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Equitable Access in Education: Access to Joy, Choice Options, and Strong Neighborhood Schools

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August 2019

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Noah Hollenkamp

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Running Head: EQUITABLE ACCESS IN EDUCATION

EQUITABLE ACCESS IN EDUCATION: ACCESS TO JOY, CHOICE OPTIONS,
AND STRONG NEIGHBORHOOD SCHOOLS

by

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in partial fulfillment of the requirements for the degree
Doctor of Education with an emphasis in Educational Practice

August 2019

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Collective Abstract

The purpose of this co-authored dissertation was to understand equitable access of quality educational opportunities in St. Louis, Missouri. Through the following research, we present a better understanding of equity and access in education from a classroom level, on a school level, and finally, on a regional level. This collection of research is the effort of a group of committed and concerned educators seeking to understand the ways of making quality education accessible for all families, specifically in the areas of school choice, quality neighborhood schools, and play in the classroom. By equitable access, we mean all families being able to participate in and take advantage of appropriate learning opportunities that they need or that are desired. Hollenkamp's mixed methods research asked the question of how an increase in play and experiential education would impact early childhood learners both academically and social-emotionally and found that students who had opportunities to play at school grew at the same academic rate as peers who did not get to play while also showing higher levels of character development than their non-playing peers. Sanders' mixed methods research examined enrollment trends in a neighborhood school and the effect of marketing and promoting strategies that work to make the school the desired choice for families in the neighborhood and found definitive ways to attract and retain families in a neighborhood school among other choice options. Schuessler's mixed methods research examined how school enrollment processes impact equitable access to school choice options for traditionally underserved populations and found a range in the complexity of enrollment practices across schools that resulted in certain choice options being more accessible to underserved families and other options

being less accessible. The collective impact of this research has the potential to improve educational outcomes for students on a variety of levels.

Collective Introduction

Close your eyes and think about a child that is dear to your heart. Now think about the ideal education system and school you want for that child. What comes to mind? How would you describe that system or school? What are some characteristics and qualities of that system or school? Some of the thoughts that come to mind when you think of the ideal education for that special child might be:

- A safe, welcoming, and warm environment for all students
- Engaging, hands-on learning experiences that prepare students for future careers
- A place with diverse student and staff populations and where diversity is celebrated and embraced
- A supportive environment for parents and families
- Differentiated learning where every student gets what they need
- Adequate funding and access to quality resources for all students
- Enrichment from the arts and time for physical play
- Support and development of the whole child

These seem like obvious answers, yet our system overall and many schools nationwide are failing to offer such environments like this for all kids. The passage of The No Child Left Behind Act (NCLB) directed the focus of schools towards academic achievement results rather than the education of the whole child, including families. Simultaneously, there has been a push for more school choice options with the idea that a competitive market approach to education will also lead to improved outcomes for all. Despite the increase in options and focus on results, the academic achievement gap

between white and minority students did not change much in the first decade following the passage of NCLB (Ravitch, 2009). A focus on testing and accountability too often results in classrooms that are dull, silent, and offer only teacher-centered instruction, leaving students less engaged in schools (Markowitz, 2018). This is especially the case for schools with high populations of traditionally underserved families. Efforts have been made to address this, but our education system remains largely unchanged, particularly for poor students and students of color (Leonardo, 2007, Murnane, 2007). However schools are now being pushed beyond the NCLB achievement focus with the passage of the Every Student Succeeds Act (ESSA) in 2015. This Act means that more than just test scores will be considered when evaluating schools, including school climate and safety and input from parents and families in the creation of state plans (Every Student Succeeds Act, 2015). The ESSA is a small step in the direction of looking at a more comprehensive picture of a quality school and some of the factors that families care about in their child's education.

Our research collectively explores equitable access around some of these characteristics of quality education and new expectations under ESSA in an educational system of choice. Specifically, this work examines access to joyful, engaging learning in the classroom, quality neighborhood schools, and school choice options. Together we present a better understanding of equity and access in education from a classroom level, on a school level, and finally, on a regional level.

