professional opinion brain injured indicated that students had low intelligence. Kirk preferred the term because it described student disorders in the development of speech, reading, language, and communication skills necessary for adequate social interactions (Kirk, 1993). Soon after, the parent groups agreed that the term learning disability better precisely described a larger group of students with special needs. The faction later created the name the Association for Children with Learning Disabilities (Kirk, 1962). Students with learning disabilities were characterized by three criteria: discrepancy criteria, exclusion criteria, and special education criterion. Kirk (1977b) researched remediation strategies for students who were identified as having a learning disability. Those remediation approaches included skills or task training, process training, and the process-task approach.

In the 1960s, the federal government began to get involved with the work in schools with students with special education needs. The creation of two task forces happened at once, with the makeup of one primarily medical professionals, and the other of educators. Then, the work persisted through the 1960s with the United States Department of Education (USDOE), when they formed a committee tasked with outlining the formal definition of learning disabilities so that it could be used for legislative purposes as it pertained to education bills and funding (Mercer & Hallahan, 2002).

Mercer and Hallahan (2002), in their study, continued to explore the evolution of students who identified with a learning disability (LD). In 1968, Congress passed the Children with Specific Learning Disabilities Act which would provide educational

support for students with a diagnosis of LD. In 1970, Public Law 91-230 consolidated the Education of the Handicapped Act with other programs on the education of children with disabilities. Lawmakers, through legislation, included discretionary funds in the form of a grant to USDOE for LD work to support teachers, education, and research and how to best serve students with the disability diagnosis (Mercer & Hallahan, 2002). Funding was allotted that allowed USDOE to examine strategies and educational models that would best assist students with disabilities to include the Child Service Demonstration Projects and the Leadership Training Institute in Learning Disabilities. In the 1970s, most students with learning disabilities were educated in the "pull-out" model of teaching, which was defined as removing from the general education classroom and moving to a smaller classroom with like peers with the same label of a learning disability (Sleeter, 1986). Discussion continued about the students who could be tested and receive the diagnosis of learning disabilities (LD). Sleeter's study (1986) was designed to address the concern that more White students were tested and determined to receive the LD diagnosis and that often minorities and families from lower socio-economic groups were disproportionately excluded from the opportunity to be identified as LD which also meant that they were not receiving the same educational support as their LD placed peers. From Sleeter, Madden, and Slavin, the pull-out model for special education students was an approach that was followed by the passing of Public Law 91-230. Student instructional placement was to be in the least restrictive environment based on their disability compared to their educational needs. The goal of the placement would mean that they would be provided with as much time in the regular education setting as possible. The continuum included special education placement, resources room placement, and in-class assistance in a general

education classroom. The resource room was a location that special education students were pulled to outside of the general education classroom and assigned to work on remediation and reteaching of skills separately from the general education class (Madden & Slavin, 1983).

Along with the creation of Public Law 91-230 in the 1970s, 1973 brought the law Section 504. This was one of the first laws to protect the civil rights of individuals with disabilities in programs and activities that are provided federal funding from the U.S. Department of Education. The law, later called Section 504, is overseen by the Office of Civil Rights to ensure that no discrimination is being done against students with disabilities (United States Department of Education, n.d.-b).

Murphy (2020) explained that Section 504 of the Rehabilitation Act of 1973 precedes the Americans With Disabilities Act (ADA) of 1990, and both laws work in conjunction to protect individuals with disabilities from being discriminated against based on disability. Under Section 504, students with a 504 plan must be provided reasonable accommodation compared to their peers and those accommodations should be provided to "level the playing field" for students with disabilities. Part of a school district's responsibilities in following Section 504 is having a process for their teachers to identify students who might need a 504. The Child Find statute, termed through IDEA, regulates states to establish policies and procedures to identify students who might need to be evaluated for a disability. All children are included in the protection of Section 504: public schools, homeless, private schools, and state ward students. States must have a reasonable method of assessing students who might be suspected of a disability; this includes children of high mobility (United States Department of Education, n.d.-c).

Section 504 protects students with everyday access and mobility but does not have the same legal requirements as IDEA. In a 2002 study by deBettencourt, deBettencourt found that there has been an increase in 504 plans and IEPs due to the number of students with attention deficit disorder and learning disabilities. Even though the numbers are increasing, the study emphasized that the need for 504 plans or IEPs would be essential to provide both general and special education teachers with guidance and support for students with disabilities. Throughout the evolution of Section 504 and an increase in student needs, students have also received 504s for mental health concerns. Due to the regulations of a 504 plan and that 504 plans do not need to be tied to a specific disability, more 504 plans are being written for anxiety and depression in adolescents. Hand (2018) explored this in a study and stated that there has been an increase in mental health diagnoses in the last 5-10 years, and also an increase in the number of students with 504 plans, but a decrease in special education plans (paras 1). The article attributed the increase in mental health concerns to technology, secondary school pressures, standardized testing, and college readiness concerns.

Hand's study (2018) continued to also raise concerns regarding the level of access and which students were frequently the ones with 504 plans. Those students were also more likely to have a 504 plan for mental health if their family was at a higher socioeconomic status than that of their non-White peers. Samuels also confirmed this same hypothesis based on a study from 2014. Samuels stated that students receiving accommodations on a 504 plan were most likely White students who attended non-title schools in the United States.

In 1990, another iteration of the Public Law 91-230 was reauthorized into the Individuals with Disabilities Act Public Law 110-476. With the change in the law, new categories were created for students with traumatic brain injury and autism. This was also the time that Congress mandated that along with the student's individual education plan (IEP), there would also need to be an individual transition plan (ITP) created for the student's plan for post-secondary living. (Individuals with Disabilities Act, n.d.).

No Child Left Behind Act of 2001 (NCLB) was a colossal move by the Bush Administration and was formed to improve public school student achievement as well as level the playing field for all students to ensure that their needs would be met (Klein, 2015). NCLB enacted the requirement that within a decade, all students, even students with disabilities, would perform at the level of proficiency on their state assessment. By many accounts, NCLB would be an enormous feat for any state to accomplish due to the fact that states must show adequate yearly progress (Simpson et al., 2004). NCLB also created more high-stakes assessment options with rewards and punishments attached to them if schools met or did not meet the progress as prescribed by NCLB. NCLB's emphasis was on the accountability of the individual states for positive academic outcomes. Under NCLB, the term Adequate Yearly Progress (AYP) has now become a common acronym in schools, districts, and states in the US. Through NCLB, by the 2005 school year, all teachers needed to be deemed as "high-qualified" in their area of expertise. While the Act was passed in 2001, by February 2004, multiple states had appealed to NCLB on the basis that it imposed costly new requirements without funding to carry them out (Simpson et al., 2004, p. 68).

Along the same time as NCLB, the MTSS framework was created as a pre-referral process in which students received early intervention within the Tier I, core instruction in the general education classroom, so that they would have their needs meet there rather than waiting after falling behind, only to be put into the pipeline for a special education referral (Seminero, 2023). The thought was also that if students responded to the Tier 1 supports within the general education classroom, which would also be considered least restrictive, then they would not need additional supports such as an IEP. Seminero (2023) continued to elaborate that the MTSS framework would and could also address both academic and behavior needs of struggling students. The study also highlighted that in order to meet the needs of students at the Tier 1 level, teachers would need to have the knowledge of the core instruction, the clarity of standards, and the professional development support in order to implement the practices into their classrooms.

Hollingsworth's 2019 study reiterates that MTSS framework, if implemented with fidelity in secondary schools, should provide safeguards for all students, starting at the Tier 1 level, which is also considered the class core instruction; however, implementation at the secondary level can be more challenging to due to scheduling barrier, resource distribution, staffing needs, and already implemented systems. Carroll et al.'s 2007 study expanded on the need to have five parts to a successful tiered intervention using the MTSS model: adherence to an intervention; exposure or dose; quality of delivery; participant responsiveness; and differentiation within the three-tiered framework. Along with the structure of the framework for MTSS success, high quality Tier 1 core instructional practices are a must. Teachers involved in the MTSS process must be well-

trained on best practice instructional strategies (Wilcher, 2022). Teachers should be provided with a clear path and plan for how to implement Tier 1 strategies within the classroom setting for all students.

