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The Effect of Choice Programs On Student Achievement

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by

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A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of

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Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

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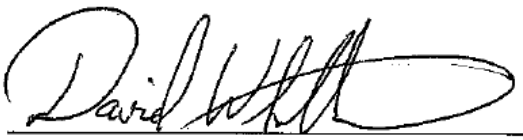
Signature:  Date: 8/31/2021

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Abstract

Educational choices provide unique learning opportunities for all children to have access to and allow parents to be the decision-makers for their child's education (Valant & Lincove, 2018). *Brown v. Board of Education* (1954) of Topeka sparked the creation of choice programs in the United States to end the segregation of students and empower families to be direct stakeholders in their child's education (Brown v. Board of Education, 1954). This study focused on a school district in the Midwest region of the United States, which investigated the expansion of learning options available to the community. The purpose of this study was to determine if there were significant differences in academic achievement, attendance, and discipline incidents between two student groups who either attended a district choice program or a traditional school classroom. The population for this study consisted of all eligible fifth-grade students who attended the Midwestern district from 2013 to 2017. The literature reviewed for this study was analyzed to inform and support the findings of this study. The de-identified district data collected and analyzed revealed significant differences in summative assessment outcomes between the two groups. Results showed that students who attended a district choice program earned higher exam scores than students who attended a traditional classroom. The data also uncovered significant differences in average daily attendance and discipline incidents between the two groups of students.

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Chapter One: Introduction

The 1954 Supreme Court decision on *Brown v. Board of Education* (1954) of Topeka established the foundation of public school choice across the country. Since this landmark civil rights decision, the concept of school choice has continued to evolve and expand by empowering families with the opportunity to be decision-makers in their child's public education (Burrola, 2020). Parents can now advocate for learning options to be made available for their children's participation, regardless of demographics or social status (McAllister, 2021). This choice allows families a voice to provide input on where they want their children to attend public school and what they want their children to learn (Olneck-Brown, 2020). As a result, public school districts across the country have developed a variety of individualized educational choice programs, in which students are taught through unique learning experiences not typically found in the traditional classroom environments (Burrola, 2020).

The premise of developing alternative learning programs was to create an exciting and relevant education that is meaningful and engaging for the students who choose to participate (Midwest District A School Choice Research Team, 2006). As a result, high engagement would positively influence student accountability and achievement since the learning was more relevant to the student's interest (Every Student Succeeds Act, 2015). More recently, with the challenge of providing traditional face-to-face classroom instruction in the midst of the worldwide COVID-19 pandemic, the dialogue and demand for alternative learning options have reignited to keep students safe and healthy during the crisis (Desanctis, 2020).

One such optional choice program was created by an urban school district in the Midwest through a partnership with a local community business (T. Bledsoe, personal communication, February 12, 2020). The choice program's education focused on conservation, which was equally important to the community business partner (T. Bledsoe, personal communication, February 12, 2020). The school district's goal was to create a pilot choice program to provide educational options to students and creatively address the need to improve achievement within the metropolitan district (Midwest District A School Choice Research Team, 2006).

This Midwestern school district had, on average, an annual enrollment size of approximately 25,000 students (Midwest District A Annual Report, 2019, p. 35). The student federal race majority was White and represented 77.4% of the student population (Midwest District A Annual Report, 2019, p. 35). Near 53% of the students had free or reduced price meal status (Midwest District A Annual Report, 2019, p. 35).

In Chapter One, the quantitative case study components are outlined. A background overview is presented to include the conceptual framework. The purpose and problem statement are given, along with the research questions and hypotheses. The significance of the study is explained, and the terms included in the study are defined. Additionally, the delimitations, limitations, and assumptions of the study are described.

Background of the Study

The No Child Left Behind Act of 2001 created an opportunity for states and local public school districts to create alternative education programs to increase student achievement by providing innovative classroom approaches never before seen in public education (Patrick et al., 2016). One component of No Child Left Behind allowed for

school districts to create and provide diverse learning options to students through community involvement and collaboration (U.S. Department of Education, 2004). The goal of providing students with a unique variety of educational opportunities would result in highly engaged learning and lead to an increase in student achievement since the learning option could be designed to be more authentic and individualized for every participating learner (Forster, 2016).

In 2015, the Elementary and Secondary Education Act was reauthorized and included revisions that replaced the outdated No Child Left Behind Act of 2001 (Klein, 2018). A provision of this update allowed school districts to use up to three percent of Title I funding to continue, create, and expand choice program options for students who attended schools identified at risk for academic underachievement (Every Student Succeeds Act, 2015, p. 18). The inclusion of choice programs could be incorporated into low-performing school district improvement plans, thereby expanding opportunities for schools to take advantage of additional federal resources provided to fund choice programs (Klein, 2018).

In 2006, leaders from a school district in the Midwestern part of the United States began investigating choice program options available to them under the No Child Left Behind Act (Midwest District A School Choice Research Team, 2006). District leadership formed a research team committee to explore and evaluate various choice program models already established in other school districts (Midwest District A Research Report and Recommendations Publication, 2006). The Midwest District A research team visited and evaluated ten school districts located across the country in Arkansas, Colorado, Kansas, Missouri, and Wisconsin (Midwest District A Research

Report and Recommendations Publication, 2006). The team observed 18 different choice program models from these ten school districts and evaluated each choice program's design, strengths, and opportunities for growth (Midwest District A Research Report and Recommendations Publication, 2006). Based on the district research team's analysis of existing choice programs, the team recommended that Midwest District A begin to design and implement the district's first choice program (Midwest District A Research Report and Recommendations Publication, 2006). The program was ready to open for the 2007–2008 school year, guided by the following five committee recommendations:

Recommendation #1:

Establish a task force to review the district's comprehensive Vocational/Technical Education and alternative program options and make recommendations for program expansion to serve more students.

Recommendation #2:

Create a community-based science model for fourth-grade students with implementation plans for the 2007–2008 school year.

Recommendation #3:

Implement choice programs at new and remodeled schools as deemed administratively appropriate.

Recommendation #4:

Expand International Baccalaureate (IB) or other inquiry-based PreK–12 program model.

Recommendation #5:

> Investigate implementation of a Fine Arts choice school starting at elementary and continuing the specialty at middle and high schools. (Midwest District A Research Report and Recommendations Publication, 2006, p. 5)

Based on the recommendations from the district choice program committee, Midwest District A's board of education approved and assigned a design team to create the district's first choice program (T. Bledsoe, personal communication, February 12, 2020).

Initially, Midwest District A planned to have two fourth grade classrooms pilot the choice program, but it was later decided that the choice program would serve two fifth grade classrooms instead (T. Bledsoe, personal communication, February 12, 2020). The justification behind the grade level change was because fifth-grade students naturally transition to junior high when the fifth-grade year is complete, thereby eliminating possible learning loss due to an added transition that fourth-grade students attending the program would be required to make (Borowski et al., 2021). The district selected the program's theme to be science-based, focusing on the outdoors and conservation (T. Bledsoe, personal communication, February 12, 2020).

The curriculum was written and designed to emphasize the use of scientific inquiry through unique and authentic learning opportunities (T. Bledsoe, personal communication, February 12, 2020). Physical classroom space located outside the district campus was provided through collaboration with a local business community partner who was also passionate about conservation and the outdoors (T. Bledsoe, personal communication, February 12, 2020). A significant consideration of the choice program

design was to ensure the program was sustainable and student success depended on the learner and curriculum and independent of the classroom teacher (T. Bledsoe, personal communication, February 12, 2020).

The student selection process required families to complete an application by the middle of the student's fourth-grade year (Midwest District A Website, 2021). In addition, it was stipulated that families would be responsible for providing student transportation, both to and from the offsite classroom location (Midwest District A Website, 2021). After all the applications were reviewed, those approved as eligible candidates went through a random lottery drawing (T. Bledsoe, personal communication, February 12, 2020). Only 46 students were selected to participate (T. Bledsoe, personal communication, February 12, 2020). A natural consequence of the mandated transportation requirement resulted in a lack of equity (T. Bledsoe, personal communication, February 12, 2020). Not all student applicants could provide transportation to and from the classroom (T. Bledsoe, personal communication, February 12, 2020). The lack of transportation created an eligibility barrier for families who could not provide or pay for daily transportation since the district did not offer busing services (Valant & Lincove, 2018).

After final approval from Midwest District A's elected Board of Education, the district's First Choice program was born (T. Bledsoe, personal communication, February 12, 2020). Shortly after this milestone, the district planned to add additional fifth-grade choice programs (Midwest District A Research Report and Recommendations Publication, 2006). One of the future programs was designed to focus on Science, Technology, Engineering, and Math (STEM) in collaboration with a community partner

with the same interest and an offsite location for classrooms (Midwest District A Website, 2021). A third fifth-grade choice program planned for development focused on the Fine and Performing Arts (Midwest District A Website, 2021). Future district plans included expanding choice to additional grade levels through developing and partnering with an agricultural magnet school (Midwest District A Website, 2021). Through a gift and grant money, the building for the magnet school would be constructed to house up to 150 fifth-through seventh-grade students and would be the first program to partner with a local college (Midwest District A Website, 2021). Midwest District A continues to focus on developing and expanding additional choice programs in the future (Midwest District A Website, 2021).

Conceptual Framework

The conceptual framework of this study was taken from the accountability requirements established initially in Title I of the Elementary and Secondary Education Act (U.S. Department of Education, 2004, Title I, Section 1116(b)). According to the Elementary and Secondary Education Act, public school districts are required to offer public school choice options to students who attend Title I schools that are identified and targeted for improvement, corrective action, or restructuring, as a result of not meeting state definitions for Adequate Yearly Progress (AYP) (U.S. Department of Education, 2004). The accountability measuring tool was implemented through annual standardized summative tests in English Language Arts and Mathematics, which are defined by the standards set for Title I status (Paul, 2016).

In 2001 under President George Bush, the Elementary and Secondary Education Act was reauthorized under a new name, the No Child Left Behind Act of 2001 (Hanna,

2005). Under this new authorization, schools were required to share and publish student achievement data, as well as district demographics, for transparency (Paul, 2016). Educators in opposition to this authorization claimed that the one size fits all mandate focused on the consequences and punishment of school districts that struggled academically rather than promoting success and celebrating schools that were on a path towards improvement (Paul, 2016).

In 2015, President Barack Obama renewed the NCLB Act of 2001 by revising the outdated policy and changing the name to the Every Student Succeeds Act (Paul, 2016). Under the Every Student Succeeds Act, the state education department is the accountability partner assigned to evaluate and monitor public school improvement in Midwest District A (Missouri Department of Elementary and Secondary Education [MODESE], 2020a). The measurement tools follow state-defined AYP expectations and guidelines (MODESE, 2020a). The AYP report publicly reveals district student achievement and demographic data of the district students (MODESE, 2020a). The purpose of AYP was to address inadequate student performance so increased support and resources could be provided to the district to assist in the remediation of student learning (MODESE, 2020a). However, if district performance did not improve over time, various consequences would be issued to the school district (Tures, 2017).

In this study, the concepts applied to the research framework included analyzing student achievement data on state-designed standardized summative test score results and proficiency levels. Similarly, student average daily attendance and the number of student discipline incident reports required by the state education department for Midwest District A were examined. The outcomes of this study were used to determine how

students who attended a traditional classroom environment compared to students who attended a choice program using accountability measures required by the state monitoring agency (MODESE, 2020a). The Every Student Succeeds Act and state educational department mandates defined what data needed to be collected in order to determine what effect Midwest District A's choice program had on student achievement, average daily attendance and the count of discipline incidents.

Statement of the Problem

School choice provides parents and students an array of educational learning opportunities, ranging from public schools to private schools or even homeschooling (Alvarez et al., 2016). The 2019–2020 global health pandemic caused by the COVID-19 virus posed unique challenges for public education and has fueled the discussion and the growth of virtual choice program access throughout the world (Sobic, 2020). The added concern of community health and wellness and the ability of school districts to provide safe learning environments are growing concerns of parents as schools face unique challenges created by this pandemic (Binkley, 2020).

This worldwide epidemic has reignited the discussion of alternative programs and the quality of learning provided through virtual instruction (Sobic, 2020). To many concerned school leaders and parents, the idea of learning choice has become a far more personal issue for families across the country due to the contagion characteristics and transmission of the COVID-19 virus (Binkley, 2020). Numerous parents and school districts across the world that may not have considered choice program options before the pandemic are now faced with health concerns associated with traditional seated classrooms (Sobic, 2020). Face-to-face instruction in a typical classroom of students

poses health and safety issues, so many educational institutes are looking for alternative learning modes to prevent learning interruptions due to potential school closures or for students who may require quarantine due to exposure to COVID-19 (Binkley, 2020).

School districts have been forced to think outside the box to prevent a disruption in student learning by adapting protocols to reduce student anxiety and fear caused by COVID-19 (Binkley, 2020). In response to the pandemic, virtual instruction was one alternative learning choice many public and private school districts offered as a safe way to promote continued education and prevent the spread of COVID-19 (Olneck-Brown, 2021b). A wide range of both public and private remote learning options have become available to students and have enabled educational services to continue during this crisis (Brinkley, 2020). The impact of this health emergency on student achievement has resulted in learning loss which will require further research to determine the significance and impact it will have on future generations (United Nations, 2020).

Midwest District A has been investigating if additional choice programs should be created to meet the increasing educational needs of all stakeholders within the metropolitan community it serves (T. Bledsoe, personal communication, February 12, 2020). This study assessed the value and performance of one Midwest District A choice program which filled an existing gap in research, by comparing the choice program students' academic achievement over time, to students who attended a traditional classroom and learning environment. Expansion of choice programs that offer individualized instruction may be necessary to improve academic success within diverse student populations (Alvarez et al., 2016).

Purpose of the Study

The purpose of this study was to present information to district leaders, parents, and school board members of the student achievement, attendance, and discipline incidents of students who chose to attend a choice program in Midwest District A, compared to students who learned in a traditional classroom in Midwest District A. The data were analyzed to determine if there were educational benefits in the intradistrict choice program in comparison to the traditional classroom in Midwest District A. The outcomes of this study provided educators with a program design model and identified that further expansion or redesign of current choice programs could be beneficial.

Research Questions and Hypotheses

The following research questions and hypotheses guided the study:

1. What is the difference in state assessment scores for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

$H1_0$: Students who participate in a fifth-grade choice program do not have a higher rate of proficiency on state assessments when compared to students who do not participate in a fifth-grade choice program.

$H1_a$: Students who participate in a fifth-grade choice program have a higher rate of proficiency on state assessments when compared to students who do not participate in a fifth-grade choice program.

2. What is the difference in attendance rates for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

$H2_o$: Students who attend a fifth-grade choice program do not have a higher rate of attendance compared to students who do not attend a fifth-grade choice program.

$H2_a$: Students who attend a fifth-grade choice program have a higher rate of attendance compared to students who do not attend a fifth-grade choice program.

3. What is the difference in reported discipline for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

$H3_0$: Students who attend a fifth-grade choice program do not have lower reported discipline occurrences compared to students who do not attend a fifth-grade choice program.

$H3_a$: Students who attend a fifth-grade choice program have lower reported discipline occurrences compared to students who do not attend a fifth-grade choice program.

Significance of the Study

In 2015 under the leadership of President Obama, the Every Student Succeeds Act replaced the outdated No Child Left Behind Act of the early 2000s (Johns & Kachel, 2017). One section of this new policy allowed schools the opportunity to diversify the learning model districts chose to implement (Kachel, 2017). Strong demand and expectations set by stakeholders to increase academic performance were considered the critical driving force behind school choice in the United States and around the world (Hastings & Weinstein, 2008). However, the COVID-19 pandemic has created a new

challenge of virtual learning and new choices now available to families (Olneck-Brown, 2021a).

Prior research studies uncovered that families were willing to pay higher rates for residential housing in school districts that demonstrated high academic performance and provided choice learning options for their children (Bonilla et al., 2018). A vital step school districts considered was how to meet the needs of their community by incorporating choice programs that were sustainable and relevant to the families they served (Denice & Gross, 2016). According to Hattie, providing school choice had an effect size of 0.12 (Visible Learning Plus, 2017, p. 2). However, this effect size was based only on student choice and did not account for how a program was designed, structured, or implemented (Hattie & Yates, 2013). Also, since this was considered an optional alternative, the students who attended these choice programs had a greater investment to participate and be successful (Bonilla et al., 2018).

The data results of this study allowed educators, parents, and legislators to evaluate the effectiveness of intradistrict choice programs in Midwest District A. Through the expansion of choice options and provided alternatives, combined with higher academic success for underserved populations, the community as a whole could benefit by providing additional choice learning opportunities to students who otherwise may never have had access (Barrow & Markman-Pithers, 2016). The outcomes of this research could assist school district leaders with assessing the value and worth of choice programs by comparing student achievement, average daily attendance, and discipline incident counts of students who attended choice programs to students who attended a traditional classroom setting. The study results also informed district leaders whether

choice programs were valuable initiatives to further expand and replicate throughout the community or were just an educational fad that had no benefit or adverse effects on student achievement (T. Bledsoe, personal communication, February 12, 2020).

In addition, the relevant timing of the worldwide COVID-19 pandemic presented challenging circumstances to school districts across the county and created barriers to learning due to unexpected and unplanned school closures and quarantines (Desanctis, 2020). The research findings of this study could be used to support various virtual choice learning options that numerous districts around the country have already started to implement to address health concerns caused by the spread of COVID-19 (Olneck-Brown, 2021a). In addition, this study could serve as a model for comparing the achievement of seated students in a traditional classroom to the achievement of online students in a virtual classroom.