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The Impact of Play and Experiential Education on Early Childhood Students

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M.Ed., University of Missouri, St. Louis, 2014

A Dissertation Submitted to The Graduate School at the
University of Missouri - St. Louis in partial fulfillment of the requirements
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with an emphasis in Educational Practice

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Abstract

Non-traditional education within the boundaries of early childhood has been shown to support both social-emotional growth as well as academic growth. These include play (purposeful or unstructured), free choice of learning topics, experiential education, and many more methods that allow children to explore the world around them at an individual pace and interest. My study asked the question of how an increase in play and experiential education would impact early childhood learners both academically and social-emotionally. This has led me to study the juxtaposition of work and play and consider them a joint effort in the world of joyful education. The stakeholders and participants in this study, students, teachers, and parents, all had positive remarks about the study with a common theme of ‘modern children need more access to play at school.’ The study was designed to provide two-hours every week of play while simultaneously pulling those children from core academic classes such as Math, Science, and Language Arts. As the data show, each play group stayed consistent with their non-play peers in almost every academic measure and surpassed their non-play peers in the social categories. Based on the results, I find this intervention demonstrated that the original research question about the larger impact of joyful education as it relates to access and equity was supported.

Acknowledgments

None of this would have been possible without the support and patience of my wonderful wife. You kept our family strong and consistent through the years and I cannot thank you enough for the joy you bring to me as your husband. To Booger and Beef, sorry I had so many long days and late nights when I missed seeing you. This is for you and because of you. To my family and friends, thank you for your celebrations when I succeeded; your encouragement and words of wisdom when I was challenged; and your relentless jokes about me somehow making it this far in school – it's hard for me to believe, too! To those at my school who stayed long days to make sure I was able to attend class, thank you. I know how hard it is to be away from your family on someone else's behalf, and I can only offer to repay that favor if-and-when the time comes. I believe in small acts leading to large changes so I must also acknowledge Dr. Sheri-Marie Harrison for her ability to make me see the impact of teachers in students' lives. I am constantly attempting to pay that kindness forward.

I also want to acknowledge my fellow cohort members in taking this journey with me over the past three years. I have learned so much with you all and see big changes coming for our community. Last, but certainly not least, I want to thank our mainstay, Dr. Phyllis Balcerzak. Throughout our time as doctoral students, Dr. Balcerzak never wavered from her commitments and moved forward with her duties despite great adversity.

Thank you all for believing in me, even when I couldn't do the same myself.

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Chapter 1: Introduction

Statement of Purpose

The purpose of this multiphase, mixed methods study was to explore how play and experiential learning (as described throughout the study as *joyful learning*) prepared Kindergarten and First Grade students to succeed in a school setting. For anonymity, the researcher used pseudonyms throughout the study for the school (Springfield Elementary), city (Springfield), and state (Illinois). Through research and practice, the researcher designed a program to fit the needs of 20 early educators, 44 early childhood students (K/1st grade), and their families in an attempt to bring play-based learning into a traditional classroom setting within an urban, independent school. The study supported the claims of multiple intelligences, perseverance versus complacency, and free form learning (Hoerr, 2013). The study proposed that the short-term effects of experiential learning are academically positive at this age. It promotes independence and self-regulation, and benefits overall character growth. The genesis of the program revolved around the researcher's poor experiences as a student, and it was important to support other children who may feel the same way about education.

At Smith Elementary, brilliant, but humble educators are the status quo. The STEAM program offers essential questions for early childhood students like 'what does it mean to be curious?' Or 'what does it mean to be creative?' These questions are built in to a curriculum but it is on the school leaders, faculty, and staff to implement a policy for each question. There isn't a gap between American education and the rest of the world because we aren't capable or smart, it seems to exist because of the execution of the ideas, or lack thereof, from one person to another, especially inside the home, as

“American children with adequate resources may be limited from enjoying the full developmental assets associated with play because of a family’s hurried lifestyle” at the expense of child-centered play (Ginsburg, 2007). The researcher of this program will show through the results of a program based on play and experiences, can ultimately be more successful and sustainable than traditional teaching methods. It is not meant to challenge the system as a whole, and the proverbial broken door doesn’t need to be fixed, but the squeaking hinge could use an awful lot of grease. The following research questions guided the review of literature in an attempt to enhance, support, and deepen the findings of joyful education.