One of the school structures and contributions to a strong Tier 1 is clear goals and guidelines for professional collaboration. One of the most well-known research-based collaboration structures in education is Professional Learning Communities (PLCs). Anderson et. al. (2023) conducted research that highlighted the need for ongoing professional development for teachers that included collaboration with a clear mission and vision that adheres to the belief that there is learning for all students. Another part of the work in a PLC is the need for ongoing data-based decision making that supports educators' need to continue to focus on reviewing data on students based around engagement, well-being, and learning. Along with the data-based decision making, clear systems of support are also created within a PLC to help students with learning and academic achievement. MTSS is considered a system of support that starts with the Tier 1 instruction and is at the level to assist all students with their learning.

Evolution of PBIS in Schools

PBIS, at its core, is a part of the MTSS framework. PBIS specifically focuses on behavior interventions that have been researched and studied to meet adolescent social, emotional, and behavioral needs in school (Benner et al., 2013). That same study goes on to suggest that PBIS also helps establish the social culture and behavioral supports that are effective for the learning environment. Bliese cited from the Blankenstein (2004) research:

> Established the crucial need for reform in education with six main principles that guide students' achievement in high-performing schools. Principle 1 stated a need for a common mission, vision, values, and goals. Principle 2 ensured achievement was needed for all students with systems for prevention and intervention. Principle 3 supported collaborative teaming focused on teaching and learning. Principle 4 utilized data to guide decision making. Principle 5 aimed to gain active engagement from family and community. The final, Principle 6 focused on building a sustainable leadership capacity. Schools were thought to be established for the common good and served as an opportunity to equalize the lives and possibilities for the achievement of millions of under-served children. According to Blankstein (2004), the real determinant of student success began with teachers creating environments which included systems to prevent failure. The needs of students were to be put first. All the systems and processes that needed to be in place to help students were examined and planned to encourage learning at a high level for all students. Blankstein's philosophy was a significant change of attitude when compared to mixtures of traditional bureaucratic and New England disciplinary pedagogy of the eighteenth century which promoted external authority such as switches and paddles to control student behavior (pp. 98-102).

In a study by Ridnouer (2006), the researcher agreed with Blankstein and declared teaching is as much about students as it is about curriculum. "Caring is a bridge to whatever a student defines as success. Frustration, hostility, confusion, and hatred are bridges to failure." (p. 27)

The key to the success of an MTSS framework is knowing the why behind the model and having clear descriptors for what the Tier I, Tier 2, and Tier 3 look like. These need to be clear for students, families, and educators. An earlier study suggested that facilitating meaningful and sustainable systems level change related to MTSS is a "complex process" requiring an understanding of evidence-based programs and effective implementation practices, executed through an interdisciplinary approach (Eagle et al., 2015; Fixsen et al., 2005). Fullan (2015) adds to this and stresses the need for developmental change from staff in order to make the change a long-term shift in thinking and practice.

Scherer and Ingle's (2020) research detailed the need for PBIS in schools to help reduce student behaviors and keep students in class. Office discipline referrals (ODRs) are the common form of tracking behaviors that limit students from learning. However, Scherer and Ingle also state that ODRs can be subjective based on the teacher who submits the referrals. PBIS training does include determining whether the behavior can be corrected through classroom and teacher management, known as a "minor" or if the behavior is a bigger issue that turns into an ODR, known as a "major." When PBIS was created, the purpose was to have structures and processes in place for teachers to use and address most of the behavior in a Tier 1 setting. When implementing the PBIS framework, extensive training was recommended to all staff to be consistent about the correct responses and actions that happen in the Tier 1, Tier 2 or Tier 3 setting (Center on PBIS, n.d.).

Students' Developmental Change as They Grow Older

As students enter the secondary level of school, that is when they are in Grade 6 or between the ages of eleven to twelve, the pressures of school, responsibility, and work increase. Students at that age sometimes believe they are the only ones experiencing stress due to higher expectations and a more significant workload and more responsibilities like looking after younger siblings. Daniels's (2005) study illustrated the unique pressures of middle school life and students' perceptions as they went through the familiar and common struggles of being a middle school student. Middle school students want to be both understood and provided with clear structures, routines, and consequences. Daniels continued to also highlight that friend groups are crucial in middle school. Adolescents either feel like they have too many friends to manage or not enough, which could lead to feeling isolated.

Characteristics of a Middle School Student at Risk of Drop-out

Rouse's study (2019) led to the term *push and pull* that describes the different factors that contribute to student drop-out rates.

Rouse concluded:

> that data was analyzed through an iterative process wherein patterns were discerned appropriately. The findings support 4 central influences that serve as both pull and push factors in the decision to drop out: disinterest/disengagement, teacher connection, a sense of hopelessness, and an end to any desire to succeed in school. Furthermore, the findings support the development of school and district-wide identification and intervention programs that make relationships with students the foundation and guide educators and local policymakers in making

> decisions that support student success and increase the likelihood that a student at risk for dropping out would remain in school and earn a high school diploma. (p. 40)

The push is defined as the reason or reasons that a student would quit school and then ultimately drop out, whereas the pull is defined as the outside factors that pull students out of school who then ultimately drop out. The push factors are “those results of adverse situations within the school environment" (Rouse, 2019, p. 7). The pull factors are ones that “lie within the student and divert him or her from finishing school” (Doll et al., 2013). Rouse (2019) continued that the choice to drop out is a gradual action rather than an impulsive one. During her study, the researcher noted that there was data-based information supporting how or why students drop out but there was not much information from the students themselves about their reasons for dropping out.

A Suburban School District’s Transition Intervention Program

Transition Intervention Program was started due to the suburban district’s concern for students returning from remote or hybrid learning due to the COVID-19 pandemic and subsequent shutdown. Engzell et al. (2021) reported from the Netherlands that students learned less during lockdown than in a typical year, and that the losses were evident throughout the age ranges, specifically in math, spelling, and reading. The size of these effects is on the order of three percentile points or 0.08 SD, but students from disadvantaged homes are disproportionately affected. Among less-educated households, the size of the learning slide is up to 60% larger than in the general population (Engzell et al., 2021). Several other studies supported the Netherland’s study. New evidence indicates that the shutdowns caused by COVID-19 could exacerbate existing achievement

gaps. The groups more impacted are students of color and students who come from low-income families. Their learning loss could be between three to four months (Dorn et al., 2020).

Small group and explicit instruction are at the core of the conception of the Transition Intervention Program. Explicit instruction has been proven to a successful approach in providing students the purpose of their learning, how to learn those skills in small steps, with multiple examples, allows the instructor to check for understanding, while also increasing the engagement and participation of student (e.g., Baker et al., 2010; Nelson et al., 2008). The National Institute of Child Health and Human Development (2000) is yet another organization that supports effective instruction tied to academic achievement. Direct instruction and small groups have been demonstrated in multiple studies to be effective for student learning.

The suburban district used research from the Christie et al., (2007) study to determine the age levels of the students who should be enrolled into the Transition Intervention Program. That study suggested screening students in Grade 5 and Grade 8 so that the students could enroll in the Transition Intervention Program in Grade 6 and Grade 9.

Grade Levels

The suburban school district needed to act, and so along with the use of ESSER funds, they hired additional staff to support students who could be at-risk for dropping out of school once they enter the high school level. But they wanted to target pivotal age groups at the secondary level, Grade 6 and Grade 9, to try to capture struggling learners earlier so they could help support the building of skills and knowledge needed to excel in

school. Christie et al., (2007) study found that cumulative individual and family stressors, together with lower sixth-grade school performance, lower high school achievement and motivation, and drug use, were associated with a higher probability of dropping out. While Baker and Sansone's study (1990) was a bit older, they stated that necessary work at the ninth-grade level was needed of support for interventions to reduce the risk of dropping out later in school.