Definition of Key Terms

For the purposes of this study, the following terms are defined:

Adequate Yearly Progress (AYP)

Adequate Yearly Progress (AYP) is the expected amount of improvement a school district should make each academic year (MODESE, 2020a). The MODESE is the state department responsible for managing the school district data of the district researched in this study (MODESE, 2020a). Through the use of standardized assessment, student academic achievement is determined (MODESE, 2020b). School districts must meet AYP goals or risk losing accreditation (MODESE, 2020a).

Annual Performance Report (APR)

The Annual Performance Report (APR) is an evaluation of annual performance, including attendance, by the MODESE for each school district in Missouri (MODESE 2020a). According to the MODESE comprehensive guide to annual performance report for educator preparation programs (MODESE 2020a):

> The Missouri Standards for the Preparation of Educators (MoSPE) outline the expectations for programs that prepare educators for certification in Missouri. In order to ensure that programs meet these expectations, the Department of Elementary and Secondary Education (DESE) established an Annual Performance Report for Educator Preparation Programs (APR-EPP) to measure the performance of educator preparation programs (EPPs) in valid, accurate and meaningful ways. The APR-EPP is based on the MoSPE performance standards and provides a mechanism by which to review and approve EPPs at the certification program level. Information provided through these reports assists in recognizing high-performing programs as models of excellence based on a set of indicators. Likewise, the reports facilitate identification of programs in need of improvement so they can receive appropriate support. (MODESE, 2020, p. 2)

Choice Program

Choice program is a term used to describe educational options students can choose from that are focused on areas of interest to provide a more relative learning experience. For this study, a choice program is:

> A term utilized to describe the variety of programs developed over the years that provide additional learning options for students at [Midwest District A]. [Midwest

> District A] Choice is choice within the public-school setting. (Midwest District A Handbook, 2020, p. 20).

Discipline

> For this study, discipline is defined according to the MODESE (2019b):
>
> School districts receiving funds under ESEA [Elementary and Secondary Education Act] and/or the Individuals with Disabilities Education Act are required to report all disciplinary incidents that result in in-school (ISS) or out-of-school (OSS) suspension, expulsion, or unilateral removal to an interim educational setting for one-half day or more. (p. 185)

Interdistrict

The term interdistrict is a transfer or open enrollment option for parents of students who want to enroll and attend a district other than the designated assigned attendance area in which they live (Merriam-Webster's Collegiate Dictionary, 2018).

Intradistrict

The term intradistrict is a transfer or open enrollment option for parents of students who want to enroll and attend an alternative school or program within the district they live, but outside the assigned neighborhood school in which they live (Merriam-Webster's Collegiate Dictionary, 2018).

Missouri Assessment Program (MAP)

The assessment program used to measure student achievement in Missouri is called the Missouri Assessment Program (MAP) (MODESE, 2020b). This standardized achievement test assesses proficiency levels in the subject areas of English Language

Arts, Mathematics, Science, and Social Studies of students in grades three through twelve (MODESE, 2020b). The results are scored according to four levels of proficiency:

- Advanced – a score considered above the set expectation
- Proficient – a score considered to be on grade level
- Basic – a score considered one grade level below expectation
- Below Basic – a score considered two or more levels below expectation. (MODESE, 2020b)

Missouri Department of Elementary and Secondary Education (MODESE)

This title is the name of the education department for Missouri (MODESE, 2020a). It is the primary agency that works with all stakeholders for regulatory and improvement actions for public schools in the state (MODESE, 2020a).

Traditional Classroom

A traditional classroom is a learning space where the teacher provides direct instruction to students who live in the school's attendance area (Pascual, 2017). All communication between and among the teacher and students is face-to-face in a typical school environment (Pascual, 2017).

Delimitations, Limitations, and Assumptions

The scope of the study was bound by the following delimitations:

Time Frame

Data collected and used for analysis included Missouri Assessment Program Grade-Level exam results from 2013–2017.

Location of the Study

The location of the study was at one school district in the Midwest region of the United States.

Sample

The participants were any fifth-grade students from 2013–2017 who attended the Midwestern public school district.

Criteria

The participants were included in the sample if they had a state MAP assessment score in English Language Arts, Mathematics or Science, and had records of attendance and discipline incidents.

The following limitations were identified in this study:

Sample Demographics

The sample size limited the study. Participants included fifth-grade students who had assessment, attendance, or discipline data and were enrolled in the Midwest school district from 2013–2017.

Instrument

The assessment analyzed may vary in content from year to year (MODESE, 2020b).

Secondary Data

The Midwest region school district collected the secondary data used in the study. The existing data used limited the study to only the formatting fields used by the district as part of the data collection process.

The following assumptions were accepted:

1. The source data provided for student performance, discipline, and attendance were accurate and timely.
2. The sample was representative of the general population of fifth-grade students who attended Midwest District A and had available MAP Grade-Level Assessment data.

Summary

Educational choice supporters believe that families have the right to advocate and make decisions that directly impact their student's education (Olneck-Brown, 2021b). Opponents of choice claim it creates a barrier for under-served families, who may not meet the criteria for enrollment and participation in choice programs (Olneck-Brown, 2020). As a result, choice programs continue to allow segregation and widen the equity and achievement gap (Olneck-Brown, 2020). Information revealed by this study may be valuable to Midwest District A leaders as they investigate the expansion and design of current and future choice programs (T. Bledsoe, personal communication, February 12, 2020). The objective of this study was to discover the impact choice programs had on student achievement, average daily attendance, and discipline incident counts, compared to the same outcomes of students who attended a traditional school and classroom environment.

In Chapter One, the background of the study, conceptual framework, statement of the problem, and purpose were presented. The research questions and hypotheses were introduced. Also, the significance of the study was explained, and the definitions of key

terms were provided. All delimitations, limitations, and assumptions of the study were identified and presented.

In Chapter Two, a review of literature regarding choice programs in education is presented. The conceptual framework is discussed in detail, including the background of historical and current educational legislation. The topics explored in the literature review are related to traditional classroom learning environments compared to choice program learning options.

Chapter Two: Review of Literature

In recent years, various educational policy decisions have created opportunities for locally controlled school districts to offer a variety of educational choices in publicly funded schools (Johns & Kachel, 2017). In response to these resolutions, the number of families curious about and participating in educational choice programs have expanded dramatically across the country (Barrow & Markman-Pithers, 2016). Modern public school choice programs and options have evolved from their diverse beginnings and continue to promote student growth by providing unique experiences and opportunities, resulting in the increased academic success of the students who attend (Chen, 2018). Recently, online choice programs have been created to address the educational crisis caused by the global Coronavirus (COVID-19) pandemic (Harris, 2020). According to experts, the pandemic will continue to disrupt K–12 education and impact student achievement in the future (Olneck-Brown, 2021a).

In the 1960s, the First Choice programs were created and implemented to increase economic and racial integration in existing schools in the United States (Klein, 2018). This initiative prompted the discussion and introduction of school choice for families and students across the United States (Chen, 2018). Some of the first charter schools, interdistrict and intradistrict choice programs, and voucher programs were developed to provide educational incentives and the option to attend academically successful schools to underserved students who otherwise may not have had this option (Midwest District A Research Report and Recommendations Publication, 2006). However, many states in the south used and designed choice programming to oppose desegregation (Rotherham, 2017).

Students in Midwest District A have the chance to participate and attend various intradistrict choice programs, which are intended to provide alternative educational opportunities not offered in the traditional classroom setting (T. Bledsoe, personal communication, February 12, 2020). Through the district's choice programs, students can participate in unique educational experiences (T. Bledsoe, personal communication, February 12, 2020). The choice program design creates a unique learning environment that is a much different experience when compared to a traditional classroom (T. Bledsoe, personal communication, February 12, 2020). Each program is focused on a topic or theme incorporated into all content learning (T. Bledsoe, personal communication, February 12, 2020).

For this study, the differences in choice programs and traditional classrooms were examined. The comparison data sets included student achievement, attendance, and the number of behavior incidents of choice program students, compared to traditional classroom students' same metrics in an urban Midwestern school district. The data results were analyzed to determine if there was a significant difference between choice program student data and traditional classroom student data.

In the following pages, the conceptual framework is presented in detail. In Chapter Two, information specific to choice program legislation and policy are reviewed. Other topics discussed within this chapter include the history of school choice programs in the United States. Also, various examples of currently available choice program models in education are presented. Barriers to implementing choice programs and the issues surrounding equity are discussed. Finally, a summary of the chapter is given.

Conceptual Framework

The conceptual framework of this study was derived from federal legislation. The origins of the Every Student Succeeds Act date back to 1965, with the initial school reform policy entitled the Elementary and Secondary Education Act (Johns & Kachel, 2017). Under the initial Every Student Succeeds Act, federal funds were made available to school districts to address low-income students' math and literacy instruction inequality in all parts of the country (Grace, 2017). Now updated, the Every Student Succeeds Act requires states to identify the lowest-performing schools and establish intervention plans that will increase student performance (U.S. Department of Education Press Office, 2018). One mode of intervention allows local school districts to design and create educational choice programs to address poor student academic achievement while providing equity to all students in the community (Kahlenberg, 2017).

The Every Student Succeeds Act defined district accountability requirements and describes the process expected to be used to assess and gather student academic performance, attendance, and discipline (MODESE, 2020a). For Midwest District A, the state reporting tool used to measure district performance is the Adequate Yearly Progress report (AYP) (MODESE, 2020a). These data include student achievement, attendance, and demographic information (MODESE, 2020a). The assessment measurement tool utilized by Midwest District A’s state education department is contracted and provided by Data Recognition Corporation (MODESE, 2020a). All grade three through eight students are required to take these summative exams annually (MODESE, 2020b). The exams contain a gamut of questions used to measure and determine student proficiency levels on state standards in the academic subject areas of English Language Arts, Mathematics, and

Science (MODESE, 2020b). The Midwestern educational state department (MODESE, 2019) stated:

> Student performance on the total test can be reported in terms of four performance levels that describe a pathway to proficiency and college and career readiness. Each performance level represents standards of performance for English Language Arts, Mathematics, and Science. Panels drawn from education, business, and professional communities determined the performance standards. Performance-level scores provide a description of what students can do in terms of the content and skills assessed, as described in the state learning standards. Performance levels are not determined for reporting categories. Instead, a student's reporting category score can be compared to the total test score that separates Basic level from Proficient level. (p. 4)

Students can score (MODESE, 2019):

- Below Basic - Students performing at the Below Basic level on the state assessments demonstrate a minimal command of the skills and processes identified in the state standards.
- Basic - Students performing at the Basic level on the state assessments demonstrate a partial or uneven command of the skills and processes identified in the state standards.
- Proficient - Students performing at the Proficient level on the state assessments demonstrate an adept command of the skills and processes identified in the state standards.

- Advanced - Students performing at the Advanced level on the state assessment consistently demonstrate a thorough command of the skills and processes identified in the state standards. (p. 5)

For this study, the MAP English Language Arts, Mathematics, and Science proficiency levels of eligible fifth-grade students, who attended a choice program and those who attended a traditional classroom, were used to compare the two group's academic outcomes.

Choice Program Background

In the 19th century, educational philosophy evolved and shifted from individual religious-based teaching to a state-supported common curriculum (Wagoner & Haarlow, 2020). As early public school education became organized and expanded throughout the country, wealthier families sought out alternative educational choices for their children to attend, expecting that this would provide better education and future advantages (Kennedy, 2018). A natural consequence of public and private educational options led to social segregation based on financial status and the ability of affluent families to pay the cost for public school alternatives (Center on Education Data and Policy, 2019). Wealthier families could fund tuition so their children could attend the school or program of their choice (Wagoner & Haarlow, 2020). Many middle and lower-class families could not afford to pay choice tuition and relied heavily on traditional public education options, establishing the beginnings of educational inequality (Kennedy, 2018).

During the twentieth century, the United States expanded geographically and proliferated in population as immigrants settled primarily in the northern part of the country (Zervas, 2017). Many of these migrants found jobs predominantly in industry

since businesses sought a manufacturing workforce to address the growing demand for commercial and consumer products (Zervas, 2017). As a direct result of this growth, business leaders challenged school districts to rethink what students were being taught (McDonald, 2017). Industrial leaders began to depend on public schools to train and prepare their incoming workforce with the skills necessary to fill the explosion of manpower required to fuel the economy that was booming in the northern United States (Zervas, 2017). Community leaders also recognized the demand for workforce social-emotional and leadership skills needed to create thriving local businesses (Ryerse, 2016). Business leaders suggested that educators evaluate best practices for teaching and include these requested skills in the taught curriculum (Ryerse, 2016).

Through collaboration and partnership, school districts began to revise student expectations by adding the mastery of academic and social-emotional standards for the first time (Sharvarts & Bakker, 2019). This shift in teaching practice led many educators to discover that not all students learn the same way or at the same level (Sharvarts & Bakker, 2019). Choice programs were seen as an appropriate and necessary option to accommodate the individualized learning required to reach the diversity of students and skills to meet community expectations and allow families choices in education (Keller & Malkus, 2017).

As northern states began to adapt and configure schools per federal law, southern states continued to experience racial inequality during the Jim Crow Era (Ford, 2017). School systems in the south were predominately controlled by white leaders determined to continue school segregation and the separation of black students from white students (Hansan, 2011). Even after the ruling for Brown outlawing segregation, United States

Senator Harry Byrd of Virginia began a movement known as the Massive Resistance in direct opposition to federal mandates requiring public school integration (Ford, 2017). This movement was an attempt to control and limit the choice options made available to underserved students under the law (Whitehurst, 2017). As a result, education decisions became a more personal issue and a topic of interest for families across the country (Chism, 2020). Racial imbalances continued to be a concern as many choice option applications asked unrealistic requirements of under-served families who cannot comply with program expectations resulting in reinforced barriers to equity (Osborne & Langhorne, 2017). Despite the ruling that segregation was illegal and efforts to make education equally accessible to minority families, by 1969, in the south only 2% of black students attended desegregated schools (West, 2021, p. 203).

After decades of educational inequality, the case of *Brown v. Board of Education* in 1954 concluded that intentional racial segregation was unconstitutional (Brown, 1954). The United States Supreme Court unanimously ruled that all students should be desegregated and provided equal educational opportunities, regardless of skin color or ethnicity (Brown, 1954). However, in Chief Justice Earl Warren's response to the verdict, he neglected to interpret what schools must do to comply with the ruling or discuss why segregation was unjust and criminal (Pruitt, 2018).

Shortly after the landmark ruling of *Brown v. Board of Education*, in 1955, Milton Friedman published the essay, *The Role of Government in Education*. In this essay, Friedman proposed that simple free-market principles, such as consumer freedom and competition, should be introduced in education, creating competition between educational organizations (Laitsch, 2016). Before formal public education was

established, parents were the educational decision-makers for their children (Kennedy, 2018). As a result of *Brown v. Board of Education*, low-income families were financially limited to affordable housing, which impacted their choice options (Strauss, 2017). Economically disadvantaged students had few choice options and were required to attend neighborhood public schools based on the district-defined physical location in which they lived, even if the environment was a poor fit for the student socially or academically (Strauss, 2017).

Renowned economist Friedman (1955) argued that parents had lost the ability to make decisions concerning their child's education since public school decisions were now made by the government (McDonald, 2017). Friedman suggested an educational voucher system to level the academic playing field (Witte, 2017). Vouchers would allow all parents, regardless of financial status, the opportunity to transfer state tax dollars to a different public school in the district or allow state funds to cover the tuition at a private school of choice (Witte, 2017).

Friedman (as cited in McDonald, 2017) stated:

> Given, as at present, that parents can send their children to government schools without special payment, very few can or will send them to other schools unless they too are subsidized. Parochial schools are at a disadvantage in not getting any of the public funds devoted to education; but they have the compensating advantage of being run by institutions that are willing to subsidize them and can raise funds to do so, whereas there are few other sources of subsidies for schools. Let the subsidy be made available to parents regardless where they send their children – provided only that it be to schools that satisfy specified minimum

> standards – and a wide variety of schools will spring up to meet the demand. Parents could express their views about schools directly, by withdrawing their children from one school and sending them to another, to a much greater extent than is now possible. (p. 3)

Supporters of Friedman expanded on his intellectual viewpoint and applied free-market ideas to various educational areas in the development of choice options (McDonald, 2017).

Advocates used Friedman's theory to advance special education services, empower impoverished families, allow religious freedom, create a competitive public education system, and teach the skills needed in the workforce (Luebke, 2021). In 1989, Wisconsin became the first state to approve a statewide voucher system that has a foundation based on Friedman's free-market principles (Luebke, 2021). More recently, Friedman's work has been revisited to address the need for workers with training in STEM as these areas are currently experiencing rapid growth worldwide (Kelly & Knowles, 2016).

Choice Program Legislation and Policy

Although the idea of school choice has origins dating back to before the Elementary and Secondary Education Act, current legislation and policy have continued to impact education and force change (Center on Education Data and Policy, 2019). Under the 2001 No Child Left Behind Act, public schools were formally held more accountable for student academic achievement (Martin & Johnson, 2016). A component of the new federal mandates required states and public school districts to report and provide an AYP report card to the public, outlining annual student achievement and

broken down by student demographics (No Child Left Behind Act, 2001). Large-scale summative standardized testing was developed due to the new No Child Left Behind Act and is used to evaluate and calculate AYP measures (Tures, 2017).