Research Questions

This study explored the main qualitative questions:

1. Does play-based, experiential education support joyful learning and facilitate social, emotional, and academic growth of early elementary students?
2. Will the introduction of play and experiential education (practical, hands-on, kinesthetic projects) in the early childhood setting support a more curious and creative child?
3. How do test results and reports (grades/character) of the playing students compare to their non-playing peers?
4. Does play at school offer any different, positive relations (grades, social-emotional, character growth) from those who only receive play at home (or outside the school)?

Chapter 2: Review of Related Literature

Optimal child development includes play so much so, that the United Nations High Commission for Human Rights as recognized it as a right of every child (Ginsburg, 2007). Play is described similarly across many experts in this field, but most reference the core ideas of play being: child-centered, loosely structured, and adaptable based on the goal that was set, if any (Ginsburg, 2007, Blanco and Ray, 2011, and Murray, 2018). However, Jane Murray (2018) believes that “there has been growing acknowledgement that some young children’s opportunities for play, especially free play, have become increasingly compromised, colonised and denied” (p. 335). Similar to play, the Association for Experiential Education describes experiential education as “**a teaching philosophy** that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities” (Miano, n.d.). These two assertions bring play and experiential learning to the macro level that go far beyond the classroom as they are both showing contributing signs to overall child development in 21st century children. Neither ability nor understanding are the main components in an experiential curriculum, rather, the willingness to try, observe, and question the results (Miano, n.d.). Further detailed analysis will show that joyful learning is making great strides in modern academics across the world as well as into the workplace. Using multiple methods of locating literature based on non-traditional academics yielded thousands of results, primarily stemming from recent research and international findings. The following review is

composed of empirical and anecdotal methods tracked by a plethora of professionals within academia and the professional world.

Academics In America

Education is seen differently all over the world and Mitchel Resnick (2018) argues that education itself is where the best of opportunities are given to support and develop every child's natural talents. "In many countries, formal education is mired in a dreary culture of testing and competition. That culture is now seeping down to early childhood education and risks stifling the nascent creative energies of the very young" (p.68). The question must be asked again: Will the introduction of experiential education (long-term, hands-on, kinesthetic projects) in the early childhood setting create a more curious, creative child?

Globally, the United States ranks 20th in happiness (World Happiness Report, 2019), 31st in education (PISA Worldwide Rankings, 2018), and 19th in wealth based on median GDP (Global Wealth Report, 2018). While not assuming causation, when looking at a country who utilizes play and experiential learning in early learning, one can see that Finland is ranked 1st in happiness, 8th in education, and 24th in wealth, with substantially less income inequality than the US (11.8% at risk of poverty versus 43.5% in the US). NPR published an article that reviewed and compared American and Finnish practices in early education and found that while children in America are starting school earlier and earlier (many preschools officially begin enrollment at two years), the majority of children in Finland don't begin school until they are seven-years-old (Sanchez, 2014). This is where income inequality makes one of the largest differences in early care; Finnish preschools and daycares are paid for through higher taxes, making

them freely available to the majority of the citizens, whereas already disadvantaged Americans are being gouged by care options in trade for quality and safety (Sanchez, 2014). The same article noted that most Finnish early learners spend the majority of their time immersed in nature or engaged in dramatic play and recognized the child poverty rate being five times higher in America (25%) than Finland (Sanchez, 2014). Given the drastic difference in child welfare, play serves as a major part of learning in all children, particularly those in poverty (Ginsburg, 2007). Many examples of early explorative learning revolved around the immersion in the natural world. In modern, metropolitan or urban schools, access to raw nature is becoming less and less available, leaving limited options for children (Sanchez, 2014).