Attendance Matters

Attendance matters, and students need to be in school. According to the National Centers for Education Statistics (2009), students who attend school regularly have higher academic achievement than students who do not. Students can also be left out of learning experiences unintentionally by the teacher due to chronic absenteeism. The suburban school district does have attendance requirements for the students in the district, and total attendance percentages are reported to the Missouri Department of Elementary and Secondary Education (DESE), who keeps track of attendance for funding purposes.

Epstein and Sheldon (2002) studied student attendance and its relationship to students who might later drop out of school. Identification and attention to student attendance early on is an effective way to mitigate the concern of a student later dropping out of school. The study continued to also look at the fact that dropping out of school is not something that is caused by one event but that it is a longer process of students who become withdrawn and then disengage from school. The study stated indicators of a student who is at risk of dropping out as early as first grade, and that the most effective stage to intervene with substantial resources is when students are in elementary and middle school.

Relationships

Student connectedness is important when considering one of the reasons why a student might consider dropping out of school. Churchill et al. (2021) expanded on this in their research by highlighting that at-risk students must feel a connection to their school and its staff to stay engaged. This can extend to students from LGBTQ sectors, disabilities, and low socio-economic status. That same study also extended the connectedness to the student's sense of belonging that could apply to their academic achievement, passing grades, motivation, and the student's personal belief that they can achieve success in school.

Bernstein-Yamashiro's 2004 study expanded on the thought of the student-to-teacher relationship and how it impacts the student's perception and performance in school. The study emphasized the importance of the dynamics between the teacher's pedagogy and the student's need for a connection and learning in a non-threatening environment when taking risks, asking for help, or having the adult feel as if they are genuinely interested in the student's experiences, opinions, and struggles. Bernstein-Yamashiro continued to stress that they (student-to-teacher relationships) constitute learning opportunities of their own, unique components of the developmental process, and a potential for community-building at school (Bernstein-Yamashiro, p. 56).

The lack of adult connection from school does create a disconnect for students. It inevitably becomes one of the significant reasons students might not want to be at school and eventually drop out. Sadly, it is the belief of some secondary educators that relationship-building with students at an older age is not as important as it is at a younger age. When relationships are not built at this level, it could create a disengaged student

who does not see the value in sticking with high school classes to earn a high school diploma.

Van Ryzin's (2010) study continued to build with the student relationships and connectedness by providing a correlation between the relationships and an advisory class at the secondary level. That study reiterates that the relationship between the student and teacher is crucial in creating lasting connections to the educational setting. The study acknowledges that the transition from the elementary setting to the secondary setting can be challenging for some students and that a way to cushion the transition hardship, through advisory classes, which provide a consistent connection between student and teacher can prove to be effective in cultivating positive relationships. The advisory classes would be built into the daily master schedule and would be a daily occurrence for a student and their teacher. The purpose of the advisory assignment for a student would be that it would provide a larger amount of time with the teacher in the advisory class, who would know the student and their needs, which would bolster the relationship between the two.

Summary

The suburban school district's approach to addressing the student drop-out rate by implementing the Transition Intervention Program is one district's efforts to meet the needs of students post-COVID. Throughout Chapter 2, the evolution of student supports by way of intervention is highlighted, starting with the identification of students with disabilities and following through to the students in need of a 504 plan. The laws and updated national acts highlighted ensure that all students receive a quality education based on their educational needs. The philosophy of inclusion of all students was a

widely adopted approach validated by national lawmakers and educators to ensure that all students are provided the opportunity to achieve to the best of their abilities. The interventions ensure no barriers to a student's education in the public-school setting. Throughout Chapter 2, the history of the earliest intervention approaches that have been implemented in schools were able to summarize ways to support struggling student learners while also leveling the academic playing field so that all students can feel success in the academic setting.

The evolution of the origins of MTSS, PBIS, and RTI also highlights the varied academic, social-emotional, and behavioral supports that are offered within the school setting to students who might not qualify for a 504 plan or on IEP but still need additional interventions for success. The efforts made in education for academic intervention have evolved over the years and are based on the changing dynamics of both school and home settings. The concern of drop-out is a layered and complex topic that if addressed by interventions is just one step in the appropriate direction for students who are at risk for droping-out. A student's risk of dropping out of school can increase if they do not attend school regularly or have a hard time establishing deep relationships with the adults or peers in the school. Some of the barriers can be self-perception from the student or actions of the adults but if the student does not feel the connection, they are more likely to detach themselves from the school setting. The obligation of the school is deep when it comes to addressing all the unique needs that a student needs to feel success in school and to ultimately complete their education, on time, and graduate.

Chapter 3

Methods

The purpose of this quantitative study was to examine the implementation of the Transition Intervention Program within the secondary setting of the suburban school district. The reason for the additional tiered support program was to target students struggling with failing grades and who, at an older age, are at risk of dropping out of the educational setting, after the COVID-19 disruption. The quantitative data was garnered through the student information system (Tyler SIS). The rationale for conducting a quantitative study was to look at the impact of the Transition Intervention Program for students in order support their academic achievement as a way to address the concern for an increase in the drop-out rate. Chapter 3 presents an explanation of the methodology, including the research design and selection of participants. The following section also addresses the data collection procedures, quantitative data analysis, and a summary.

Research Design

A quantitative research design determined to be the most appropriate because it compared Grade 6 and Grade 9 students' academic achievement based on the implementation of the Transition Intervention Program both prior to and after the intervention's implementation, as it was a newly adopted tiered support in the district. The intervention support was created in response to the learning loss due to COVID-19 related school closings, and as a way to identify students at risk of dropping out at an earlier age. The independent variables were implementation status (prior to the intervention and after the intervention), additional educational supports (special education, 504 plan or English language learner), time in the district (Grade 6–0-2, 305,

6-8; Grade 9–7 or fewer, more than 7) number of discipline referrals (Grade 6–0, 1-2, 3 or more; Grade 9–0, 1-8, 9 or more), and attendance. (less than 91% and 91% or more). The dependent variable was calculated prior to and after the implementation of the Transition Intervention Program.

Selection of Participants

Participants in the study were students enrolled in Grade 6 and Grade 9 in the suburban school district. Forty students in total were enrolled in the Transition Intervention Program, and data from those students were utilized for the study and were enrolled in the Transition Intervention Program. The sample included in the study was chosen based on the following criteria:

1. The student attended the suburban school district during the 2021-2022 and 2022-2023 school year.
2. The student earned three or more non-passing grades (Fs) during the 2021-2022 school year to be included in the Transition Intervention Program.
3. The student was enrolled in either Grade 6 or Grade 9 during the 2022-2023 school year.

Measurement

The measure of the dependent variable for the sample of students in the study was denoted by using numbers such as one passing grade would be denoted by the number one, two passing grades would be denoted by the number two, and three passing grades would be denoted by the number three. Grades are evaluated at the six-week grading period at the secondary level. Grade 6 students were enrolled daily in 10 class periods in each semester. Grade 9 were enrolled in seven class periods based on the high school

master schedule. The measurement was to count the number of student passing grades before and after six weeks of the Transition Intervention Program.

An additional variable in the study was the consideration of any additional educational supports a student who was enrolled in the Transition Intervention Program was also receiving that would be above and beyond the typical tier I supports that all students receive in a general education setting.