In accordance with the federal requirement issued by state legislators, Midwest District A must assess all third- through eighth-grade students annually in the content areas of English Language Arts and Mathematics (MODESE, 2020b). Also, grades five and eight must be assessed annually in Science content (MODESE, 2020b). Students in grades nine through twelve must complete follow-up exams in high school in English Language Arts, Mathematics, and Science (MODESE, 2020b). Social Studies is an additional content area required of high school students but is not a requirement of elementary or middle school students (MODESE, 2020b). The NCLB mandate set the expectation that all students in the Midwestern state would, at minimum, be proficient in all subject areas by the end of the 2014–2015 school year (Tures, 2017).

If a school district failed to show annual academic improvement, it could face financial consequences (Strauss, 2015). The NCLB act stated that school districts risk losing Title I funding for failure to meet the expected progress measure outlined in the educational policy (Strauss, 2015). As a result, at-risk schools were at greater risk since they were expected to do more with fewer resources (Klein, 2019). If, after two consecutive years, a school district did not show improvement in AYP measures, then students were allowed to transfer to other neighborhood schools within the same district (Editorial Projects in Education Research Center, 2011). The at-risk school lost the funding connected to the student's attendance (Editorial Projects in Education Research Center, 2011). If the school district failed to meet achievement expectations for three

consecutive years, the district was required to provide free tutoring to students (Fensterwald, 2016). In the fourth consecutive year of a school failing to meet the goal, school districts could be taken over or closed by the state's education department (Strauss, 2015).

In 2015 under President Obama, the Every Student Succeeds Act updated and replaced the No Child Left Behind Act of 2001. Although similar in purpose, the Every Student Succeeds Act (ESSA) provided additional resources to school districts targeted as failing schools instead of reducing funding (Fensterwald, 2016). The Every Student Succeeds Act allowed public schools to utilize additional incentives and resources previously unavailable under the NCLB act to focus on remediation of student learning, increase achievement, and close the educational gap of under-served students (Every Child Succeeds Act, 2015). Additional options created by the ESSA included creating educational savings plans for families, utilizing and creating charter schools, providing online virtual learning, transferring to homeschools, and forming magnet schools (Fensterwald, 2016). All initiatives were designed to improve student academic success and close the underserved learning gap (Every Child Succeeds Act, 2015).

Choice Program Models

Choice programs were created to be a distinct public or private educational service that provides families and students with K–12 learning options (Barkan, 2017). Choice opportunities often provide students with extra resources and innovative learning techniques (Laitsch, 2016). Unlike public education, many choice options are not required to follow federal and state AYP measures (Barkan, 2017). Supporters market the uniqueness of many choice programs and use the theme for advertising specific areas of

interest and specialized instruction not typically available in a traditional public school environment (Barrow & Markman-Pithers, 2016). Choice programs are considered an alternative mode of learning, which targets the student's needs by creating a more individualized approach to learning and improved student success (Keller & Malkus, 2017). The ESSA, for the first time, also authorized the use of public tax dollars to be accessible to families interested in moving schools and allow students to attend the program or school of their choice, either public or private (Laitsch, 2016).

When choice options were first introduced, parents were required to pay the student's tuition if a student wanted to transfer to a nonpublic or choice school (Laitsch, 2016). Since tax revenue is used to fund public schools, state reimbursements were not allowed to be funded by the government to private choice programs (McDonald, 2019). Supporters challenged this, and legislatures eventually began offering families paid choice options outside the assigned public school district (McDonald, 2019). This action caused public schools to forfeit the tax credits they received, resulting in lost funding for students who dropped from public education (Keller & Malkus, 2017). This action was a win for choice supporters but directly lowered the public school district’s annual budget, leading to teacher job losses (Keller & Malkus, 2017).

Charter schools are publicly funded tuition-free schools that operate independently of an elected school board and open enrollment to all students (Prothero, 2018). Typically, Charter schools are exempt from the state accountability measure rules and requirements of public schools and offer educational competition to traditional public schools (National Charter School Resource Center, 2020). Although charter schools are accountable to the public through the free market and philanthropy contributions, they are

not required to follow a state-mandated curriculum (Gulosino, 2020). Instead, charter schools are allowed to implement flexible learning options to meet the specific needs of the students they serve (Jason, 2017). What originally started as an experimental small-scale choice option has recently expanded in several states around the country (Stokes, 2019). In 2018, charter school students accounted for 5% of public school enrollments in the United States (Prothero, 2018, p. 3).

Magnet schools are a type of public school specializing in a focused area of study or theme (Adams, 2020). The three most common focus areas include STEM, performing and fine arts, and early college preparation (Adams, 2020). These schools usually have a higher set of standards in place for achievement, and all required classes are taught by incorporating the focus area into each core subject area (National School Choice Week Team, 2020). Magnet schools promote their focus area to draw students to apply who have a common interest or skillset (Adams, 2020). Even though magnet schools are free to the public, most require students to complete an application before enrollment, and not all who apply are accepted (Polikoff & Hardaway, 2017). By promoting specialized instruction, magnet schools attempt to attract students from other schools in the same district (Roland, 2019).

Open enrollment choice options allow families to attend a public school different from the local attendance area in which they reside (Wixom & Keily, 2018). Students are provided the option to apply for in-district or out-of-district transfer since enrollment is not based on the resident district or school boundaries (Dell'Erba, 2019). Students who are approved for transfer are typically required to provide their means of transportation both to and from school, which can limit the participating population if parents cannot

meet the transportation requirement (Midwest District A website, 2020). Open enrollment can be interdistrict or intradistrict, depending on whether the school of choice is inside or outside the student's resident district (Wixom & Keily, 2018).

Education Savings Account Programs in K–12, known as ESA K–12 Programs, allow parents the option to enroll students in their school of choice and are not limited to public schools or private schools (Lueken, 2020). The design premise of this program allows tax dollars to be used to fund students transferring from the resident district to the district of choice, so the money follows the student (U.S. Securities and Exchange Commission, 2018). If the cost to attend the choice school is more than the reimbursement provided by the state, families are required to pay the difference (U.S. Securities and Exchange Commission, 2018).

Private school options are independent of most state and federal regulations (Lueken, 2020). Private schools are funded through a combination payment of tuition by the families, the utilization of Education Savings Account K–12 Program funds, school vouchers, and tax-credit scholarships (Lueken, 2020). These schools differ from public schools in one fundamental way, tuition cost (Lueken, 2020). Private schools are allowed to be religiously themed or based, create their curriculum, and set standards on enrollment (School Choice Regulations, 2013). Private schools are also allowed to hire noncertified teachers and are not accountable for state achievement expectations or data monitoring (Lambert, 2019).

Homeschooling is a choice option where students learn at home and parents or cohorts of private teachers provide individualized instruction in a nontraditional private school style setting (McDonald, 2019). The homeschooling process requires parents to

notify the local school district and unenroll the student from the public school, but this is regulated differently from state to state (McDonald, 2019). According to the Home School Legal Defense Association (HSLDA), home schools must teach course subjects and maintain educational records until the student is 16 years old (HSLDA, 2020). Parents have the flexibility to teach the curriculum of their choice and must keep classwork and assessment samples that can be used to audit the homeschooling program (HSLDA, 2020).

Additionally, homeschool educators must maintain a teaching log and document a minimum of one thousand hours of learning (HSLDA, 2020). Homeschooled students are not required to take annual summative state assessments (MODESE, 2020a). Also, some students participate in a hybrid model where they are taught at home part-time and attend a local public school for the remainder of their studies (McDonald, 2019). In response to the COVID-19 pandemic, homeschooling became a popular option for families to utilize and prevent interruptions in their students' learning (Crary, 2021). Many families planned to use homeschooling temporarily to keep their children safe, but most have decided to continue to homeschool permanently due to benefits observed by parents (Crary, 2021).

Online options, also referred to as e-learning, allow students the flexibility to receive their education remotely and offsite of the traditional teaching campus (MOCAP, 2020). Both public and private schools offer virtual learning options (West, 2018). The Missouri Course Access and Virtual School Program (MOCAP) outlines that if a virtual course is state-funded, the provider is held accountable to traditional in-person public school requirements (MOCAP, 2020). Private e-learning options are flexible and are not held to federal or state requirements (Lieberman, 2019).

Recently, the online choice for students has become a more personal topic of discussion for many families due to the interruption of traditional education worldwide caused by the global COVID-19 pandemic (Desanctis, 2020). According to Li and Lalani (2020), 1.2 billion students have been dispersed from 186 different countries around the globe due to school closures caused by the virus (p. 1). This situation has dramatically increased the number of school districts forced to use online instruction to avoid learning disruptions (Dhawan, 2020). Almost instantaneously, school districts and teachers adapted instruction from traditional classroom procedures to online learning devices already utilized by students due to the sudden school closures across the country (Kaur, 2020).

Barriers to Choice Programs

Education is said by many to be the great social equalizer and the only way to break the cycle of poverty (Giovetti, 2020). Access to choice programs can be increased or severely limited by a student's social status or physical housing location (Jorgan & Gallagher, 2015). Typically, families who take advantage of choice program options have the financial means to send their children to the choice program location or relocate to a different school district if they are unsatisfied with the neighborhood school in their assigned school boundary (Reeves et al., 2017). For underserved families, choice options can be minimal or not accessible as a direct result of poverty (Trinidad & Korman, 2020). Access to choice programs creates an equity barrier and limits the options available to the underprivileged population (Ross, 2020). Research indicated three key barriers block access and equity to educational choice: cost, transportation, and enrollment (Valant & Lincove, 2018).

According to Abram (2020), affluent households tend to live in high-performing school districts due to the large amount of support and revenue they receive, compared to low-performing school districts with an underserved population that struggles with poverty. Middle-class families can also experience a cost barrier since they may make too much money to be eligible for assistance but not wealthy enough to pay out of pocket to attend choice programs (Abram, 2020). To create access for all and ensure equity, McKenna (2018) stated that:

> Simply opening up the market to parental choice tends to favor those families with the most social capital, rather than those whose children lack quality choices. Centralize efforts to ensure good schools in every neighborhood with investments in high-quality personnel and programs and means to protect access for the full range of students to all schools. (p. 2)

Policymakers should make choice program options available to all students because all children deserve a quality education, independent of social status (Abram, 2020).

The transportation barrier to choice stems from low-income families who cannot afford the expense of transporting their children through private or public modes of transportation (DeGrow, 2018). Other families who can pay for or provide transportation may have obstacles getting their children to the choice program location, making the option impractical since the challenges outweigh the benefit of the program (DeGrow, 2018). The inability to overcome transportation issues for choice programs is a source of racial and economic isolation (Cornwall, 2018).

Many choice program options offer limited enrollment to students with special needs or English Language Learners (Sundbom, 2019). Also, the enrollment process

often creates a barrier due to complicated applications, and procedural processes schools require of parents, which can be overwhelming to families seeking information or placement (Valant & Lincove, 2018). Some families are unaware of existing vouchers, savings plans, or scholarships (McKena, 2018). English Language Learners and students with disabilities may be denied an enrollment opportunity due to the program's inability to provide the appropriate support or resources needed to accommodate these unique student populations (Sundbom, 2019). Restrictions of this kind add to the list of choice equity barriers (Ross, 2020). To overcome this challenge, program providers should give assistance and resources to families who may struggle with enrollment details so that families are fully aware of the choices available to their students and understand the rights to which they are entitled (Trinidad & Korman, 2020).

When considering virtual choice options, the most severe barriers include limited access to devices and internet service, taking away the equity of online choice to underserved populations (Garcia & Weiss, 2020). Experts believe that online learning is no longer an option for schools to provide; it is now a requirement since many districts relied on this mode of instruction during school closures and student quarantines (Dhawan, 2020). Once virtual education was an option to families, it would be almost impossible to remove the choice used by so many schools and students around the country (Garcia & Weiss, 2020). According to the National Center of Education Statistics, 14% of students between the ages of three to 18 do not have dependable internet service at home, and 17% do not have a computer device (NCES, 2020, p. 2). As districts virtually navigate the future of educating students during a health crisis, they

must realize and plan that online learning now has new audiences as choice programs move forward (Lockee, 2021).

Summary

The literature review in this chapter included information on choice program options and the requirements designed to guide the educational process. Simple one-room schoolhouses of old have changed and transformed into the school districts in today's society (Sundbom, 2019). As education continues to expand and evolve, choice programs will grow and adapt to meet the ever-changing needs of education (Chen, 2018). Existing achievement gaps and the challenge to learn basic educational skills have forced educators to adapt instruction to meet the diverse needs of all students (Keller & Malkus, 2017). Federal and state governments have established educational policies and created laws to provide a fair and equal learning experience for all students (Center on Education Data and Policy, 2019). Court systems have provided direction and interpretation of public school law related to social justice issues and the country's transition to equitable education options (Laitsch, 2016). Barriers to educational choice continue to exist and create roadblocks for disadvantaged families (Ross, 2020).

In Chapter Three, the methodology of the study is outlined. The problem and purpose are reviewed, the research questions and hypothesis are provided. The research design, population and sample, and the instrument used to collect data for this research are introduced. The validity and reliability of the instrumentation and the data provided by Midwest District A are presented. The data collection process is described. The ethical considerations for this research study are explained. In conclusion, a summary of Chapter Three is provided.

Chapter Three: Methodology

The motivation for this study was to determine what impact Midwest District A's intradistrict choice program had on fifth-grade student academic success in reading and math. In this chapter, an overview of the study is reexamined, and the research design is presented. The components of the study are provided, which include the population and sample size, the instrument used, the data collection method, and data analysis. Also, ethical considerations are discussed. The chapter is concluded with a summary.

Problem and Purpose Overview

Leadership in Midwest District A was evaluating this program to determine if additional intradistrict programs should be created to accommodate diversity and grow equity in the community (T. Bledsoe, personal communication, February 12, 2020). The existing choice program's student MAP Grade-Level achievement data were analyzed to determine what, if any, impact the choice program had on student achievement. Based on the achievement outcomes of this study, the district may choose to expand choice program options to raise achievement scores and provide appealing learning options to increase enrollment (Barrow & Markman-Pithers, 2016).

Furthermore, student average daily attendance and discipline incident frequency were compared to appraise intradistrict choice program effectiveness. Midwest District A's choice program attendance and discipline data were compared to traditional seated classroom data. The results of these options were compared and used to determine the educational value and next steps for future choice program redesign and development (T. Bledsoe, personal communication, February 12, 2020).

Research Questions and Hypotheses

The following research questions guided this study:

1. What is the difference in state assessment scores for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

$H1_0$: Students who participate in a fifth-grade choice program do not have a higher rate of proficiency on state assessments when compared to students who do not participate in a fifth-grade choice program.

$H1_a$: Students who participate in a fifth-grade choice program have a higher rate of proficiency on state assessments when compared to students who do not participate in a fifth-grade choice program.

2. What is the difference in attendance rates for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

$H2_o$: Students who attend a fifth-grade choice program do not have a higher rate of attendance compared to students who do not attend a fifth-grade choice program.

$H2_a$: Students who attend a fifth-grade choice program have a higher rate of attendance compared to students who do not attend a fifth-grade choice program.

3. What is the difference in reported discipline for students who participated in fifth- grade choice program and students who did not participate in a fifth-grade choice program?

$H3_0$: Students who attend a fifth-grade choice program do not have lower reported discipline occurrences compared to students who do not attend a fifth-grade choice program.

$H3_a$: Students who attend a fifth-grade choice program have lower reported discipline occurrences compared to students who do not attend a fifth-grade choice program.

Research Design

According to Hoy and Adams (2016), quantitative research is ordinarily used when studying social sciences and uses statistical methods to analyze the data used for the study. The quantitative method was chosen for this study to determine what, if any, choice program learning elements positively impacted the academic success of students who attended (Creswell, 2018; Mascha & Vetter, 2018). A causal-comparative methodology was used to determine if differences in the sample were significant and could be inferred to occur in a larger population (Umstead & Mayton, 2018).

Creswell (2018) stated, "In a quantitative project, the problem is best addressed by understanding what factors or variables influence an outcome" (p. 104). In causal-comparative research, investigators attempt to determine the cause or consequences of differences that already existed between or among groups of individuals (Fraenkel et al., 2019). According to Fraenkel et al. (2019), the group difference variable is either a variable that cannot be manipulated or one that might be manipulated. According to Fraenkel et al. (2019), "Quantitative data are reported in terms of scores" (p. 182). This causal-comparative analysis will involve comparing two predetermined groups of students to investigate if census data differed on existing standardized state MAP Grade-

Level assessment achievement scores, as well as student attendance rates and discipline incidents. The quantitative data for this study consisted of MAP English Language Arts, Mathematics, and Science summative assessment data for Midwest District A fifth-grade students. Attendance percentages and discipline incidents secondary data of the designated students were also analyzed for this study.

The students for this study were already identified as public school students who attended Midwest District A. The students were already placed into one of two groups, traditional classroom students or choice program students. For this study, the groups of fifth-grade students were analyzed using historical quantitative data and categorical data sets. Since the differences between the two population averages were studied, a *t*-test was used to test the null hypothesis (Bevans, 2020). More specifically, one-tailed *t*-tests were used to determine if one population's mean was significantly greater than the other. The probability value, or *p*-value, is the probability of resulting test results and was measured against a level of significance of $\alpha = 0.05$ (Bevans, 2020). According to Fernandez (2020), the *p*-value results signify:

- *p*-value > 0.1: No evidence
- *p*-value between 0.05 and 0.1: Weak evidence
- *p*-value between 0.01 and 0.05: Evidence
- *p*-value between 0.001 and 0.01: Strong evidence
- *p*-value < 0.001: Very strong evidence. (p. 3)

Population and Sample

The population included all fifth-grade students from Midwest District A spanning five years, 2013 to 2017. The sample consisted of the students from the

population who met the eligibility criteria of having MAP achievement scores, a record of attendance, and a count of discipline incidents. Since the intradistrict choice program for this study was a fifth-grade program, the criteria eligible choice program students were compared to all other criteria eligible district fifth-grade students in the same years using secondary data comparisons. The exact sample count depended on the secondary data provided by the district.