According to Ferre Laevers (2005), experiential education is “exploiting and enhancing the energy in people and drawing them into a positive spiral which engenders deep level learning. Only in this way can we make schools more effective and strong enough to meet the challenge of education” (p. 9). In her book, Gwynnyth Llewellyn (1998) discusses that “fear of bad grades and lack of faith in one’s abilities” (p. 46), can often lead to prevention of learning while “schools present learning backwards, emphasizing answers instead of questions” (p. 50). Both represent an idea based around how education is being delivered and are focusing on the process of learning and not the product of a contrived learning environment. Grading is not objective as the results are subjective to each student’s approach to the subject, therefore it seems unfair to grade based on a single idea. Like Miano (n.d.), Llewellyn (1998) sees learning as a process of understanding. When focusing on the product only, the process becomes irrelevant or a

one-time formality when the results of the learning should form the basis for future learning (Miano, n.d.) and experiential education is attempting to enhance the process.

Play and Academics

The theory of Howard Gardner's (1999) Multiple Intelligences supports the idea that any person can be successful in other ways than the traditional, academic sense. Some of those ways include: *Narrational* - learning through stories, *Quantitative* - learning through numbers or patterns, *Logical* - learning through deductive thinking, *Foundational/Existential* - learning through fundamental questions, *Aesthetic* - learning through art, balance, and harmony, *Hands On* - learning through kinesthetic engagement (this is primary goal for the project), and *Social* - learning through group observation and perspective (Gardner, 1999). Gardener attempted to support every level of learning and stopped a cycle of isolated assessments as understanding. Like Gardner's (1999) theory, another logical reason for putting this plan into action is for the basic left-brained and right-brained learners. "Those of us who - for whatever reason - favor the right-brained 'mode of perception' (and therefore: pictures, music, spatial design, etc.), often find the educational system quite difficult to survive" (Bolles, 1978, p. 100). Bolles (1978) referenced life in boxes and each box is "a whole new ball-game, and very little help is given to prepare us for the next ball-game coming up" (p. 20). He believed that too much focus was on the future of success without fully supporting the present for each individual, in education or beyond. Both seem to believe in a differentiated approach to learning while challenging an educational system that assumes that everyone can learn the same materials in the same way (Gardener, 1999).

When reviewing similar studies as mine (play intervention in typical school setting), one of note showed consistent themes and data as it related to play and academic success (Blanco and Ray, 2011). Pedro Blanco and Dee Ray (2011) found that children who received two, 30-minute play sessions per week, for eight weeks, demonstrated significant increases in the scores of the Composite of the Young Children's Achievement Test compared to their non-playing peers. They attributed unhappiness in school as an identifier to suspensions and expulsions in elementary students and went so far as to include the No Child Left Behind act of 2001 as a reason why so many children with mental health needs go unobserved due to increased academic pressures (Blanco and Ray, 2011). A similar study found that periodic play intervention was not the only way to assess children, and that "a variety of assessments, interventions, and curricula use play activities for implementing a wide variety of developmental goals (eg, language, social, and motor goals) because of the natural context that play provides" (Lifter, Foster-Sanda, Arzamarski, Briesch, and McClure, 2011, p. 227). While both studies agree that play and academic assessments are appropriate for young children, the methods in which they retrieved the data varied on frequency and type.

Another study surrounding academic performance and playful learning dealt exclusively on the brain and its reaction to physical, active play (Sattelmair and Ratey, 2009). They found that not only did physical activity directly correlate with improved academics, "play facilitates healthy cognitive development by stimulating frontal lobe maturation" (p. 366) which helped support children with ADHD and impulse control. When reviewing a study that involved one million students around the US (grades five, seven and nine), those with higher fitness scores also scored higher on the SAT-9 tests

(Sattelmair and Ratey, 2009). The inverse also held true where those with a higher body mass index (BMI) had lower scores. These studies seem to support the universality of play as a support to academic learning and not a detraction from it.