The State of Missouri has an attendance target of 90% for schools and students (Missouri Department of Elementary and Secondary Education, 2023). The suburban school district's board regulation policy on attendance states that excessive absences, excused or unexcused, have a detrimental effect upon academic progress and may be one factor considered in promotion/retention decisions. ([redacted]Board Regulation 3510, p. 2). In support of the Missouri Compulsory Attendance Law, attendance letters are sent to parents communicating the number of absences their student has had from school. The letters are sent out after a student has accumulated 5, 10, and 12 absences of any kind. After ten verified/unexcused absences or tardies/early outs, the office contacts the student's parents to schedule a conference regarding the issue. ([redacted] Student Handbook, p. 5). If families and students do not respond to interventions with attendance and being in school, then truancy could be considered by the administration and filed with the local law enforcement office. The categories for attendance was less than 91% or 91% and above.

In the two years leading up to the Transition Intervention Program, the suburban school district had implemented Comprehensive Integrated Three-Tiered Model of Prevention to work supporting and addressing student behaviors (Ci3T, n.d.). Part of

Ci3T intervention model's focus is on consequences for student behaviors. Minor behaviors are addressed by the teacher. Major behaviors are documented and addressed by the teacher and depending on the incident could also be addressed by the administrator. The suburban school district in this study holds monthly data meetings with the district lead team to evaluate the reason for the major behaviors. Discipline referral data for the study was a count of the number of major behaviors that were reported for the student (Ci3T, n.d.). Categories were determined using the raw data that analyze the impact of the Transition Intervention Program. Categories for the Grade 6 students were 0 discipline referrals, 1-2 discipline referrals, and 3 or more discipline referrals. Categories for the Grade 9 students were 0 discipline referrals, 1-8 discipline referrals, and 9 or more discipline referrals.

The Tyler student information system (SIS) that the suburban school district utilized provided archival data for students and their time in the district based on their enrollment date. Tyler SIS and is denoted by numerical value. The categorical measurement included 0-2 years, 3-5 years, and 6-8 years for the Grade 6 enrolled in the Transition Intervention Program, and 7 or less, and more than 7 years for the Grade 9 enrolled in the Transition Intervention Program.

Data Collection Procedures

Before the data collection process started for this study, a written request was submitted for permission to conduct research in the suburban school district. The research request was reviewed, and permission was granted on June 9, 2022, for the data collection procedure for the study. The document is attached in the appendix. A proposal for research was made to the Baker University Institutional Review Board on Monday,

December 11th, 2023, for permission to conduct this study. Approval was granted on Tuesday, December 19, 2023, and the document is attached in the appendix. Data collection procedures began after the two approvals were received.

Data used in this study were collected utilizing the district's student information system. Information was provided by the lead district interventionist who was facilitating the implementation of the Transition Intervention Program at the secondary level. Student names were removed from the data and identification numbers were assigned to the students to maintain anonymity. The number of passing grades, discipline records, attendance records, time in the district, and information on additional educational supports data were retrieved from the district information system, Tyler SIS, a K-12 educational management software that suburban school district uses to manage student data for the district and state reports.

Data Analysis and Hypothesis Testing

The data collected were imported into SPSS for analysis. Each research question listed below is followed by the associated hypothesis statements and the method of data analysis used to test each hypothesis.

RQ1

To what extent is there a difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program?

H1. There is a difference in academic achievement in Grade 6, as measured by the number of passing grades, prior to and after the implementation of the Transition Intervention Program.

A two-factor one within and one between (2x2) analysis of variance (ANOVA) was conducted to test H1 and H3. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 6 students, were implementation status (prior to and after the implementation of the Transition Intervention Program and additional educational supports). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect additional educational supports, and a two-way interaction effect (Implementation Status x Additional Educational Supports). The main effect for implementation status was used to test H1. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

H2. There is a difference in academic achievement in Grade 9, as measured by the number of passing grades, prior to and after the implementation of the Transition Intervention Program.

A second two-factor one within and one between (2x2) ANOVA was conducted to test H2 and H4. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 9 students, were implementation status (prior to and after the implementation of the Transition Intervention Program and additional educational supports). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for additional educational supports) and a two-way interaction effect (Implementation Status x Additional Educational Supports). The main effect for implementation status was used to test H2. The level of

significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

RQ2

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by additional educational supports?

H3. The difference in Grade 6 academic achievement, as measured by the number of passing grades of Grade 6 students, prior to and after the implementation of the Transition Intervention Program, is affected by additional educational supports.

The interaction effect for implementation status by additional educational supports from the first ANOVA was used to test H3. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

H4. The difference in Grade 9 academic achievement, as measured by the number of passing grades of Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected by additional educational supports.

The interaction effect for implementation status by additional educational supports from the second ANOVA was used to test H4. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

RQ3

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the

implementation of the Transition Intervention Program, affected by time spent in the school district?

H5. The difference in academic achievement, as measured by the number of passing grades of Grade 6 students, prior to and after the implementation of the Transition Intervention Program, is affected by time spent in the school district.

A third two-factor one within and one between (2x3) ANOVA was conducted to test H5. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 6 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and time in district (0-2 years, 3-5 years, 6 or more years). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for time in the district and a two-way interaction effect (Implementation Status x Time in the District). The interaction effect for implementation status by time in the district was used to test H5. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

H6. The difference in academic achievement, as measured by the number of passing grades of Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected by time spent in the school district.

A fourth two-factor one within and one between (2x2) ANOVA was conducted to test H6. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 9 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and time in the district (0-7,

more than 7). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for time in the district and a two-way interaction effect (Implementation status x Time Spent in the District). The interaction effect for implementation status by time in the district was used to test H6. The level of significance was set at .05 When appropriate, an effect size, as indexed by *eta squared*, is reported.

RQ4

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by discipline referral status.

H7. The difference in academic achievement, as measured by the number of passing grades of Grade 6 students, prior to and after the implementation of the Transition Intervention Program, is affected by discipline referral status.

A fifth two-factor one within and one between (2x3) ANOVA was conducted to test H7. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 6 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and discipline referral status (0, 1-2, 3 or more). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for number of discipline referral status and a two-way interaction effect (Implementation Status x Discipline Referral Status). The

interaction effect for implementation status by discipline referral status was used to test H7. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

H8. The difference in academic achievement, as measured by the number of passing grades of Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected by the number of discipline referral status.

A sixth two-factor one within and one between (2x3) ANOVA was conducted to test H8. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 9 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and discipline referral status (0, 1-9, 9 or more). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for discipline referral status and a two-way interaction effect (Implementation Status x Discipline Referral Status). The interaction effect for implementation status by discipline referral status was used to test H8. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

RQ5

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by attendance status.

H9. The difference in academic achievement, as measured by the number of passing grades of Grade 6 students, prior to and after the implementation of the Transition Intervention Program, is affected by attendance status.

A seventh two-factor one within and one between (2x2) ANOVA was conducted to test H9. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 6 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and attendance status (less than 90%, 90% or more). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for number of discipline referrals and a two-way interaction effect (Implementation Status x Attendance Status). The interaction effect for implementation status by number of discipline referrals was used to test H9. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

H10. The difference in academic achievement, as measured by the number of passing grades of Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected by attendance status.

An eighth two-factor one within and one between (2x2) ANOVA was conducted to test H10. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 9 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and attendance status (less than 90%, 90% or more).The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups,

including a main effect for implementation status, a main effect for number of discipline referrals and a two-way interaction effect (Implementation Status x Attendance Status). The interaction effect for implementation status by attendance was used to test H10. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

Limitations

Limitations of a study are not "under the researcher's control yet may affect interpretation of findings or generalizability of results" (Lunenburg & Irby, 2008, p. 133). The following are potential limitations of this study:

1. Teachers may not have completed the district referral form for district-defined major behaviors. Teacher tolerance of behaviors could cause a discrepancy in the data.
2. Teachers and office administration were responsible for entering attendance daily. Inaccuracies could have caused discrepancies in the data.
3. Rigor in class instruction and coursework could differ from class to class based on the class curriculum and instruction.
4. Support is different depending on the additional educational supports indicator.
5. Teachers graded consistently across the district in order to assign the appropriate grade to the students.
6. Scheduling of the Transition Intervention Time could shift based on the master schedule at the secondary level.