From the population of all fifth-grade students in Midwest District A, the study sample *N* consisted of 10,509 students who completed state MAP Grade-Level testing in English Language Arts, Mathematics, and Science in the spring of 2013, 2014, 2015, 2016, and 2017. The data from these students were divided into two groups by cohort year; those who attended Midwest District A's intradistrict choice program and those who learned in a traditional classroom setting. Each data set was compared using *t*-tests to determine if the intradistrict choice program illustrated a positive difference from the traditional program in student performance, attendance, and discipline (King et al., 2018).

Instrumentation

De-identified secondary data were used for this study. Midwest District A collected and provided the data for the research, using the data field requirements set by the MODESE as part of the data reporting process. This process limited the study to the data fields available as part of the data collection process.

The instruments used for this study were the existing state MAP Grade-Level standardized state assessments for English Language Arts, Mathematics, and Science. Secondary accountability data were utilized to capture individual student attendance and discipline incidents data for Midwest District A. The data were uploaded securely from

Midwest District A via encrypted student enrollment files, then transferred directly to the MODESE electronically (MODESE, 2020a).

MAP Grade-Level assessments are a complete battery of state-specific assessments created for the MODESE by Data Recognition Corporation for English Language Arts, Math, and Science (MODESE, 2020b). All public school students in third through eighth grade must take the annual state summative assessments to determine if the school district is meeting achievement goals for Adequate Yearly Progress (MODESE, 2020a). Some exclusions or exemptions are allowed if the public school district determines the student meets the following exception criteria based on the MODESE's (2020a) outlined guidance:

- Students whose Individualized Education Program teams have determined that the MAP-Alternative is the appropriate assessment do not have to take the Grade-Level assessment.
- English Language Learners (ELL) who have been in the United States 12 cumulative months or fewer at the time of administration may be exempted from taking the English Language Arts portion. All other content areas must be assessed.
- Foreign exchange students are allowed but are not required to take the assessment. This is a district decision.
- Homeschooled students may take part in the assessment at the local district's discretion.
- Private school students are not required to take the Grade-Level assessment. (p. 3)

The raw individual student MAP Grade-Level assessment data were captured and secured by the vendor Data Recognition Corporation, then transferred securely to the MODESE (MODESE, 2020b). Next, the MODESE securely stored, analyzed, and reported student achievement in accordance with Missouri Learning Standards (MLS) for annual district AYP reporting (MODESE, 2020a). Scale scores provided the metric that indicates a student's proficiency level and academic achievement level (MODESE, 2020a). A scale score is a common term used in education, which assigns a numeric value to student performance for measure purposes (MODESE, 2020a).

Reliability

In the *Guide to the Missouri Assessment Program 2020-2021,* it is stated that the reliability of the state MAP Grade-Level assessments for English Language Arts, Math, and Science is standardized by grade level expectations (MODESE, 2020b). Precisely, "…the blueprint along with item specifications, performance–level descriptors and the practice and processes documents provide strong content validity and reliability for the assessment system" (MODESE, 2020b, p. 9). Thus, the reliability of the assessment data analyzed in this study was assured.

Midwest District A's secondary attendance and discipline data were considered reliable (A. St. John, personal communication, October 1, 2020). According to the 2020-2021 Core Data and Missouri Student Information System (MOSIS) Reference Manual, MOSIS student data were collected from each district in the state (MODESE, 2020a). These data were uploaded by individual school districts and checked for inconsistencies in the transfer file (MODESE, 2020a). All identified errors in the files were corrected and warnings addressed before the file was accepted (MODESE, 2020a). Data items are

entered only once and are collected at the lowest level to maximize their usefulness in decision-making and compliance with various state and federal reporting requirements (MODESE, 2020a).

Validity

The validity of the third through eighth-grade state-required MAP Grade-Level English Language Arts, Math, and Science assessments was also based upon the previously described learning blueprint, item specifications, and performance level descriptors created and designed by the MODESE (MODESE, 2020b). The annual *Guide to the Missouri Assessment Program* provided to school districts displayed set item specifications and performance-level descriptors, which also outlined pre- and post-test district requirements to be finalized within the Data Recognition Corporation Insight assessment portal in compliance with test security (MODESE, 2020b). Thus, the validity of the assessment data to be analyzed in this study was assured.

State school districts were required to report individual student attendance and discipline data, which were uploaded by the district directly to the MODESE through a secure server (A. St. John, personal communication, October 1, 2020). If the district reported data contained errors in the file upload, the school district received a warning to correct all inaccuracies before the state certified the file (A. St. John, personal communication, October 1, 2020). Once the file was free of errors, the MOSIS Data Collection system warehouse validated the securely transmitted data file to the state Core Data System, requiring the district to certify the file to be accurate (MODESE, 2020a). The MOSIS Data Collection system then cataloged and recorded all historic district data previously submitted to the state for analysis (A. St. John, personal communication,

October 1, 2020). The product of this process was secondary data reports published and made available through the Missouri Comprehensive Data System (MODESE, 2020a).

In accordance with the MODESE district core file validation and certification process, attendance and discipline data were deemed valid, considering the guidelines established by the core data process (MODESE, 2020a). The MODESE provided school districts with file code sets and data rules that must be corrected, or the file transfer would be rejected by the MODESE and not certified (2020a). Next, Missouri Department of Elementary and Secondary Education secured the data (2020a). Through this detailed process, corrected district files were validated for the data upload of annual June submissions for both district attendance and discipline student records (MODESE, 2020a).

Data Collection

Permission was requested from the Institutional Review Board at Lindenwood University (see Appendix A) and the Midwest School District A to collect data for this study. Upon approval from Lindenwood IRB, a formal data request to Midwest District A's data analytics department was submitted. This request included secondary individual fifth-grade student data for students who completed the MAP Grade-Level Assessment for English Language Arts, Math, and Science, in cohort years 2013–2017. The MODESE and Midwest District A gathered the initial data for state accountability purposes (A. St. John, personal communication, October 1, 2020). The secondary data request for students who attended the intradistrict choice program was tied to accountability at the students' home school of residence in the district. Therefore, these data were disaggregated and de-identified to be considered for use in this study.

Data Analysis

In this study, data analysis was used to determine if the intradistrict choice program students outperformed traditional students on student achievement performance on standardized assessments, student attendance, and discipline concerns. Frost (2020) explained that *t*-tests are used to analyze and evaluate sample data to test hypotheses (Frost, 2020). A one-tailed *t*-test can detect if a difference in performance is significantly better for one group than another group (Lewinson, 2019). One-tailed *t*-tests were utilized for data calculations and analysis of disaggregated and de-identified secondary data for student achievement, attendance, and discipline. The significance level selected for this study was $\alpha = .05$.

Ethical Considerations

All data and supporting documentation were electronically password-protected on a VPN secured network to minimize the risk of identifying the district or participants. Any physical documentation was stored securely in an electronic combination safe at the researcher's residence when not in use. Since the researcher was employed by Midwest District A, safety measures were put in place to conduct the research and data analysis objectively without bias. A district data department employee organized and securely delivered the de-identified student-level data to safeguard student privacy and anonymity since this study required student-level data comparison.

Summary

All students in the United States are afforded the right to a free and appropriate quality public education, including choice in schooling (Kahlenberg, 2017). Various educational choices are available to families that range from public, private, or

homeschool options (Kennedy, 2018). For this specific study, quantitative measures would be used to evaluate and support Midwest District A's decision on the next steps for the intradistrict choice programs. Causal-comparative research was used to determine if outcomes that existed in Midwest District A's intradistrict choice program differed from the mainstream traditional classroom environment (Umstead & Mayton, 2018). In Chapter Four, the results of this quantitative study comparing the two groups of students, those who attended an intradistrict choice program and those who attended a traditional classroom environment, will be analyzed and presented. The results for each research question are disclosed and explained.

Chapter Four: Analysis of Data

The purpose of this study was to determine if there were any significant differences in academic achievement, attendance, and behavior incidents between fifth-grade students who attended an intradistrict choice program and fifth-grade students who received instruction in a traditional classroom setting in Midwest District A. Specifically, fifth-grade standardized test scores in the areas of English Language Arts, Mathematics, and Science were evaluated. These achievement level data were collected and compared to determine the impact choice programs had on student achievement compared to traditional classroom programs. Data were also collected for student attendance rates and discipline incidents. The same sample groups were used to determine the impact choice programs had on attendance and discipline compared to traditional classroom programs.

It is important to determine programs that positively impact student outcomes as school districts evaluate best teaching practices. Many schools must proactively plan long-term goals to avoid potential pitfalls and allocate resources where they are needed most (Barrow & Markman-Pithers, 2016). The data points analyzed in this study were chosen to inform Midwest District A leaders as choice programming was evaluated and decisions for education programs were made (T. Bledsoe, personal communication, February 12, 2020).

Data Collection

The annual MAP assessment academic achievement data from 2013 through 2017 were collected by the MODESE (2020b) then accessed by Midwest District A through the Missouri Comprehensive Data System (MCDS) secure online portal. Midwest District A collected student attendance and discipline rates for 2013 through 2017, as

required by and reported to the MODESE (2020a). Following approval by the Lindenwood University Institutional Review Board, in compliance with the Lindenwood University IRB Approval guidelines, all data were de-identified, analyzed, and securely protected. Student data were narrowed down to the results for fifth-grade students who had a data point for years 2013 through 2017 for the following:

- English Language Arts MAP scale score and achievement level
- Mathematics MAP scale score and achievement level
- Science MAP scale score and achievement level
- Attendance minutes present and total minutes possible
- Count of discipline incidents.

Organization of the Chapter

In the remainder of this chapter, the demographics of the student participants in this study are described. A summary of eligible student achievement, discipline, and attendance data follow the demographic information. Finally, analyses of the differences between the outcomes of fifth-grade students who attended an intradistrict choice program and fifth-grade students who attended a traditional classroom program are provided.

Demographics

Total Count by Gender. Figure 1 shows the total count of female and male students who qualified for this study. A total count of 10,509 eligible fifth-grade students who had the required data points for gender is represented. The total five-year female count was 5,024, and the total five-year male count was 5,485. These data averaged

1,004.8 female and 1,097 male students per year for five years. All students included in Figure 1 could have qualified for inclusion in other variable data collections.

Figure 1

Count of Qualifying Students by Gender by Year

Note. N = 10,509.

Figure 2 shows the total count of female and male choice program students who qualified for this study. The data from Figure 2 show a total count of 229 eligible fifth-grade students who had the required data points. All students included in Figure 2 could have qualified for inclusion in other variable data collections.

Figure 2

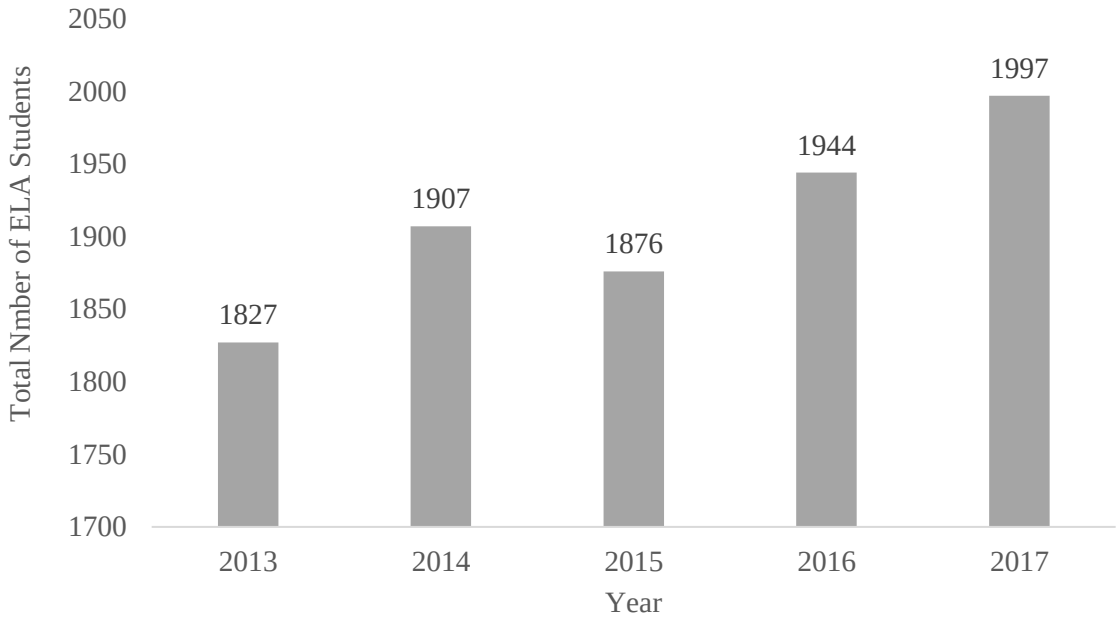
Count of Qualifying Choice Program Students by Gender by Year

Note. $N = 229$.

Total Count by Content Area. Figure 3 shows the total count of English Language Arts students who qualified for this study. The data from Figure 3 show a total count of 9,551 eligible fifth-grade students who had the required data points for the MAP English Language Arts test, which averaged 1,910 students per year for five years. All students included in Figure 3 could have qualified for inclusion in other variable data collections.

Figure 3

Count of Qualifying English Language Arts Students by Year

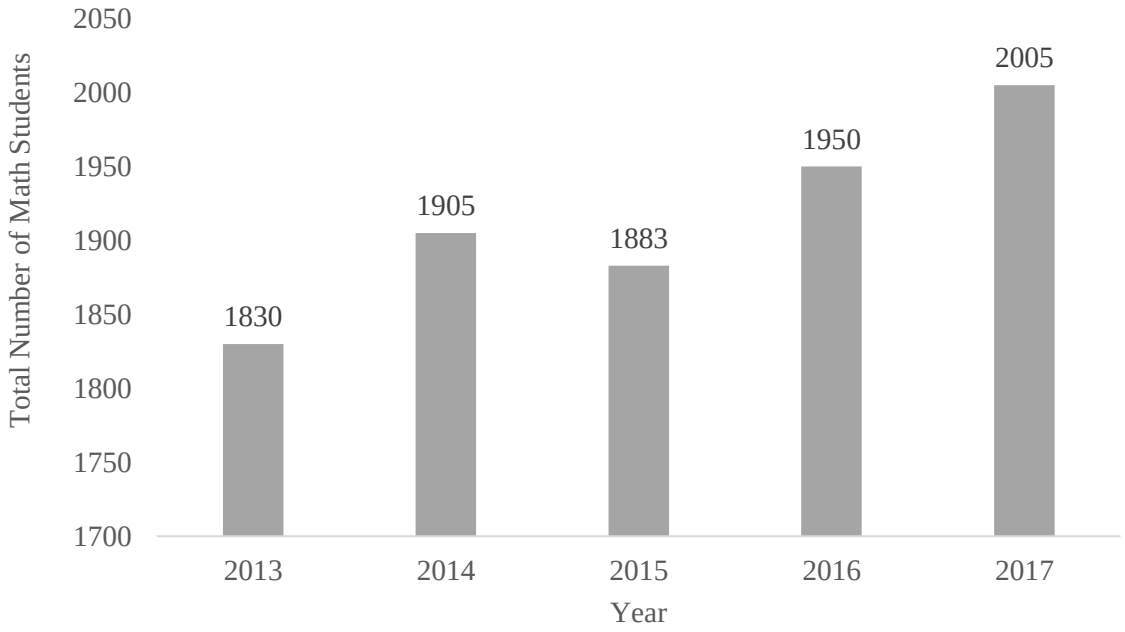


Note. N = 9,551.

Figure 4 shows the total count of Mathematics students who qualified for this study. The data from Figure 2 show a total count of 9,573 eligible fifth-grade students who had the required data points for the MAP Mathematics test, which averaged 1,914 per year for five years. All students included in Figure 4 could have qualified for inclusion in other variable data collections.

Figure 4

Count of Qualifying Mathematics Students by Year

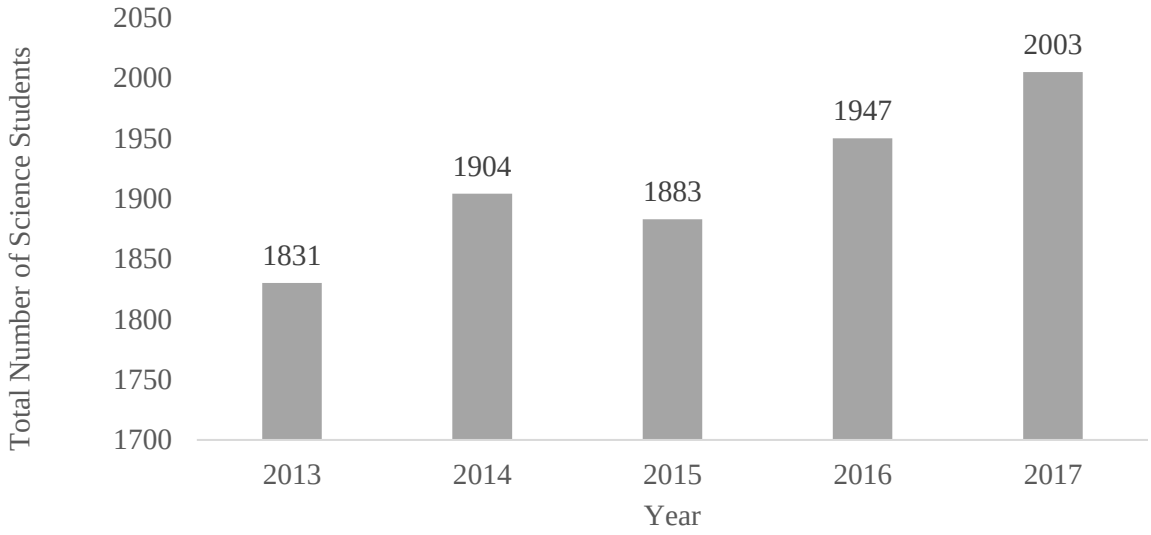


Note. N = 9,573.