7. Teacher perception of their connectedness to the students in their class and in the school could defer from the student's perception of connectedness.

Summary

The objective of this chapter was to explain the research methodology used in this study. Covered in this chapter were the research design, selection of participants, measurement, data collection procedures, data analysis and hypothesis testing, and the limitations of the study. The purpose of Chapter 4 is to provide descriptive statistics and the results of the data analysis.

Chapter 4

Results

The importance of identifying and intervening early is important to support students who might be at risk of dropping out of school. The sample for the study was comprised of 40 students at the Grade 6 and Grade 9 levels in a suburban district, and the purpose was to determine if the Transition Intervention Program, which was created and implemented at the start of the 2022-2023 school year would be an effective approach in supporting students and providing resources to help them with their academic achievement and success. Five research questions and 10 hypotheses were tested within the student group to determine the outcomes of the Transition Intervention Program's implementation with students.

Hypothesis Testing

RQ1

To what extent is there a difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program?

H1. There is a difference in academic achievement in Grade 6, as measured by the number of passing grades, prior to and after the implementation of the Transition Intervention Program.

A two-factor one within and one between (2x2) ANOVA was conducted to test H1 and H3. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 6 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and additional educational

supports. The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for special education status, and a two-way interaction effect (Implementation Status x Additional Educational Supports). The main effect for implementation status was used to test H1. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between the two means, $F(1, 16) = 1.078$, $p = .315$. See Table 3 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H1 was not supported.

Table 3

Descriptive Statistics for the Results of the Test for H1

Implementation	*M*	*SD*	*N*
Prior to	8.22	2.53	18
After	8.94	1.55	18

H2. There is a difference in the academic achievement in Grade 9, as measured by the number of passing grades, prior to and after the implementation of the Transition Intervention Program.

A second two-factor one within and one between (2x2) ANOVA was conducted to test H2 and H4. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 9 students, were implementation status (prior to

and after the implementation of the Transition Intervention Program) and additional educational supports. The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for special education status, and a two-way interaction effect (Implementation Status x Additional Educational Supports). The main effect for implementation status was used to test H2. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between the two means, $F(1, 18) = 0.556$, $p = .465$. See Table 4 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H2 was not supported.

Table 4

Descriptive Statistics for the Results of the Test for H2

Implementation	*M*	*SD*	*N*
Prior to	3.80	2.22	20
After	4.15	2.13	20

RQ2

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by additional educational supports?

H3. The difference in Grade 6 academic achievement, as measured by the number of passing grades of Grade 6 students, prior to and after the implementation of the Transition Intervention Program, is affected by additional educational supports.

The interaction effect for implementation status by additional educational supports from the first ANOVA was used to test H3. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means, $F(1, 16) = 1.692$, $p = .212$. See Table 5 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H3 was not supported.

Table 5

Descriptive Statistics for the Results of the Test for H3

Implementation	*M*	*SD*	*N*
Prior to			
With support	9.71	0.76	7
Without support	7.27	2.83	11
After			
With support	9.57	1.13	7
Without support	8.55	1.70	11

Note. With support = additional educational supports; without support = no additional educational supports

H4. The difference in Grade 9 academic achievement, as measured by the number of passing grades of Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected by additional educational supports.

The interaction effect for implementation status by additional educational supports from the second ANOVA was used to test H4. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means, $F(1, 8) = 0.084$, $p = .76$. See Table 6 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H4 was not supported.

Table 6

Descriptive Statistics for the Results of the Test for H4

Implementation	*M*	*SD*	*N*
Prior to			
With support	3.67	1.53	3
Without support	3.82	2.35	17
After			
With support	4.33	2.08	3
Without support	4.12	2.21	17

Note. With support = additional educational supports; without support = no additional educational supports

RQ3

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by time spent in district?

H5. The difference in academic achievement, as measured by the number of passing grades of Grade 6 students, prior to and after the implementation of the Transition Intervention Program, is affected by time in the district.

A third two-factor one within and one between (2x3) ANOVA was conducted to test H5. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 6 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and time in district (0-2 years, 3-5 years, 6-8 years). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for time in the district and a two-way interaction effect (Implementation Status x Time in the District). The interaction effect for implementation status by time in the district was used to test H5. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means, $F(2, 15) = 0.795$, $p = .470$. See Table 7 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H5 was not supported.

Table 7

Descriptive Statistics for the Results of the Test for H5

Implementation	*M*	*SD*	*N*
Prior to			
0-2	8.80	0.84	5
3-5	7.00	4.08	4
6-8	8.44	2.46	9
After			
0-2	9.00	1.73	5
3-5	9.00	1.41	4
6-8	8.89	1.69	9

Note. 0-2 = 0-2 years in the district; 3-5 = 3-5 years in the district; 6-8 = 6-8 years in the district.

H6. The difference in academic achievement, as measured by the number of passing grades of Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected based on time spent in the school district.

A fourth two-factor one within and one between (2x2) ANOVA was conducted to test H6. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 9 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and time in the district (7 or less years, more than 7 years). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for time in the district and a two-way interaction effect (Implementation status x Time Spent in the District). The interaction

effect for implementation status by time in the district was used to test H6. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means, $F(1, 18) = 0.222$, $p = .643$. See Table 8 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H6 was not supported.

Table 8

Descriptive Statistics for the Results of the Test for H6

Implementation	*M*	*SD*	*N*
Prior to			
7 or fewer	4.11	1.83	9
More than 7	3.55	2.54	11
After			
7 or fewer	4.22	1.79	9
More than 7	4.09	2.47	11

Note. 7 or fewer = 7 or fewer years in the district; more than 7 = more than 7 years in the district.

RQ4

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected by discipline referral status?

H7. The difference in academic achievement, as measured by the number of passing grades of Grade 6 students, prior to and after the implementation of the Transition Intervention Program, is affected by discipline referral status.

A fifth two-factor one within and one between (2x3) ANOVA was conducted to test H7. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 6 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and discipline referral status (0, 1-2, 3 or more). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for number of discipline referral status and a two-way interaction effect (Implementation Status x Discipline Referral Status). The interaction effect for implementation status by discipline referral status was used to test H7. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means $F(2, 15) = 0.164$, $p = .850$. See Table 9 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H7 was not supported.

Table 9

Descriptive Statistics for the Results of the Test for H7

Implementation	*M*	*SD*	*N*
Prior to			
0	8.55	2.92	9
1-2	8.60	1.67	5
3 +	7.00	2.71	4
After			
0	9.44	1.33	9
1-2	8.80	1.64	5
3 +	8.00	1.83	9

Note. 0 = 0 discipline referrals; 1-2 = 1-2 discipline referrals; 3+ = 3+ discipline referrals.

H8. There is a difference in academic achievement, as measured by the number of passing grades of Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected based on the number of discipline referral status.

A sixth two-factor one within and one between (2x2) ANOVA was conducted to test H8. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 9 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and discipline referral status (0, 1-9, 9 or more). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for discipline referral status and a two-way interaction effect (Implementation Status x Discipline Referral Status). The interaction

effect for implementation status by discipline referral status was used to test H8. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means, $F(2, 17) = 2.134$, $p = .149$. See Table 10 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H8 was not supported.

Table 10

Descriptive Statistics for the Results of the Test for H8

Implementation	*M*	*SD*	*N*
Prior to			
0	3.40	2.97	5
1-8	3.33	1.75	6
9 +	4.33	2.18	9
After			
0	5.20	1.64	5
1-8	2.83	2.14	6
9 +	4.44	2.13	9

Note. 0 = 0 discipline referrals; 1-8 = 1-8 discipline referrals; 9+ = 9+ discipline referrals.

RQ5

To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected by attendance status.

H9. The difference in academic achievement, as measured by the number of passing grades of Grade 6 students, prior to and after the implementation of the Transition Intervention Program, is affected by attendance status.

A seventh two-factor one within and one between (2x2) ANOVA was conducted to test H9. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 6 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and attendance status (less than 90% and 90% or more). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for number of discipline referrals and a two-way interaction effect (Implementation Status x Attendance Status). The interaction effect for implementation status by number of discipline referrals was used to test H9. The level of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means $F(1, 16) = 3.138$, $p = .096$. See Table 11 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H9 was not supported.

Table 11

Descriptive Statistics for the Results of the Test for H9

Implementation	*M*	*SD*	*N*
Prior to			
Less than 90%	6.50	3.83	6
90% or more	9.08	0.90	12
After			
Less than 90%	8.50	1.98	6
90% or more	9.17	1.34	12

Note. Less than 90% = Less than 90% attendance; 90% or more = 90% or more attendance.

H10. The difference in academic achievement, as measured by the number of passing grades of Grade 9 students, prior to and after the implementation of the Transition Intervention Program, is affected based on attendance status.

An eighth two-factor one within and one between (2x2) ANOVA was conducted to test H10. The two categorical variables used to group the dependent variable, the number of classes passed by Grade 9 students, were implementation status (prior to and after the implementation of the Transition Intervention Program) and attendance status (less than 90% and 90% or more). The results of the two-factor ANOVA can be used to test for differences in the means for a numerical variable among three or more groups, including a main effect for implementation status, a main effect for number of discipline referrals and a two-way interaction effect (Implementation Status x Attendance Status). The interaction effect for implementation status by attendance used to test H10. The level

of significance was set at .05. When appropriate, an effect size, as indexed by *eta squared*, is reported.

The results of the analysis indicated there was not a statistically significant difference of at least two means, $F(1, 18) = 2.807$, $p = .111$. See Table 12 for the means and standard deviations for this analysis. A follow up post hoc was not necessary. H10 was not supported.

Table 12

Descriptive Statistics for the Results of the Test for H10

Implementation	*M*	*SD*	*N*
Prior to			
Less than 90%	3.64	2.73	11
90% or more	4.00	1.50	9
After			
Less than 90%	4.64	2.38	11
90% or more	3.56	1.74	9

Note. Less than 90% = Less than 90% attendance; 90% or more = 90% or more attendance.

Summary

This chapter began with an overview of the data analysis procedure, description of the Transition Intervention's purpose and the study details related to the quantitative study. When reviewing the quantitative data and outcomes from the study, there was no statistically significant difference in student academic achievement prior to and after the six-week Transition Intervention Program. Chapter 5 provides a study summary, the

results related to the literature, comparison from the literature to the current study results, and conclusions. Additionally, suggestions for practice and further research are discussed.

Chapter 5

Interpretation and Recommendations

The focus of this chapter is on reviewing the background, purpose, literature review, and methods, and on summarizing the findings of the study. In addition, comparisons are made to the findings that other researchers found, in order to make suggestions for district changes and future research on the Transition Intervention Program. The chapter ends with conclusions. Students enrolled in the Transition Intervention Program received more intensive small group instruction at least two days a week for 6 weeks. The instruction included academic, behavior, and social emotional learning curricula. Students were screened in their Grade 5 and Grade 8 year to participate in Grade 6 and Grade 9. Students with three or more non-passing grades were enrolled per parent or guardian permission.

Study Summary

This study was conducted to investigate the effectiveness of the newly created Transition Intervention Program in the suburban school district. The suburban school district's intention in creating the Transition Intervention Program ultimately stemmed from district leaders' concerns after the COVID-19 pandemic (Dorn et al., 2020). The purpose of the intervention was to address any potential increases in the drop-out rate once students reach the high school level and could make the decision to not complete their high school education to receive a diploma at graduation. Graduation rates are recorded and reported to DESE and are published to the school community. Educational leaders in the suburban school district had a strong desire to support all students to ensure that they had a college or career path after graduation with a high school diploma. This

section includes an overview of problem and purpose of the study, research questions, methodology, and the major findings of the study.

Overview of the Problem

The study involved the examination of the implementation of the Transition Intervention Program, by analyzing data prior to the enrollment and after students had been enrolled for six weeks in the Tier 3 intervention. Research from Rouse in 2019 shaped some of the intention behind the creation of the Transition Intervention Program. The goal for the intervention program with Grade 6 and Grade 9 students, in the secondary setting, was to provide students with academic supports and build skills to increase academic success and improvement in passing grades, which would hopefully address the potential of more student dropouts in high school. The problem the suburban school district wanted to know was if the intervention made a difference in student achievement after students had been enrolled in it for 6 or more weeks.

Purpose Statement and Research Questions

This research examined the impact of enrollment in the Transition Intervention Program on at-risk Grade 6 and Grade 9 students, as measured through grades and achievement based on the time duration in the Transition Intervention Program. An additional purpose of this study was to determine whether the difference in student achievement after being enrolled in the Transition Intervention Program, as measured by passing grades, was affected by additional educational supports, attendance rates, time in the district, and number of discipline referrals. The below information introduces the research questions.

RQ1. To what extent is there a difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program?

RQ2. To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by additional educational supports?

RQ3. To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by time spent in the school district?

RQ4. To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by discipline referral status?

RQ5. To what extent is the difference in academic achievement, as measured by the number of passing grades of Grade 6 and Grade 9 students, prior to and after the implementation of the Transition Intervention Program, affected by attendance status.

Review of the Methodology

A quasi-experimental research design was the most appropriate for this study, as it compared Grade 6 and Grade 9 students' academic achievement based on the implementation of the Transition Intervention Program. The Transition Intervention Program was a newly adopted tiered support in the district as a response to the potential

learning loss from COVID-19 due to school closures and then the modified instruction that took place in schools as a response to safety measures to COVID-19. Measurement for the study also included the number of passing grades prior to and after implementation of the Transition Intervention Program as a measurement of achievement. Data used in this study was collected utilizing the district's student information system.

The first analysis was to measure the effects on Grade 6 and Grade 9 students prior to and after the implementation of the Transition Intervention Program. Analyses were also conducted to consider additional educational supports a student in the program might have such as additional educational supports (IEP, 504 plan, or ELL status); time in the district; discipline referrals; and attendance status. Information was provided by the lead district interventionist who was facilitating the implementation of the Transition Intervention Program at the secondary level. Two-factor ANOVAs were used to analyze the data collected for the study.

Major Findings

Results from the quantitative portion of the study did not indicate a statistically significant difference in the impact of the enrollment in the Transition Intervention Program on student achievement.

- For RQ1, it was determined that there was no difference in the number of passing grades for Grade 6 or Grade 9 prior to or after the six-week enrollment of the Transition Intervention Program.
- For RQ2, it was determined that there was no effect on the difference in the number of passing grades for Grade 6 and Grade 9 students prior to or after

their enrollment in the Transition Intervention Program based on the provision of additional educational supports.

- For RQ3, it was determined that there was no effect on the difference in the number of passing grades for Grade 6 and Grade 9 students prior to or after their enrollment in the Transition Intervention Program based on the time in the district.
- For RQ4, it was determined that there was no effect on the difference in the number of passing grades for Grade 6 and Grade 9 students prior to or after their enrollment in the Transition Intervention Program based on the number of discipline referrals.
- For RQ5, it was determined that there was no effect on the difference in the number of passing grades for Grade 6 and Grade 9 students prior to after their enrollment in the Transition Intervention Program based on attendance status.

Findings Related to the Literature

The needs of students have increased, especially after the COVID-19 pandemic. When analyzing the academic progress of secondary students who might have been struggling academically, the habits formed during the pandemic shutdown and the exceptions made to learning during that time did not help them excel and could have created a bigger void in their academic achievement and connection to school (Kuhfeld et al., 2022). Dorn et al. (2020) suggested that there could be anywhere between 2 and 9% additional students at risk of dropping out of high school due to learning gaps created during the COVID-19 pandemic.