Figure 5 shows the total count of Science students who qualified for this study. The data in Figure 5 show a total count of 9,568 eligible fifth-grade students, who had the required data points for the MAP Science test, which averaged 1914 students per year for five years. All students included in Figure 5 could have qualified for inclusion in other variable data collection.

Figure 5

Count of Qualifying Science Students by Year

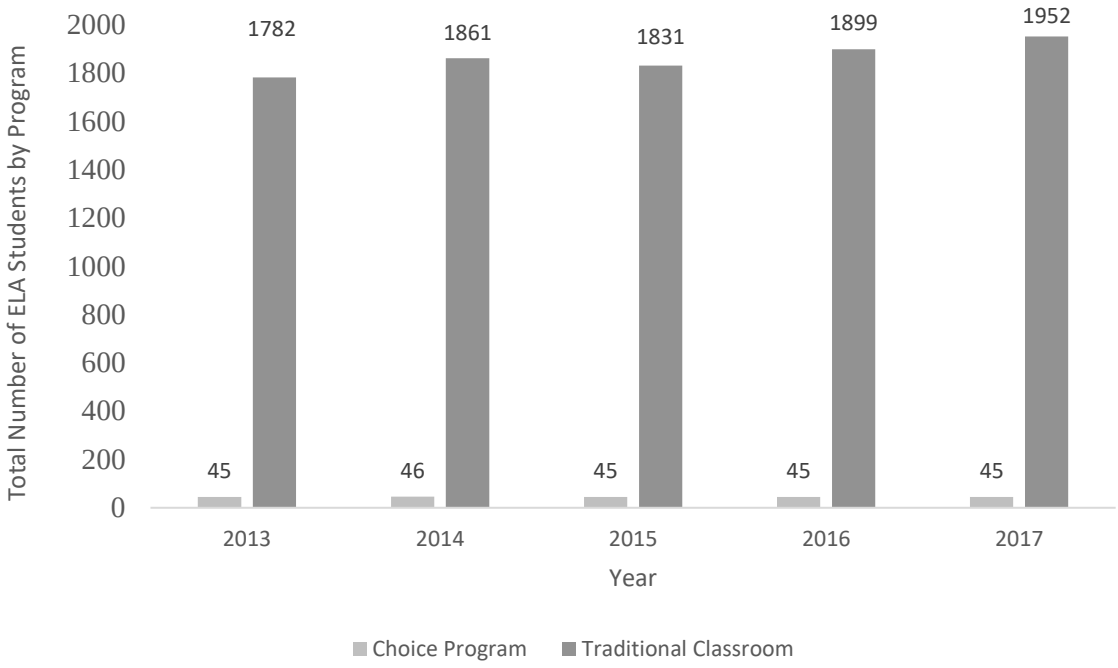


Note. N = 9,568.

Program Count by Content Area. Figure 6 shows the number of fifth-grade English Language Arts students who attended a choice program and the number of students who attended a traditional classroom by year. The data in Figure 6 show the count of eligible fifth-grade students in a choice program and the count in a traditional classroom program for the MAP English Language Arts exam. A total of 226 students attended a choice program, and a total of 9,325 students attended a traditional classroom program.

Figure 6

Count of English Language Arts Students by Year and Program

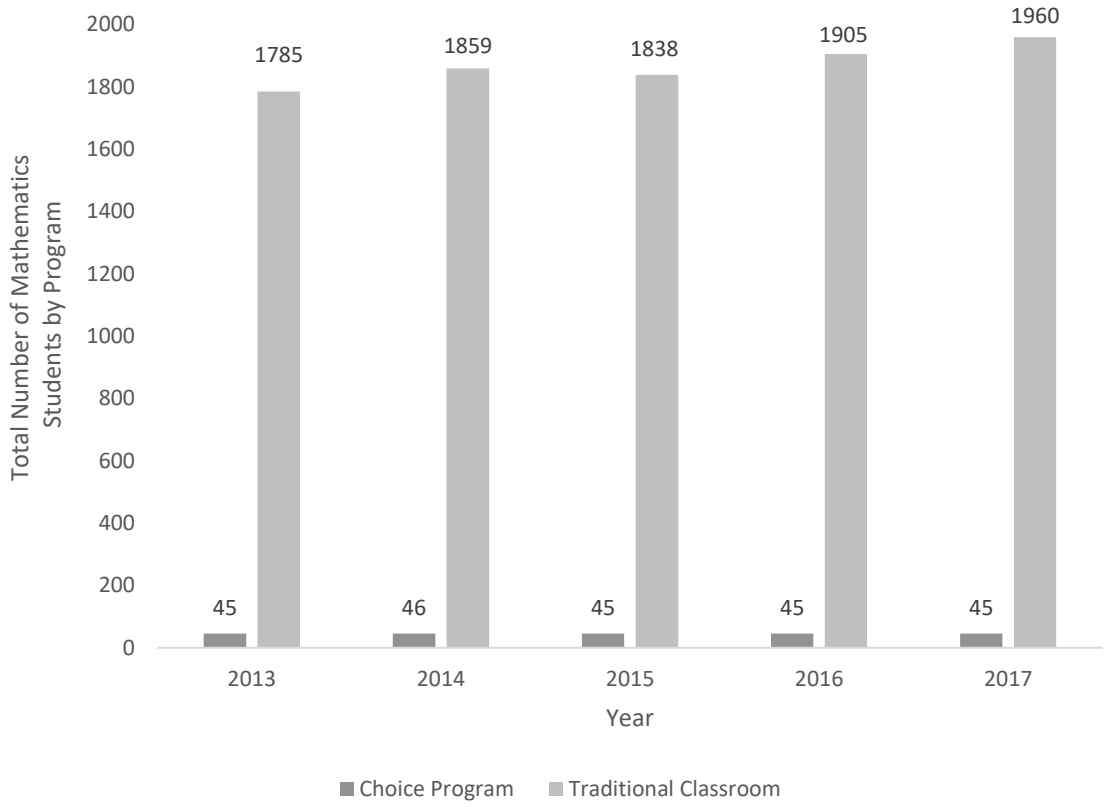


Note. N = 9,551.

Figure 7 shows the number of fifth-grade Mathematics students who attended a choice program and the number who attended a traditional classroom by year. The data from Figure 7 show the count of eligible fifth-grade students who attended a choice program and the count in a traditional classroom program for the MAP Mathematics exam. A total of 226 students attended a choice program, and a total of 9,347 students attended a traditional classroom program.

Figure 7

Count of Mathematics Students by Year and Program

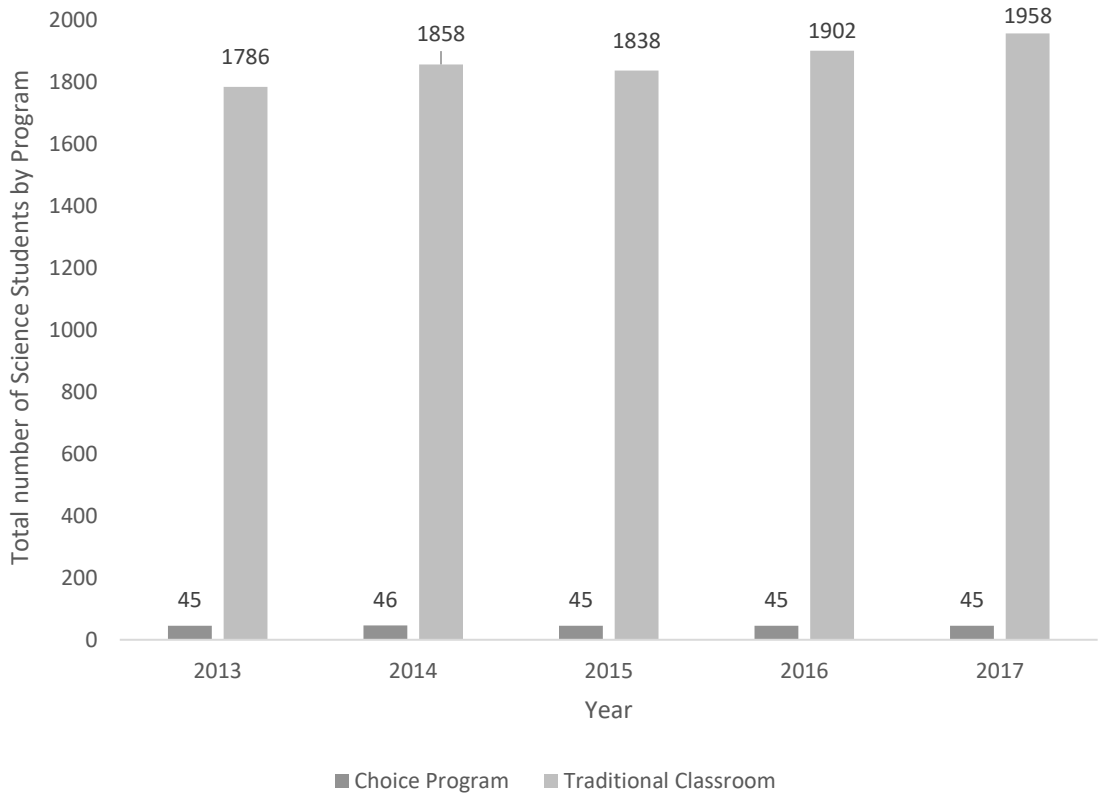


Note. N = 9,573.

Figure 8 shows the number of fifth-grade Science students who attended a choice program and the number who attended a traditional classroom program by year. The data from Figure 8 show the count of eligible fifth-grade students who attended a choice program and the count in a traditional classroom program for the MAP Science exam. A total of 226 students attended a choice program, and a total of 9342 students attended a traditional classroom program.

Figure 8

Count of Science Students by Year and Program

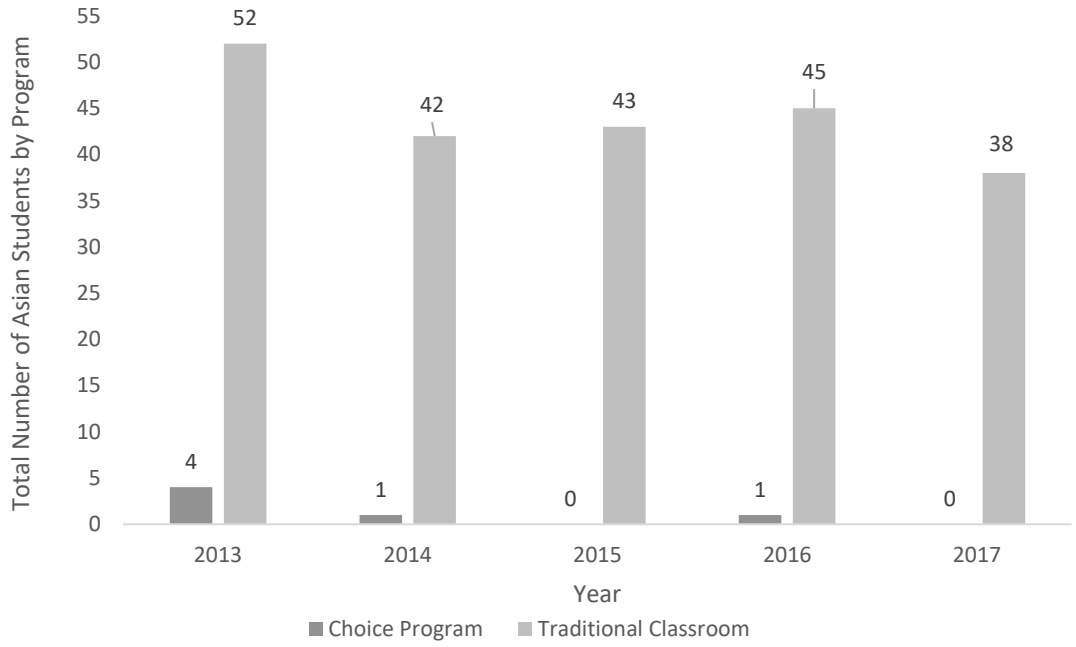


Note. N = 9,568.

APR Ethnicity Count by Program. Figure 9 shows the number of fifth-grade Asian students who attended a choice program and the number who attended a traditional classroom program by year. The trend for both groups show a downward trajectory in the number of Asian students enrolled in Midwest District A.

Figure 9

Count of Asian Students by Year and Program

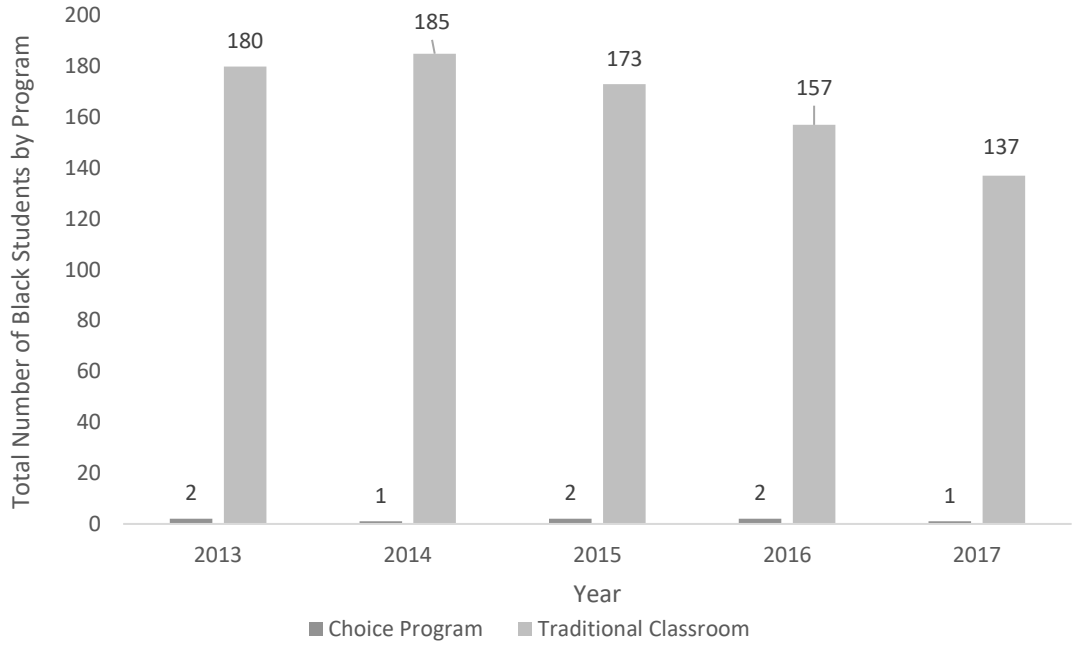


Note. $N = 226$.

Figure 10 shows the number of fifth-grade Black students who attended a choice program and the number who attended a traditional classroom program by year. The trend for Black traditional classroom students show a downward trajectory in the number enrolled in Midwest District A, while the choice program enrollment stayed stable.

Figure 10

Count of Black Students by Year and Program

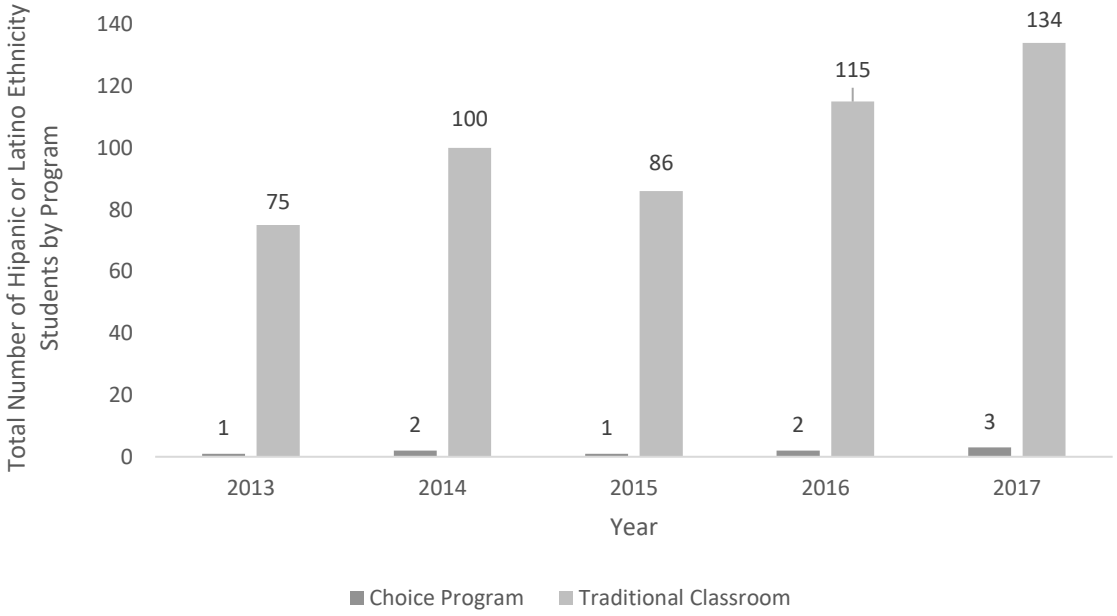


Note. $N = 840$.