The response to the concerns about the increased dropout rates from the suburban school district was to create the Transition Intervention Program, a Tier 3 intervention support for students in Grade 6 and Grade 9. This current study investigated the effectiveness of the Transition Intervention Program by looking at the number of passing grades prior to and after its implementation with the students in Grade 6 and Grade 9. The study found no difference in the academic achievement prior to and after the implementation of the Transition Intervention Program.

Tiered intervention supports when done well can benefit struggling students (Hollingsworth, 2019). MTSS is an approach that targets both academic and behavior supports for struggling students. MTSS is meant to be used as an integrated, preventative, and problem-solving method for supporting students (McRel Institute, 2015). MTSS focuses on making sure that the problem-solving for students is approached holistically and done by reviewing data on both academics and behaviors.

The Transition Intervention Program uses small groups time with students in Grade 6 and Grade 9 enrolled in the program and meets with them two times each week. In other studies, on interventions at the secondary level, researchers have concluded that consistent interventions can be difficult to implement based on master schedules and the lack of time that is open for students to have small groups or advisory classes (Hollingsworth, 2019; Van Ryzin, 2010). The Transition Intervention Program would be considered a Tier 3 support for students based on the MTSS structure and framework. With Tier 3 being the most intensive of the tiers, it also requires the most time dedicated to meeting the needs of the small group of students. The staff involved at the highest level of the work with the Transition Intervention Program also experienced the complex

work of systemic challenges in the suburban school district's 6-12 secondary setting (Neal, 2012).

Conclusions

This study was designed to evaluate the effectiveness of the Transition Intervention Program as it related to improved academic achievement for Grade 6 and Grade 9 students after it had been implemented. The intervention was newly created by the suburban school district to proactively address the concerns after the COVID-19 pandemic about an increase in the drop-out rate (Chaturvedi et al., 2021). The study conclusions include implications for actions, recommendations for future work, and concluding remarks.

Implications for Action

The district's approach to the implementation of the Transition Intervention Program was an effort to address the concern about Grade 6 and Grade 9 students who were potentially at risk to drop out based on their lack of academic growth as identified by the number of failing grades earned in Grade 5 and Grade 8. There is the fact that achievement was not shown to increase over the six weeks in an implication for action; however, future work can be gleaned from the research regarding the implementation of strong MTSS supports such as: how much time is designated each week for students enrolled in the Transition Intervention Program, how long students can be enrolled in the Transition Intervention Program, how the interventionist implementing the program tracks the long-term success of students once they exit the program, consideration of making the tiered intervention times a priority when planning the master schedule, and clarity of the program and its goal in supporting student academic achievement.

Reflecting on the results from the study, there are five implications for action based on the current research:

1. adding more time for intervention
2. providing longer durations for students who are in the intervention
3. adding a tracking system for success
5. modifying the master schedule to make intervention time a priority
6. delivering clarity and collective efficacy of staff

This section is divided up into subsections based on the numbered list above to explain each of the implications in detail.

Adding More Time for Intervention. The current Transition Intervention Program's small groups met twice a week for thirty minutes. Since the Transition Intervention Program is considered a Tier 3 intervention in the MTSS framework, more time should be designated to the small group work with students. The MTSS framework outlines that Tier 3 is more intensive and should occur at least 30 minutes three days a week (McRel Institute, 2015). More time with students in the intervention also lends to the implementation fidelity for an intervention and how students respond to that intervention, specifically in Tier 2 and Tier 3. Carroll et. al.'s 2007 study about how to ensure that the implementation of an intervention takes place and the content, coverage, frequency and duration is met for the fidelity of the intervention.

Providing Longer Durations for Students Who are in the Intervention. Students who are enrolled in the Transition Intervention Program during the school year should be enrolled for not just Grade 6 but also Grade 7 if needed, so that they are participating in the tiered intervention and receiving more support for a longer period.

The study was targeted to Grade 6 and Grade 9 students. By expanding the Transition Intervention Program to more grade levels in the secondary level, it ensures overall sustainability for the skills they learned while enrolled in the Transition Intervention Program. In creating a more systematic tracking system, students who are in the program can be evaluated for long-term academic success even when they have been exited from the tiered intervention. While there are varying opinions in the implications for action on how long a student could or should be in a Tier 3 intervention as a part of the MTSS framework, long-term sustainability of the executive functioning skills, student achievement and growth should be documented and reviewed.

Adding a Tracking System for Success. The tracking system monitors the academic progress of students transitioning through the secondary education system who were previously in the Transition Intervention Program, spanning from Grade 6 to Grade 9. Fixsen et al. (2005) reiterated that there are two parts to any type of systematic approach to a new program for students: the intervention process and outcomes and the implementation process and outcomes. Both should be analyzed to produce an effective and data-driven intervention for students and to help them improve and grow in their academic achievement. The tracking system will also allow research-based instructional decisions to be made or adjusted based on the data collection to benefit future students in the Transition Intervention Program.

Modifying the Master Schedule to Make Intervention Time a Priority. Other studies have indicated that one of the barriers to secondary student intervention is the concern with lack of time in the master schedule to prioritize interventions for students. Sailor et al. (2021) mentioned that a secondary master schedule that provides time for

interventions and MTSS can be complex. However, prioritizing the scheduling of intervention time for students could benefit all students, not just those who are struggling academically. Wright (2023) agreed that when students transition to the secondary level, there are more challenges with the master schedule; ensuring there is time in the daily schedule for designated tiered intervention time becomes more important. Individuals involved in planning a master schedule for the secondary level should consider deliberate and intentional planning around Tier 2 and Tier 3 supports that occur during the school day for students. Without intentional planning of intervention time, the work and necessary skills practiced could get lost among all the other initiatives at the secondary level. While the middle levels had specific time during the school that were designated for the Transition Intervention Program, the high school schedule did not so it created a bigger challenge for students who were enrolled in the Transition Intervention Program (Hollingsworth, 2019). Several guiding practices need to be in place for the MTSS process to work well in a school setting: teacher knowledge and clarity on the practices, solid foundation of Tier 1 practices that then support Tier 2 and Tier 3, communication on student progress, and time within the school day for students to receive the more intensive intervention in a small group setting (Hollingsworth, 2019; Wright, 2022).

Delivering Clarity and Collective Efficacy of Staff. Collective efficacy of the work done by a small group of individuals could have a greater impact if all staff were fully informed, updated, and integrated into the work of the Transition Intervention Program and the students enrolled in the intervention. An earlier study suggested that facilitating meaningful and sustainable systems-level change related to MTSS is a "complex process" requiring an understanding of evidence-based programs and effective

implementation practices, executed through an interdisciplinary approach (Eagle et al., 2015; Fixsen et al., 2005). More teacher and staff training on the Transition Intervention Program, its purpose, and its benefits to struggling students need to be clarified, repeated, and reinforced. Progress monitoring data collected by the interventionist should be discussed, dissected, and next steps decisions should be made alongside the general education teachers, so that the Transition Intervention Program interventionist does not work in isolation. Waldron and McLeskey (2010) reinforced this belief by emphasizing the development of a strong team with a collaborative culture. More communication and clarity to staff and reports on student progress while in the Transition Intervention Program is needed. This study could be utilized by the suburban school district's leaders to modify the current structure of the Transition Intervention Program, coach up staff on the purpose and implementation of tiered supports, and affirm which current practices are being done with fidelity. The current research would also align with Hollingsworth (2019) and McRel Institute (2015) in that the MTSS framework, including the Tier 3 intervention of the Transition Intervention Program, should be integrated into the work that all staff do with students in all tiers. While these are implications for action, research should also be conducted to measure the effectiveness of the suggestions above.

Recommendations for Future Research

Participants in this study represented two grade levels in the secondary education setting. All participants' parents opted into the Transition Intervention Program that was created by the suburban school district to address the concerns of an increased drop-out rate post-COVID-19. Additional research could be conducted to enhance the work that has been done in the suburban school district as it finds ways to support struggling

students and intervene at an earlier age to support students and help them find academic success and a connection to their school, teachers, and learning.