Figure 11 displays the number of fifth-grade Hispanic or Latino Ethnicity students who attended a choice program and the number who attended a traditional classroom by year. The number of Hispanic or Latino Ethnicity students who attended a traditional classroom increased significantly from 2013 to 2017, while choice program enrollment showed little growth for the same time period.

Figure 11

Count of Hispanic or Latino Ethnicity Students by Year and Program

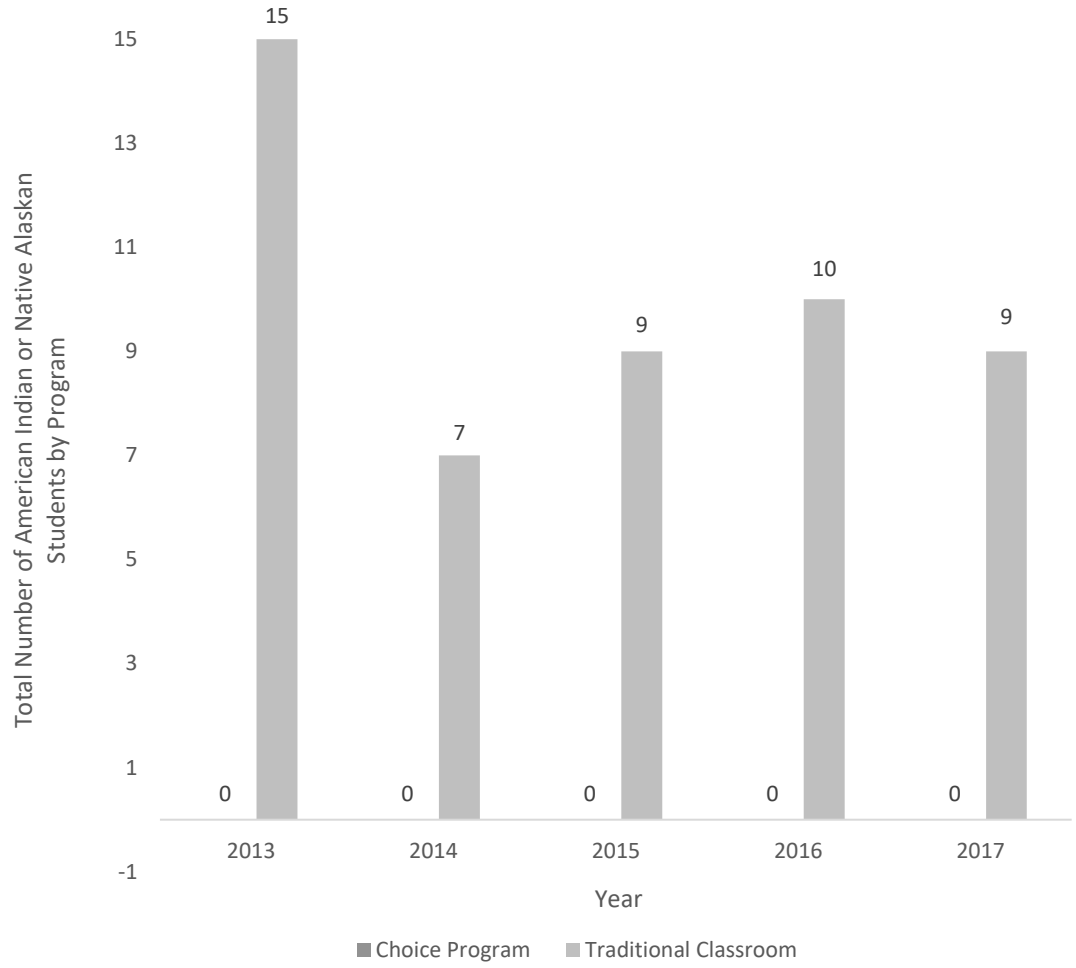


Note. $N = 519$.

Figure 12 shows the number of fifth-grade American Indian or Alaska Native students who attended a choice program and the number who attended a traditional classroom program by year. The traditional classroom enrollment count dropped significantly from 2013 to 2014 and stabilized at a lower number from 2014 to 2017. No American Indian or Alaska Native students were enrolled in Midwest District A's choice program.

Figure 12

Count of American Indian or Alaska Native Students by Year and Program

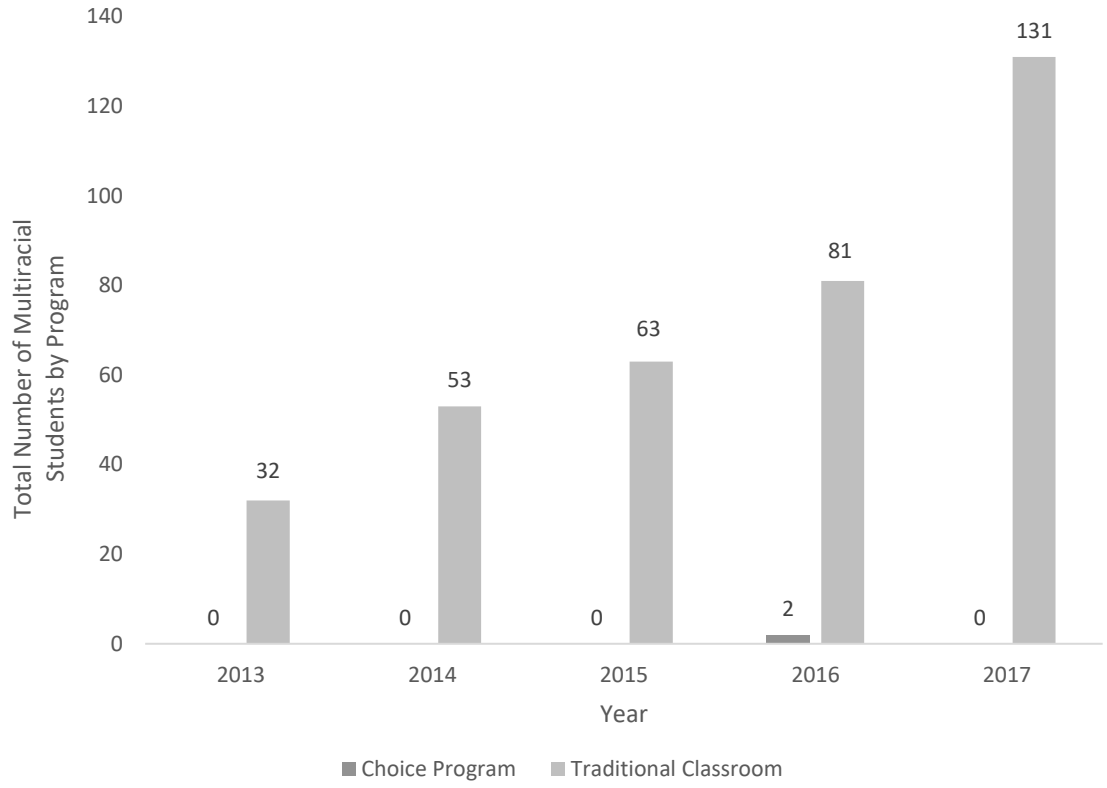


Note. N = 50.

Figure 13 shows the number of fifth-grade multiracial students who attended a choice program and the number who attended a traditional classroom program by year. Midwest District A experienced a 400% growth of traditional classroom student enrollment from 2013 to 2017. However, the same enrollment trend was not represented in choice program participation with only two students attending in 2016.

Figure 13

Count of Multiracial Students by Year and Program

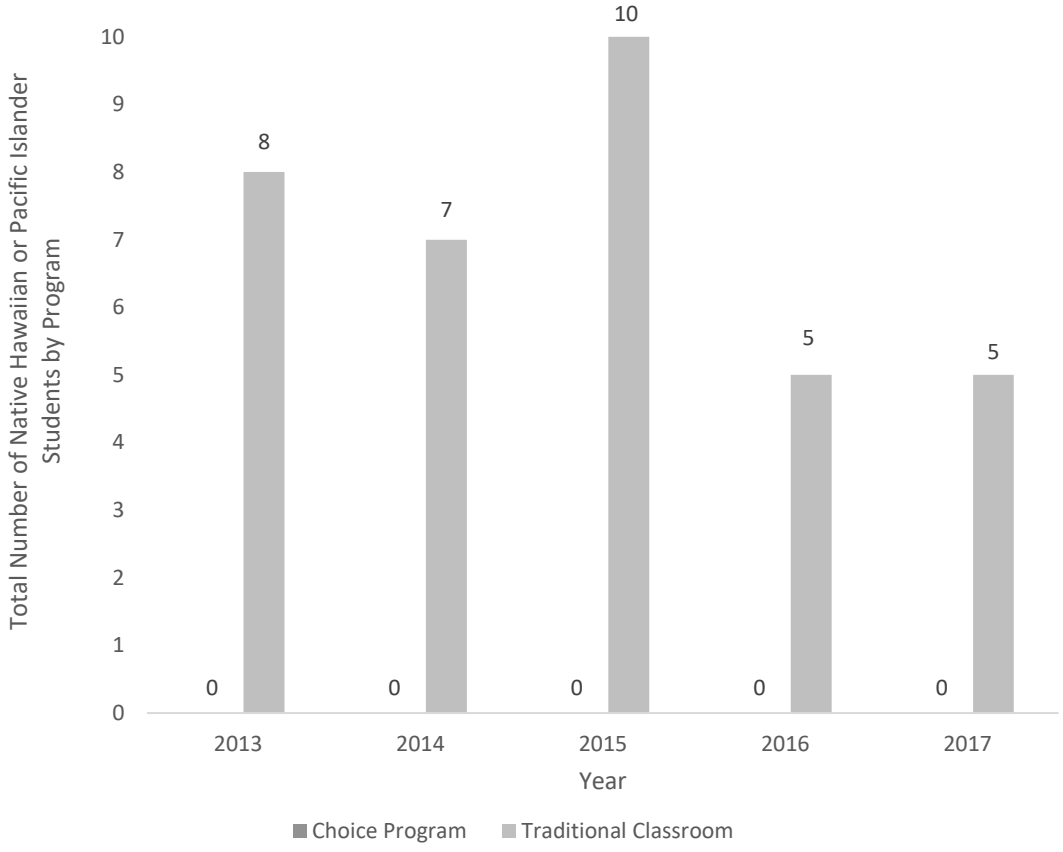


Note. N = 362.

Figure 14 shows the number of fifth-grade Native Hawaiian or Pacific Islander students who attended a choice program and the number who attended a traditional classroom program by year. The count of traditional classroom students show small and unstable enrollment. This population is not represented in any choice program enrollment from 2013 to 2017.

Figure 14

Count of Native Hawaiian or Pacific Islander Students by Year and Program

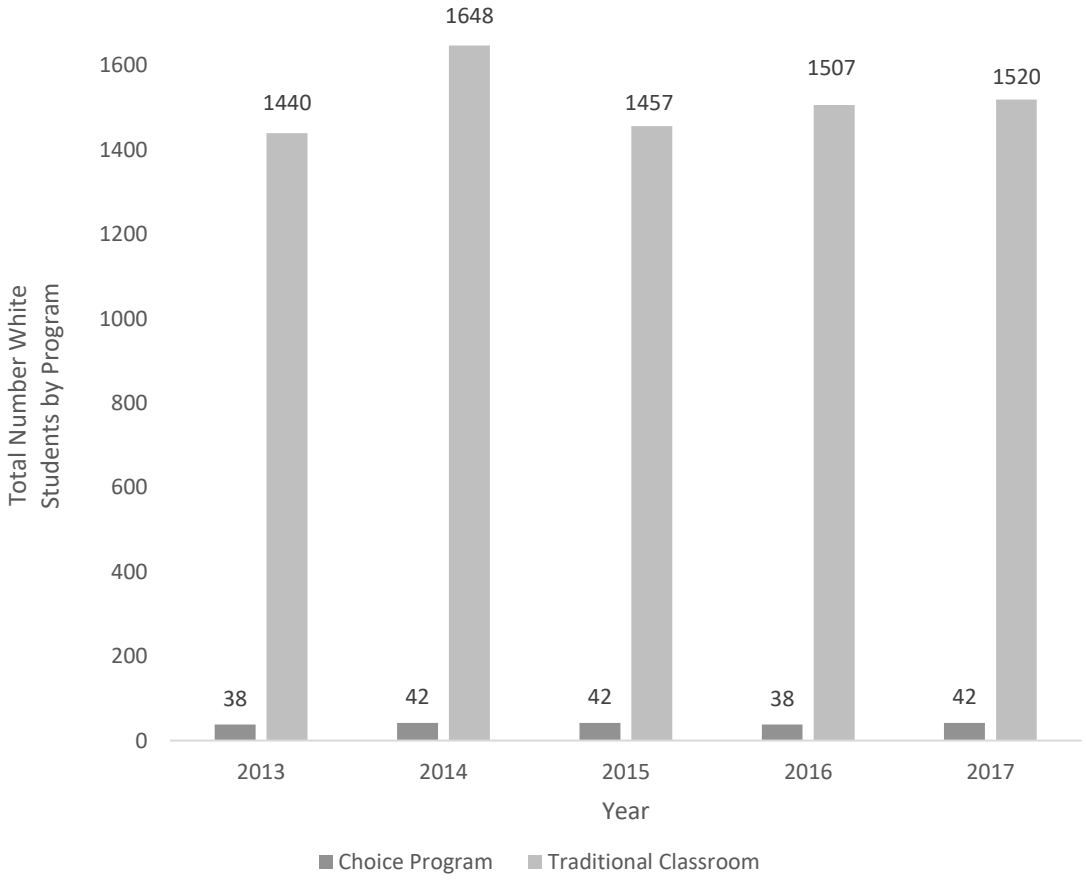


Note. $N = 35$.

Figure 15 shows the number of fifth-grade White students who attended a choice program and the number who attended a traditional classroom program by year. The number of White students who attended a choice program show the largest enrollment of all populations studied, and maintained an average enrollment trend. Traditional classroom enrollment grew significantly from 2013 to 2014 and showed a significate drop from 2014 to 2015. The population count stabilized in 2015 to 2017.

Figure 15

Count of White Students by Year and Program

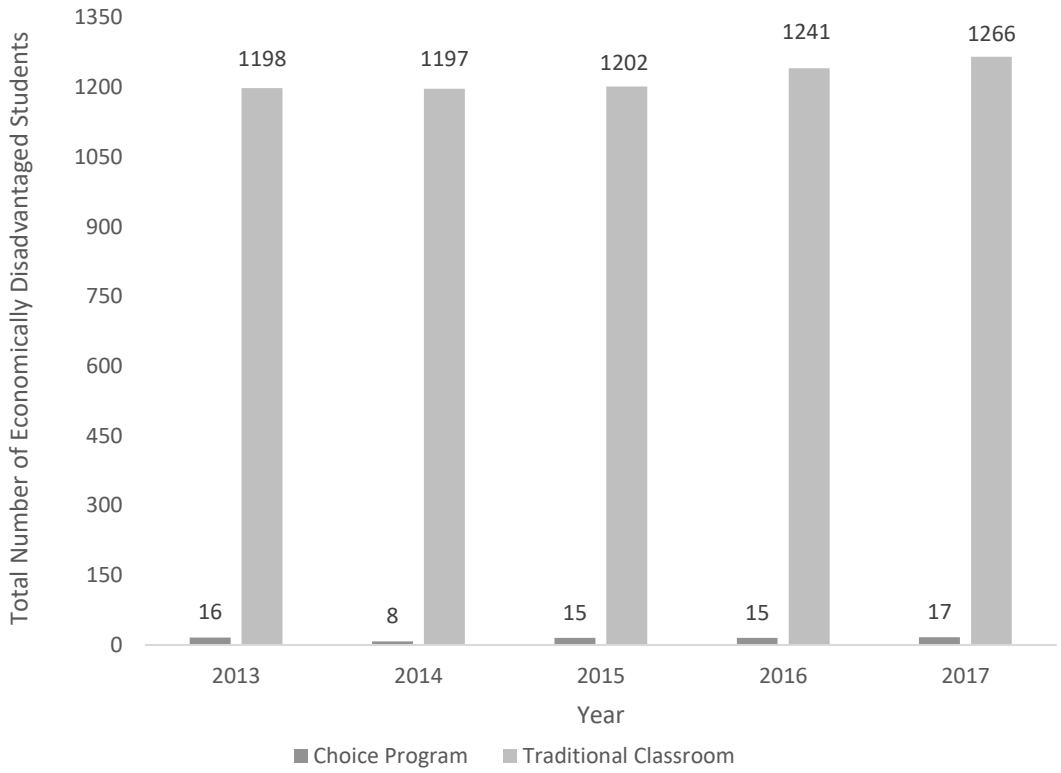


Note. N = 7,774.

Economically Disadvantaged Count by Program. Figure 16 shows the number of fifth-grade economically disadvantaged students who attended a choice program and the number who attended a traditional classroom program by year. Choice program enrollment counts are stable, with the exception of year 2014 that showed a drastic drop in choice participation. The count of traditional classroom students showed a stable population from 2013 to 2017.

Figure 16

Count of Economically Disadvantaged Students by Year and Program



Note. N = 6,175.

Table 1 shows the number of fifth-grade students per meal status according to instructional delivery for each year of this study. The data showed that free and reduced meal status students remained stable for choice program enrollments, with the exception of 2014 which showed a significate decrease in enrollment. Traditional classroom enrollments remained relatively stable for all three meal status categories.

Table 1

Summary of Descriptive Statistics of Student Meal Status – Overall Composite by Year

	Full Pay	Reduced	Free
2013			
Choice Program Students	29	5	11
Traditional Classroom Students	766	152	1046
2014			
Choice Program Students	38	2	6
Traditional Classroom Students	844	156	1041
2015			
Choice Program Students	31	5	10
Traditional Classroom Students	829	172	1030
2016			
Choice Program Students	31	6	9
Traditional Classroom Students	865	140	1101
2017			
Choice Program Students	29	5	12
Traditional Classroom Students	872	142	1124

Note. N = 10,509.

English Language Learner Count by Program. Table 2 shows the number of fifth-grade English Language Learner per status by year who attended a choice program and those students who attended a traditional classroom program by year. This population's trend showed an overall increase in the traditional classroom, but underserved in choice program participation.

Table 2

Summary of Descriptive Statistics of Student English Language Learner – Overall Composite by Year

	Yes	No	Total
2013			
Choice Program Students	0	45	45
Traditional Classroom Students	67	1897	1964
2014			
Choice Program Students	0	46	46
Traditional Classroom Students	62	1979	2041
2015			
Choice Program Students	0	46	46
Traditional Classroom Students	77	1954	2031
2016			
Choice Program Students	0	46	46
Traditional Classroom Students	85	2021	2106
2017			
Choice Program Students	2	44	46
Traditional Classroom Students	115	2023	2138

Note. N = 10,509.

Student IEP Disability Count by Program. Table 3 shows the number of fifth-grade IEP Disability students by year who attended a choice program and those students who attended a traditional classroom program. Choice program IEP Disability enrollment showed an upward trend, while non-IEP students showed an overall increase in traditional classroom enrollment.

Table 3

Summary of Descriptive Statistics of Student IEP Disability – Overall Composite by Year

	Yes	No	Total
2013			
Choice Program Students	1	44	45
Traditional Classroom Students	273	1691	1964
2014			
Choice Program Students	1	45	46
Traditional Classroom Students	315	1726	2041
2015			
Choice Program Students	3	43	46
Traditional Classroom Students	295	1736	2031
2016			
Choice Program Students	6	40	46
Traditional Classroom Students	324	1782	2106
2017			
Choice Program Students	3	43	46
Traditional Classroom Students	294	1844	2138

Note. N = 10,509.

Data Analysis

Research Question One

What is the difference in state assessment scores for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

Table 4 shows the comparison of eligible fifth-grade student MAP English Language Arts achievement levels by year of the students who attended a choice program and those students who attended a traditional classroom program. Choice program students on average, scored significantly higher in ratio on the MAP English Language Arts assessment when compared to traditional classroom students.

Table 4

Summary of Descriptive Statistics of Eligible Students English Language Arts Achievement Levels – Overall Composite by Year

	Advanced	Proficient	Basic	*Below Basic*
2013				
Choice Program Students	19	19	7	0
Traditional Classroom Students	341	577	731	149
2014				
Choice Program Students	20	22	4	0
Traditional Classroom Students	308	611	803	135
2015				
Choice Program Students	19	17	6	3
Traditional Classroom Students	356	609	428	438
2016				
Choice Program Students	12	27	5	1
Traditional Classroom Students	311	780	480	340
2017				
Choice Program Students	17	21	7	1
Traditional Classroom Students	323	853	477	314

Note. $N = 9{,}571$.

Table 5 shows the difference in the mean state assessment scores by year between eligible fifth-grade English Language Arts students who attended a choice program and fifth-grade students who attended a traditional classroom program. Across the years of available data, $p < .001$ indicated a statistically significant positive difference between the English Language Arts scores of students who attended the choice program and students who attended traditional classroom programs. Therefore, the null hypothesis, *Students who participate in a fifth-grade choice program do not have a higher rate of proficiency on state assessments when compared to students who do not participate in a fifth-grade*

choice program, was rejected. The intradistict choice program students scored significantly higher in English Language Arts.

Table 5

Summary of Descriptive Statistics of Eligible Students with MAP English Language Arts Scores – Overall Composite by Year

	N	Mean	Variance	*t* Stat	*p*
2013					
Choice Program Students	45	698.1	596.8	6.98	*$p < .001$
Traditional Classroom Students	1782	671.9	1379.7		
2014					
Choice Program Students	46	702.7	651.4	9.17	*$p < .001$
Traditional Classroom Students	1857	667.0	1845.8		
2015					
Choice Program Students	45	2559.1	4285.1	5.43	*$p < .001$
Traditional Classroom Students	1831	2504.2	6999.8		
2016					
Choice Program Students	45	519.5	519.5	5.38	*$p < .001$
Traditional Classroom Students	1899	492.7	492.7		
2017					
Choice Program Students	45	525.5	1347.2	5.28	*$p < .001$
Traditional Classroom Students	1952	496.0	2245.7		

Note. *$p < .001$.

Table 6 shows the comparison of eligible fifth-grade students' MAP Mathematics achievement level by year who attended a choice program and those students who

attended a traditional classroom program. Choice program students on average, scored significantly higher in ratio on the MAP Mathematics assessment when compared to traditional classroom students. Both populations show a decrease in achievement trend over time from 2013 to 2017.

Table 6

Summary of Descriptive Statistics of Mathematics Achievement Levels – Overall Composite by Year

	Advanced	Proficient	Basic	*Below Basic*
2013				
Choice Program Students	29	14	2	0
Traditional Classroom Students	304	640	727	130
2014				
Choice Program Students	30	13	3	0
Traditional Classroom Students	334	640	747	138
2015				
Choice Program Students	20	10	11	4
Traditional Classroom Students	306	386	546	600
2016				
Choice Program Students	13	15	14	3
Traditional Classroom Students	236	429	675	577
2017				
Choice Program Students	16	11	15	4
Traditional Classroom Students	266	480	675	553

N = 9,573.

Table 7 shows the difference in the mean state assessment scores by year between eligible fifth-grade Mathematics students who attended a choice program and fifth-grade students who attended a traditional classroom program. Across the years of available data, $p < .001$ indicated a statistically significant positive difference between the Mathematics scores of students who attended the choice program and students who

attended traditional classroom programs. Therefore, the null hypothesis, *Students who participate in a fifth-grade choice program do not have a higher rate of proficiency on state assessments when compared to students who do not participate in a fifth-grade choice program,* was rejected. The intradistict choice program students scored significantly higher in Mathematics.

Table 7

Summary of Descriptive Statistics of Eligible Students with MAP Mathematics Scores – Overall Composite by Year

	N	Mean	Variance	*t* Stat	*p*
2013					
Choice Program Students	45	723.5	1800.0	8.83	**p* < .001
Traditional Classroom Students	1785	666.9	1924.7		
2014					
Choice Program Students	46	715.8	1030.9	10.1	**p* < .001
Traditional Classroom Students	1859	667.0	1845.8		
2015					
Choice Program Students	45	2565.5	7162.0	5.50	**p* < .001
Traditional Classroom Students	1838	2495.2	6715.2		
2016					
Choice Program Students	45	516.5	1570.2	5.02	**p* < .001
Traditional Classroom Students	1905	486.2	2651.0		
2017					
Choice Program Students	45	523.6	2192.9	4.90	**p* < .001
Traditional Classroom Students	1960	489.0	2589.3		

Note. **p* < .001.

Table 8 shows the comparison of eligible fifth-grade students' MAP Science achievement level by year who attended a choice program and those students who

attended a traditional classroom program. The students that attended a choice program showed a relatively stable Science achievement level, but traditional classroom students showed a significant decrease in achievement trend.

Table 8

Summary of Descriptive Statistics of Science Achievement Levels – Overall Composite by Year

	Advanced	Proficient	Basic	*Below Basic*
2013				
Choice Program Students	33	9	3	0
Traditional Classroom Students	372	496	744	190
2014				
Choice Program Students	20	22	4	0
Traditional Classroom Students	281	582	796	199
2015				
Choice Program Students	13	17	13	2
Traditional Classroom Students	254	506	823	255
2016				
Choice Program Students	3	26	15	1
Traditional Classroom Students	178	494	943	299
2017				
Choice Program Students	9	25	10	2
Traditional Classroom Students	245	513	946	268

N = 9,568.

Table 9 shows the difference in the mean state assessment scores by year between eligible fifth-grade Science students who attended a choice program and fifth-grade students who attended a traditional classroom program. Across the years of available data, $p < .001$ indicated a statistically significant positive difference between the Science scores of students who attended the choice program and students who attended traditional classroom programs. Therefore, the null hypothesis, *Students who participate in a fifth-*

grade choice program do not have a higher rate of proficiency on state assessments when compared to students who do not participate in a fifth-grade choice program, was rejected. The intradistict choice program students scored significantly higher in Science.

Table 9

Summary of Descriptive Statistics of Eligible Students with MAP Science Scores – Overall Composite by Year

	N	Mean	Variance	*t* Stat	*p*
2013					
Choice Program Students	45	702.9	449.4	11.59	*$p < .001$
Traditional Classroom Students	1786	665.2	1053.9		
2014					
Choice Program Students	46	692.1	478.7	9.10	*$p < .001$
Traditional Classroom Students	1858	662.0	1020.7		
2015					
Choice Program Students	45	678.5	658.4	5.04	*$p < .001$
Traditional Classroom Students	1838	658.8	1053.8		
2016					
Choice Program Students	45	670.8	359.8	5.60	*$p < .001$
Traditional Classroom Students	1902	654.4	1127.2		
2017					
Choice Program Students	45	673.4	640.7	4.19	*$p < .001$
Traditional Classroom Students	1958	657.3	1192.3		

Note. *$p < .001$.

Research Question Two

What is the difference in attendance rates for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

Table 10 shows the difference in attendance rate by year of eligible fifth-grade students who attended a choice program compared to those students who attended a traditional classroom program. Across the years of available data, $p < .001$ indicated a

statistically significant positive difference between the attendance percentages of students who attended the choice program compared to students who attended traditional classroom programs. Therefore, the null hypothesis, *Students who attend a fifth-grade choice program do not have a higher rate of attendance compared to students who do not attend a fifth-grade choice program,* was rejected.

Table 10

Summary of Descriptive Statistics of Eligible Students Attendance – Overall Composite by Year

	N	Mean	Variance	*t* Stat	*p*
2013					
Choice Program Students	45	.985	.001	10.5	*$p < .001$
Traditional Classroom Students	1802	.956	.002		
2014					
Choice Program Students	45	.999	.001	37.5	*$p < .001$
Traditional Classroom Students	2041	.956	.002		
2015					
Choice Program Students	45	.998	.001	37.9	*$p < .001$
Traditional Classroom Students	1841	.955	.002		
2016					
Choice Program Students	45	.996	.001	29.8	*$p < .001$
Traditional Classroom Students	1915	.955	.002		
2017					
Choice Program Students	45	.997	.001	30.2	*$p < .001$
Traditional Classroom Students	1974	.953	.002		

Note. *$p < .001$.

Research Question Three

What is the difference in reported discipline for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

Table 11 shows the difference between student discipline incidents by year of eligible fifth-grade students who attended a choice program and students who attended a traditional classroom program. Across the years of available data, $p < .001$ indicated a statistically significant lower number of discipline incidents among students who attended the choice program compared to students who attended traditional classroom programs. Therefore, the null hypothesis, *Students who attend a fifth-grade choice program do not have lower reported discipline occurrences compared to students who do not attend a fifth-grade choice program*, was rejected.

Table 11

Summary of Descriptive Statistics of Eligible Students Discipline – Overall Composite by Year

	N	Mean	Variance	*t* Stat	*p*
2013					
Choice Program Students	45	0	0	-7.73	*$p < .001$
Traditional Classroom Students	1802	0.468	6.61		
2014					
Choice Program Students	45	0	0	-9.39	*$p < .001$
Traditional Classroom Students	2041	0.504	5.59		
2015					
Choice Program Students	45	0	0	-8.56	*$p < .001$
Traditional Classroom Students	1841	0.600	9.04		
2016					
Choice Program Students	45	0	0	-7.44	*$p < .001$
Traditional Classroom Students	1915	0.794	21.80		
2017					
Choice Program Students	45	0	0	-10.85	*$p < .001$
Traditional Classroom Students	1974	0.637	6.80		

Note. *$p < .001$.

Summary

Data from 10,509 Midwest District A fifth-grade students from 2013 through 2017 were analyzed for this study. With $\alpha = .05$, a significant value of $p < .001$ was reported for the English Language Arts MAP assessment, Mathematics MAP assessment, Science MAP assessment, average daily attendance, and discipline incidents for all years 2013–2017. These measures indicated substantial evidence to reject each of the three null hypotheses. Consequently, there exists a statistically significant difference between the MAP achievement levels, attendance rates, and discipline incidence rates between the two groups in this study.

From the collected secondary data analysis for this study, it was determined that there was a statistically significant difference in student achievement, average daily attendance, and discipline incidents between students who attended an intradistrict choice program when compared to students who attend a traditional classroom program within the same district. As a result of these findings, the evidence revealed that Midwest District A's intradistrict choice program had a positive effect on student achievement and proficiency, with $p < .001$. Also, students who attended the intradistrict choice program had better attendance when compared to students who attended the traditional school program, with $p < .001$. Choice program students also had fewer discipline incidents compared to students who attended the traditional school program.

In Chapter Five, a review of the study and data analysis are provided. The findings and conclusions of the research are outlined. Implications for practice are provided for Midwest District A, including further exploration of choice program options. Recommendations for future research for educators based on the results of the

study follow the implications for practice. Finally, an overall summary of the study is provided.

Chapter Five: Conclusions and Implications

The purpose of this causal-comparative was to compare the academic achievement, average daily attendance, and count of discipline incidents of students who attended an intradistrict choice program compared to students who attended a traditional classroom program in Midwest District A. In this chapter, a review of the study is provided. The findings are given. The conclusions drawn based on the findings and implications for practice are shared. Recommendations for the future of choice programs and a summary of the study are presented.

Review of the Study

The conception of school choice was set in motion by the 1954 Supreme Court ruling on Brown v. Board of Education of Topeka (Brown v. Board of Education, 1954). Before this landmark decision, families and students had very few educational options regarding public education choices, which were often limited by the proximity of the primary family residence to local schools (Olneck-Brown, 2020). Educational choice programming has continued to evolve due to legislative policy and the desire for families to have input in their children's education, regardless of their residential boundaries (Every Student Succeeds Act, 2015). Even more recently, in the wake of the COVID-19 worldwide pandemic, schools across the United States have expanded school choice options, including virtual learning, to address the complications of school closure and quarantine required for public safety and health (Desanctis, 2020).

When the No Child Left Behind Act legislation was first instituted, Midwest District A began investigating school choice options (Midwest District A Research Report and Recommendations Publication, 2006). The leadership of Midwest District A

researched and explored other school districts that had established choice options located in five mid-America states. A total of 18 different choice programs were explored by the investigative team, who provided five recommendations as a guide to create and develop the local district's very first choice program pilot (T. Bledsoe, personal communication, February 12, 2020).

The resulting Midwest District A Research Report and Recommendations Publication (2006) revealed the team's following five recommendations: a task force would review current nontraditional program practices and propose program expansion; a community-based science program would be developed and implemented for 2007–2008; choice programs would be implemented at new and remodeled school buildings; IB and other inquiry-based PreK–12 programs would be expanded; a Fine Arts choice school would be implemented at the elementary level with middle school and high school implementation to follow. Through program expansion, local district families would have an alternative option for the first time to traditional classroom settings, which would provide students an opportunity to be actively engaged in the learning process of their choice (Dove et al., 2014).

Providing equitable education has been investigated and revised over several years (Lieberman, 2019). Lawsuits and legislative policies have guided the evolution of educational programs to address the equity gaps for families across the country (Binkley, 2020). The 2020 COVID-19 global pandemic highlighted the exposure of these gaps, which proved challenging for school districts to overcome equity barriers that exist for continued learning (Sobic, 2020). Even with the adaptation of alternative remote learning

options, students experienced learning loss, impacting the achievement of future generations (United Nations, 2020).

The goal of this study of Midwest District A was to determine if school choice is a viable educational option that provides positive opportunities for the families and students who participate in such programs and possible district expansion of such choice programs. In addition, the district recently began to study the structure of remote learning and the potential future development of choice programs that would provide uninterrupted learning services during possible school closures and quarantines caused by the reemergence of COVID-19 (C. DeSilva-Carver, personal communication, July 20, 2021). The district's leaders intend for all students to attend in-person learning five days a week but communicated and committed that online learning will now always be a choice option for families and students (C. DeSilva-Carver, personal communication, July 20, 2021).

In this study, answers to three research questions addressing student achievement, attendance, and discipline of students who attend an intradistrict choice program compared to students who learn in a traditional classroom environment are provided. The first research question posed in this study was to determine any significant differences in student learning environments based on academic achievement results of annual assessment measures. The required MAP standardized state summative assessment for all fifth-grade students in Midwest District A assessed students in the following three areas:

- English Language Arts
- Mathematics
- Science

The second research question presented in this study was posed to determine any significant differences in the attendance percentages of students who attend an intradistrict choice program compared to students who attended a traditional classroom setting. The third and final question presented in this study was to determine any significant differences in the number of discipline incidents of students who attended an intradistrict choice program compared to students who attended a traditional classroom setting.

For this study, a quantitative method was appropriate to collect and analyze the data to answer the three research questions posed (Fraenkel et al., 2019). A causal-comparative design was used to determine if differences existed between groups of variables from events that had already occurred and therefore could not be manipulated (Fraenkel et al., 2019). The data analyzed for this causal-comparative study were secondary data from two different groups (Creswell, 2018).

The secondary data used for this research analysis was from a large urban school district in the Midwest section of the United States. The study participants were 10,509 fifth-grade students who attended Midwest District A in 2013 through 2017. All student data and information were de-identified by the school district before being shared with the researcher for analysis. The study's population included all fifth-grade students who had assessment score data in English Language Arts, Mathematics, or Science in the designated years. Also compared were the average daily attendance percentages for each student during the same timeframe. In addition, participants' discipline incident counts were compared. Students were not required to have a discipline incident to be included in this study, which justifies why some students' discipline counts were zero.