The results of the current study indicate that the intervention did not make a difference in the number of passing grades for the Grade 6 and Grade 9 students enrolled in the Transition Intervention Program for the 2022-2023 school year. Suggestions for future research include:

1. researching a qualitative study that allows for teacher perception on why they think that there was not a statistically significant result in the current study and get their feedback on what could be done differently to make an impact in the academic achievement of the Grade 6 and Grade 9 students in the intervention;
2. conducting the study again, but setting the post-test out further, and have students in Grade 6 and Grade 9 extend their time in the Transition Intervention Program to include the next school year;
3. a quantitative study researching the Transition Intervention Time in earlier or later grade levels;
4. looking at other dependent variables such as test scores, standardized assessment scores, behavior incidents, and attendance; and
5. following the students to find out if they drop out less frequently than similar students who were not enrolled in the Transition Intervention Program in Grade 6 and Grade 9.

Driving deeper into further research, a quantitative study of the PBIS process within a school and a district could take place. The future research should evaluate the

systematic approach to teaching expected behaviors, correcting behaviors, tracking major and minor behaviors, and using researched based strategies to support students in an effort to increase positive behaviors, which also increases a connection to their school and teachers.

Results of the analysis of the achievement data for students enrolled in the Transition Intervention Program were not significantly significant; however, it does not mean that the work with a Tier 3 intervention is unimportant in the area of supporting struggling students. In addition to looking at the tiers, research should also be conducted to review the PBIS implementation. Research could be conducted using a quantitative study to measure the shift in ODRs over the course of 3-5 years. Fullan (2015) talked about change and how long it takes. Patience is important.

Assume that effective change takes time. It is a process of "development in use."

> Unrealistic or undefined timelines fail to recognize that implementation occurs developmentally. Significant change in the form of implementing specific innovations can be expected to take 2 or 3 years; bringing about instructional reforms can take 5 or 10 years. At the same time, work on changing the infrastructure (policies, incentives, and capacity of agencies at all levels) so that valued gains can be sustained and built upon. Don't expect change overnight but do press for significant results in the foreseeable future. (p. 91)

Additional research could also be conducted around whether a viable curriculum and rigorous and engaging instruction at the core level (Tier I instruction) would benefit and positively impact all students. High quality core instruction provided to all students in all general education classes could make a difference in the success of Tier 2 and Tier

3 interventions such as the Transition Intervention Program. Seminerio's 2023 study confirmed similar findings.

Future research could include a qualitative study to collect perception data from teachers on the most common accommodations and modifications that are provided in student plans and evaluate which of those could be considered Tier 1 supports and provided to all students in the general education classroom. In a 2012 study, Neal delved into teacher knowledge and perceptions of student accommodations, and included that:

> Teachers identified a need for more time and more training on accommodations. The need is greatest for differentiating between accommodations and RtI interventions. Teachers suggested that they rely on the IEP document and the special education teacher to make accommodations decisions. This confirms previous research that suggested that special education teachers are considered the experts. (p. 68)

Teachers want to do their best and will follow the additional student support plans out of compliance, but more research is recommended on accommodations and modifications for two reasons:

1. ensuring that the general education teacher is also an expert in accommodations and modifications
2. clarifying that distinctions can be made in the development of a student's additional support plan between Tier 1 supports and additional accommodations and modifications that are exclusive to that student and not all students

Continued research on what makes a good professional learning communities (PLCs) could also benefit the suburban school district and be essential for future work on tiered supports, specifically starting at the Tier 1 level and then moving on up. It is important to create a pedological toolbox by having PLCs that have a clear mission and vision, are collaborative, provide professional development opportunities, and use data-driven decision making in order create systems of support for struggling students (Anderson et. al., 2023). The use of solid PLC protocols and processes throughout the district would help to ensure that all staff have proper training and support in the implementation of accommodations and modifications for students, as well as general knowledge on research-based Tier 1 strategies, those that can be implemented for all students.

Continued research and work on student connectedness are going to be crucial not just for struggling students but for all students. The research could be in the form of a qualitative study using staff and student perception data. Churchill et al. (2021) gleaned that what is important is the students' perception of their connection to the school. The research could also be around the perceptions and relationships that are perceived as positive with both staff and peers in order to provide comfort, support and understanding when the student is in crisis. The school should be a place where there is routine and expectations expressed in a caring way because some of the students who struggle do not have that in any other space in their lives. Students in a school need to feel as if they are valued by others. This would also connect other researchers. Van Ryzin (201) mentioned three areas that bolster connectedness: advisory classes that are small, and deliberately track academic progress, check in on social emotional needs, develop trust amongst peers

and the adults, and develop a sense of community. Review of the existing implementation of the advisory classes at the suburban school district would be a great way to evaluate an additional layer of support for not just struggling students but all students as they move through the secondary level.

Concluding Remarks

The need for effective tiered support, especially for students who are at risk, continues to evolve and grow to meet the needs of the community. Any attempt at addressing concerns about student academic achievement is a valiant effort made by schools and districts. It is crucial that school districts use best practices and researched based frameworks to support students whose needs are higher than their peers. When done well, and under a pillar of a clear, concise, and communicative approach, the intervention can positively impact students who need the most support and improve the academic achievement. The goal and purpose of a K-12 education is to support students so that they graduate with a high school diploma and have the skills and abilities to demonstrate their college or career readiness.

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Appendices

Appendix A: District Approval Letter

2/26/24, 3:44 PM [redacted] RE: [EXTERNAL]Re: Campbell, K: Dissertation Request

[redacted]

Katie Campbell <katie.campbell@raypec.org>

RE: [EXTERNAL]Re: Campbell, K: Dissertation Request

1 message

Harold Frye <Harold.Frye@bakeru.edu> Thu, Jun 9, 2022 at 10:35 AM

To: [redacted]

Cc: [redacted], Harold Frye <Harold.Frye@bakeru.edu>

Thanks. Katie, this can be used when we file your IRB.

Sent from my Verizon, Samsung Galaxy smartphone

[redacted]

Cc: Katie Campbell [redacted] Harold Frye [redacted]

Subject: [EXTERNAL]Re: Campbell, K: Dissertation Request

CAUTION: This email originated from outside Baker University. Do not click links or open attachments unless you know the sender and content are valid. If you are unsure, please use the phish button to report the email and it will be reviewed

Awesome! Thank you!

On Thu, Jun 9, 2022 at 9:24 AM [redacted] wrote:

> We are good to go on this. [redacted] We are good to share data with Katie as she works on her dissertation.
>
> [redacted]
>
> ***What I'm Reading Now: Onward: Cultivating Emotional Resilience in Educators***
> ***What I Just Finished Reading: After She's Gone; The Silent Patient***
> ***What I will Read Next: Everything About You***
>
> *We are cups, constantly and quietly being filled. The trick is knowing how to tip ourselves over and let the beautiful stuff out.*
>
> Ray Bradbury,
>
> On Mon, May 16, 2022 at 7:24 PM Katie Campbell [redacted] wrote:
>
> > Hi [redacted]
> >
> > Here is the request for the dissertation work from Baker.
> >
> > Please let me know if we need to meet or if I should submit this to someone else. I am collaborating with [redacted] on the topic based on what [redacted] had mentioned in a meeting.
> >
> > Thanks!

Appendix B: IRB Approval

BAKER UNIVERSITY
Own Confidence

Baker University Institutional Review Board

December 19, 2023

Dear Katie Campbell 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 skimball@bakeru.edu or 785.594.4563.

Sincerely,

Scott A. Kimball

Scott Kimball, PhD
Chair, Baker University IRB

Baker University IRB Committee
Jiji Osiobe, PhD
Tim Buzzell, PhD
Susan Rogers, PhD