Findings

Research Question One

What is the difference in state assessment scores for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

English Language Arts. After performing statistical analysis of MAP English Language Arts achievement, it was determined:

- In 2013 the mean scale score was 26.2 points higher for students who attended the intradistrict choice program.
- In 2014 the mean scale score was 35.7 points higher for students who attended the intradistrict choice program.
- In 2015 the mean scale score was 54.9 points higher for students who attended the intradistrict choice program.
- In 2016 the mean scale score was 26.8 points higher for students who attended the intradistrict choice program.
- In 2017 the mean scale score was 29.5 points higher for students who attended the intradistrict choice program.

Based on the English Language Arts scale score analysis and the resulting $p < .001$ from the independent *t*-test, a significant statistical difference was indicated between students who attended an intradistrict choice program and students who did not participate in a fifth-grade choice program. Specifically, students who attended an intradistrict choice program scored significantly higher than students who attended the traditional classroom setting.

Mathematics. After performing statistical analysis of MAP Mathematics achievement, it was determined:

- In 2013 the mean scale score was 56.6 points higher for students who attended the intradistrict choice program.
- In 2014 the mean scale score was 48.8 points higher for students who attended the intradistrict choice program.
- In 2015 the mean scale score was 70.3 points higher for students who attended the intradistrict choice program.
- In 2016 the mean scale score was 30.3 points higher for students who attended the intradistrict choice program.
- In 2017 the mean scale score was 26.2 points higher for students who attended the intradistrict choice program.

Based on the Mathematics scale score analysis and the resulting $p < .001$ from the independent *t*-test, a significant statistical difference was indicated between students who attended an intradistrict choice program and students who did not participate in a fifth-grade choice program. Specifically, students who attended an intradistrict choice program scored significantly higher than students who attended the traditional program.

Science. After performing statistical analysis of MAP Science achievement, it was determined:

- In 2013 the mean scale score was 37.7 points higher for students who attended the intradistrict choice program.
- In 2014 the mean scale score was 30.1 points higher for students who attended the intradistrict choice program.

- In 2015 the mean scale score was 19.7 points higher for students who attended the intradistrict choice program.
- In 2016 the mean scale score was 16.4 points higher for students who attended the intradistrict choice program.
- In 2017 the mean scale score was 16.1 points higher for students who attended the intradistrict choice program.

Based on the Science scale score analysis and the resulting $p < .001$ from the independent *t*-test, a significant statistical difference was indicated between students who attended an intradistrict choice program and students who did not participate in a fifth-grade choice program. Specifically, students who attended an intradistrict choice program scored significantly higher than students who attended the traditional program.

Research Question Two

What is the difference in attendance rates for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

The official average daily attendance data reported to the MODESE were statistically analyzed. Every student had a record of minutes absent and minutes present, which was provided by Midwest District A to the MODESE annually for student core data purposes (MOSESE, 2020a). To calculate the denominator for each student's total minutes, the minutes absent and minutes present were added together. By dividing the student's total number of minutes present by the denominator, the attendance percentage for each group of students could be analyzed. After performing statistical analysis of attendance it was determined:

- In 2013 the mean daily attendance was 2.9% higher for students who attended the intradistrict choice program.
- In 2014 the mean daily attendance was 4.3% higher for students who attended the intradistrict choice program.
- In 2015 the mean daily attendance was 4.2% higher for students who attended the intradistrict choice program.
- In 2016 the mean daily attendance was 4.1% higher for students who attended the intradistrict choice program.
- In 2017 the mean daily attendance was 4.4% higher for students who attended the intradistrict choice program.

Based on the mean daily attendance analysis and the resulting $p < .001$ from the independent *t*-test, a significant statistical difference was indicated between students who attended an intradistrict choice program and students who did not participate in a fifth-grade choice program. Specifically, students who attended an intradistrict choice program had significantly higher daily attendance percentages than students who attended the traditional program.

Research Question Three

What is the difference in reported discipline for students who participated in a fifth-grade choice program and students who did not participate in a fifth-grade choice program?

With discipline, it was possible that a student could have zero discipline incidents. These incidents included in-school suspensions and out-of-school suspensions. The official discipline count reported to the MODESE was statistically analyzed. If a student

had a discipline incident record, Midwest District A provided these data to the MODESE annually for student core data purposes (MOSESE, 2020a). After performing statistical analysis of discipline incidents, it was determined:

- In 2013, the mean reported for discipline incidents was .468 higher for students who attended a traditional classroom.
- In 2014 the mean reported for discipline incidents was .504 higher for students who attended a traditional classroom.
- In 2015 the mean reported for discipline incidents was .600 higher for students who attended a traditional classroom.
- In 2016 the mean reported for discipline incidents was .794 higher for students who attended a traditional classroom.
- In 2017 the mean reported for discipline incidents was .637 higher for students who attended a traditional classroom.

Based on the mean discipline incident analysis and the resulting $p < .001$ from the independent *t*-test, a significant statistical difference was indicated between students who attended an intradistrict choice program and students who did not participate in a fifth-grade choice program. Specifically, students who attended a traditional program had a significantly higher number of discipline incidents than students who attended an intradistrict choice program.

Conclusions

The results of this study showed statistically significant differences in student achievement outcomes in English Language Arts, Mathematics, and Science for students who participated in an intradistrict choice program as compared to students in a

traditional classroom setting. In addition, both attendance and discipline comparisons for the same two groups of students revealed statistically significant differences. The conclusions described in this study are associations connected directly to the variables in relation to the study (Creswell, 2018; Fraenkel et al., 2019).

Analysis of data used to answer the first research question regarding student achievement outcomes revealed that the intradistrict choice program students had statistically significant higher scores on state MAP assessment in all three subject areas of English Language Arts, Mathematics, and Science. Data analysis for research question two regarding student attendance revealed that intradistrict choice program students had statistically significant higher attendance rates when compared to traditional classroom student attendance. Analysis of student discipline data for research question three regarding discipline revealed a statistically significant lower incidence of discipline rate for students who attended an intradistrict choice program compared to traditional classroom students.

As discussed in Chapter Three, the results from this quantitative study are considered to be meaningful due to the design of the study and the method chosen to measure outcomes (Frost, 2020; Lewinson, 2019; Mascha & Vetter, 2018). The findings revealed that Midwest District A should invest in expanding choice programs and creating more diverse options to reach a greater population of students with various areas of study or program themes. Also, Midwest District A should move forward with the task force recommendations to expand choice options to all kindergarten through twelfth-grade students. The benefits expected for students are more educational choice options, improved student achievement and attendance, and lower discipline incidents.

Implications for Practice

Analyzing achievement, attendance, and discipline data to compare student group results revealed the effectiveness of an intradistrict choice program in Midwest District A. The data from this study showed that intradistrict choice program students had higher academic achievement, better attendance, and lower discipline rates than students who attended traditional classroom environments. Therefore, implications for practice would be to recommend policy changes that include choice, to increase community awareness of choice programs, and to allow students to make decisions regarding their education.

According to Johns and Kachel (2017), by adopting policy changes that include choice, school districts have the opportunity to create learning options where students will excel when compared to their peers. Also, Barrow and Markman-Pithers (2016) found that community interest in educational choice programs impacted their expansion across the country. Chen (2018) found that by allowing students the opportunity to be decision-makers in their education, choice programs give students buy-in and ownership of their learning.

For these reasons, the option to expand intradistrict choice programs should be further investigated. Midwest District A should evaluate existing choice programs currently offered to families and students and look to expand these in the future. The data showed additional choice programs should be equitable in order to provide under represented populations the option to participate in additional choice programs to meet the need for increased performance on MAP Grade-Level state assessments.

Recommendations for Future Research

Several recommendations for future research of the impact of school choice programs on student outcomes have been revealed through this study. Within Midwest District A, newly established intradistrict choice programs should be evaluated and compared to one another to determine if the other district choice programs have similar results. Midwest District A should adopt a practice of comparing program results annually across all types of instructional delivery systems, existing and future. This comparison would serve as an accountability system for equity, possibly removing barriers for all students.

In addition, program design themes could be researched so learning can be better individualized for students while also expanding choice programming options to other grade levels. Also, a study could be conducted with choice program teachers to understand the effect teachers have on choice program student success. Qualitative data from teachers, students, parents, and community members of their perceptions and ideas about choice programs could further inform school leaders regarding opportunities, needs, and best practices addressed in choice programs vs. traditional programs.

Transportation availability should be studied to understand how it impacts participation or creates barriers for families who would otherwise participate in choice programs. Further investigation of equity across all programs and of choice program student demographics regarding outcomes could reveal information that would benefit all students. Perhaps, not all choice programs need to be conducted offsite. Research on the physical location of creating programs in the neighborhood school of residence the student currently attends would allow the expansion of choice, possibly eliminating

transportation barriers and increasing equity. Finally, a study of the impact of COVID-19 on choice programs and online virtual instruction would be of interest and benefit to education as a whole.

Compare Student Outcomes of Intradistrict Programs

During the research period of this study, additional intradistrict programs were started and planned in Midwest District A. One choice program focused on science, technology, engineering, and math (STEM) has developed through a community partnership (C. DeSilva-Carver, personal communication, July 20, 2021). This program has two classrooms housed at a local business that accommodates up to 40 fifth-grade students (C. DeSilva-Carver, personal communication, July 20, 2021). Another choice option recently created in the district focused on fine and performing arts (C. DeSilva-Carver, personal communication, July 20, 2021). This program consists of two classrooms as well and is housed at a local community partner location (C. DeSilva-Carver, personal communication, July 20, 2021). This space can accommodate up to 46 fifth-grade students (C. DeSilva-Carver, personal communication, July 20, 2021). The application to enroll in this choice program recommends that students who apply should be creative and interested in drama, theater, dance, vocal, and visual arts (C. DeSilva-Carver, personal communication, July 20, 2021). Recently, Midwest District A received funding to construct and expand a choice option for 150 fourth-, fifth- and sixth-grade students to focus on agriculture (C. DeSilva-Carver, personal communication, July 20, 2021).

In the future, achievement levels, attendance, and discipline data could be analyzed and compared to the other intradistrict choice programs to determine their

effectiveness. This analysis could allow the district to investigate if one program has a greater influence on student success. The student cohort could also be monitored and studied on an annual basis. As the students transition through the district year to year, an analysis could be completed to compare their achievement, attendance, and discipline to peers who did not participate in a district choice program. This analysis could aid in determining if choice programs have a long-term impact on future learning and mastery.

Data from this research revealed overwhelming evidence that students who attended the district choice program had better achievement, higher attendance, and lower discipline rates than traditional classroom students. School districts should be mindful that choice programs could create high-performing silos compared to neighborhood school performance within the district. Magnet programs are a popular improvement tool districts use. Still, these programs promote specialty areas that may only appeal to a certain population of students with a common interest, limiting diversity. If a district has quality choice options, there are a limited number of spots available for enrollment, compared to the demand of students who want to participate. As a result, this could unintentionally cause segregation by spotlighting deserved recognition of the success of these programs but cause a negative stigma in areas of deprived neighborhood schools where the choice programs are housed. Research should be conducted to identify and monitor the adverse effects of choice programming.

Collect Qualitative Data

This study was based only on quantitative data analysis of secondary data sources by comparing state assessment scores, attendance, and discipline. Future research could be expanded to include qualitative data gathered through surveys and interviews from the

community, families, students, and teachers of choice program students. A mixed-methods study could provide additional ideas and uncover resources available within the community that could be utilized to expand the choice options in different areas of focus and grade levels.

Evaluate Eligible Choice Program Student Demographics

Future research could be conducted to determine the role demographics may play in student achievement results. These data could be analyzed to inform district leaders of the learning environment and variable measures affecting student achievement. The district should review the ratio of student ethnicity to reflect traditional classroom environments and determine what barrier is preventing these students from participating. An analysis may highlight areas of success or improvement that should be made to influence student achievement positively.

Compare Equity across Programs

Additional investigation of demographics may reveal concerns of programming equity for all students. The ratio of demographic categories should be representative of the population of students who attend choice programs. Certain limitations, like the ability to provide or pay for transportation for students, could be identified as barriers for student and family participation in choice programs. Also, childcare for before and after school may prevent some families from participating. These data would allow district leaders to identify areas of opportunity for future expansion and to overcome barriers that may limit participation in choice programs.

Review Impact of COVID-19

The global pandemic that began in 2019 forced district leaders and educators around the country to explore non-traditional methods of instruction. Many districts opted to provide online instruction to all students during extended times of school closures and quarantines. These ad-hoc instructional methods were needed to curb academic learning loss. With the possibility of future closures and quarantine, online and remote learning options will continue to fill the need of providing education to students affected by COVID-19. If the pandemic ends, these non-traditional learning choices should be examined for academic effectiveness because some families may want to continue learning remotely and online. The quality and value of instruction used would need to be examined to determine if best practices are in place. Many schools had to pivot to online learning to meet the need, but the quality of online instruction should be studied.

Summary

Choice program learning opportunities continue to expand and evolve throughout the country (Chen, 2018). The need to individualize learning to meet the diverse challenges in education will continue to drive the discussion and expansion of choice programs (Keller & Malkus, 2017). Various choices are available to families and range from public to private or even homeschool learning options (Kennedy, 2018). The government will continue to modify and create educational policies to drive equal educational access and opportunity to all families and students (Center on Education Data and Policy, 2019). School districts will work to overcome barriers in educational choice limitations until all obstacles are removed and equity is achieved (Ross, 2020).

Brown v. Board of Education (1954) of Topeka was a pivotal ruling in education that helped fuel the conversation of educational equity. Through this historic ruling, the idea of educational options, or choice, laid the foundation for the development of the choice programs that exist today (Burrola, 2020). In this study, a midwestern school district choice program was compared to the district's traditional program in regard to achievement levels, attendance, and discipline of students.

Chapter One included the introduction to this study—a quantitative, causal-comparative, case study. A background overview of choice education in general and in the district studied was presented. The conceptual framework was described. The purpose and problem statement were presented, followed by the research questions and hypotheses. The significance of the study was explained as it pertained to the district studied as well as to education in general. Key terms included in the study were defined. Additionally, the delimitations, limitations, and assumptions of the study were described.

In Chapter Two, a literature review revealed the evolution of choice programs in the United States (Sundbom, 2019). Also, the barriers to choice programs were discussed, along with equity issues that still exist today, preventing underserved students from participating in choice programs. Educational policy and legislators' role in creating laws designed to provide fair and equal learning for all students was outlined (Center on Education Data and Policy, 2019).

Chapter Three contained an overview of the methodology of the study. The study was conducted to determine if choice programs impact student achievement, attendance, or discipline compared to students who attend a traditional classroom setting. The research and design, population and sample, and the instrument used to collect data were

introduced. A description of the data collection process was explained, and ethical considerations were examined.

In Chapter Four, the results of one-tailed *t*-tests revealed statistically significant positive differences in the student achievement of students who attended an intradistrict choice program compared to students who attended the traditional classroom program. , The significant values of $p < .001$ were revealed for all assessment level data, attendance data, and discipline data. This calculation resulted in a rejection of all three null hypotheses and strong evidence that the Midwest District A intradistrict choice programs had a positive effect on student achievement and performance.

Chapter Five provided a summary of the findings and conclusions of the research project. MAP English Language Arts, Mathematics, and Science mean scores and proficiency counts showed the comparison of eligible fifth-grade students compared to students who attend a traditional classroom. Also, students who attended a choice program had higher attendance and lower discipline incidents when compared to students who attended a traditional classroom program. Implications and recommendations for future choice program development and design were given for Midwest District A.

All data analyzed for this research study indicated that students who attend choice programs in Midwest District A have a significant advantage in achievement testing and higher test results. This specific choice program had a significantly higher rate of daily attendance versus their peers. Also, choice program students had virtually no discipline incidents when compared to traditional classrooms. According to these findings, Midwest District A should continue to invest and expand choice programs for their students to increase student performance and close achievement gaps.

In conclusion, the debate over school choice will continue to be a point of contention in politics and education. Regardless of the type, public, private, or voucher, none of these options have resulted in the widespread restructuring of school district programs to make neighborhood school programs as successful as choice programs. While these choice options show high performance and student success, the essential question is, *Does providing school or program choice fix the fundamental issue in public education?* It seems unrealistic that the future of education will be comprised of only choice programs so that all students will be highly successful and ready for college or careers. It is possible that spotlighting the success of choice programs covers up and diminishes the honest discussion of developing good schools and providing equity to all students.

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Appendix A

Lindenwood Institutional Review Board Approval

Feb 2, 2021 11:29:31 AM CST

RE:

IRB-21-76: Initial - The Effect of Choice Programs on Student Achievement

Dear David Whitham,

The study, The Effect of Choice Programs on Student Achievement, has been Approved as Exempt.

Category: Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording). The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

The submission was approved on February 2, 2021.

Here are the findings:

Regulatory Determinations

This study has been determined to be minimal risk because the research is not obtaining data considered sensitive information or performing interventions posing harm greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

Sincerely,

Lindenwood University (lindenwood) Institutional Review Board

Vita

David Whitham is currently the Coordinator of Assessment for Springfield Public Schools in Springfield, Missouri, where he has served in this role since 2014. He holds a Bachelor of Science degree in Early Childhood Education from Missouri State University in Springfield, Missouri, and a Master of Science in Education from Lindenwood University in St. Charles, Missouri. David's teaching career started in 2004. He was a first-grade teacher for six years and then a second-grade teacher for four years for the Republic School District in Republic, Missouri.