Play and Social-Emotional Growth

There are many internal and personal benefits of playing, most notably, the person/people engaged in play are generally enjoying the moment. As parents and teachers, one thing that rings out is often, why can't you just get along?! Using play to increase social behaviors is integral to research as play can be easily generalized to naturalistic, less-restrictive environments in which social interventions may be implemented (Lifter et al., 2011). As schools around the world continue to push the development of the whole child, "much research focuses on the acquisition of literacy, numeracy, and problem-solving skills" (Hofferth and Sandberg, 2001, p. 295) while activities such as play continue to provide social and emotional skills (Hofferth and Sandberg, 2001). Similar to the findings of Lifter et al. (2011), Hofferth and Sandberg (2001) agree that play is the more natural way for children to develop social constructs relating to their own emotional abilities.

Ginsburg (2007) writes, "play allows children to learn how to work in groups, to share, to negotiate, to resolve conflicts, and to learn self-advocacy skills" (p. 183) and in doing so, children are more likely to solve the problem independently through playful measures. According to Ginsburg (2007), an area of growth for all Americans is in the realm of playtime versus work time and "despite the numerous benefits derived from play for both children and parents, time for free play has been markedly reduced for some children" (p. 183). Parents are still choosing to subsidize their time with their children

with high tech gadgets and copious amounts of screen time instead of direct interactions which, in turn, help guide conflict resolution in a more appropriate manner (Ginsburg, 2007). A similar study by Stephanie Pappas (2011) shows schools in major cities like New York have cut recess in elementary schools to less than 30 minutes a day while certain schools in Los Angeles are averaging 19 minutes and “as many as 40 percent of schools in the United States have reduced recess in the aftermath of No Child Left Behind act, which emphasizes testing scores” (Pappas, 2011). Like Pappas (2011) and Ginsburg (2007), Sattelmair’s and Rattey’s (2009) study argued that “schools in the United States need to stop eliminating physical education programs under the current political pressures to emphasize academics” (p. 366). With so many researchers discovering the same trends in American education values, it is worth noting that virtually zero responses emerged with conflicting ideas about the lack of gross motor activities. In fact, the National Association of Early Childhood Specialists in State Departments of Education published the following position statement regarding the importance of recess and play:

“The National Association of Early Childhood Specialists in State Departments of Education takes the position that recess is an essential component of education and that preschool and elementary school children must have the opportunity to participate in regular periods of active, free play with peers” (NAECS-SDE, 2003).

The lack of child-centered free time is having a negative, long-term effect, and Penny Wilson (2009) writes that “children who suffer from play deprivation is just the beginning” (p. 4) of long-term social-emotional development issues. Babies and young children have a very big world around them and they are forced into it without any

preparation or knowledge of it. For them, playful exploration is their only way of learning about their new surroundings. The idea of children exploring nature actually has coined terms: Biophilia and Biophobia (Wilson, 2009). Biophilia is the “natural love children have for the living world” whereas Biophobia is described as simply “a fear of nature” (p.7). A global concern with this suggests that if we are alienated from nature (our planet), it will ultimately lead to the destruction of our species (Wilson, 2009).

Playing is so inherently important to our existence that play deprivation is now being looked in to at the later stages in life with those who exhibit atypical behaviors. “Play-deprived people may be physically desensitized, show symptoms of severe learning disabilities, physical ineptitude, erratic behavior, be depressive and withdrawn, or have difficulty in forming bonds” (Wilson, 2009, p. 15). The long-term impacts of play deprivation are just now becoming more valid as justifications for heinous acts (such as murder), and studies carried out in orphanages as well as prisons in the US show that “there are links between a play-deprived childhood and atypical behaviors, both socially aggressive and emotionally repressed” (p. 15). Involving play at an early age seems to help children learn about themselves, nurture empathy, and cope with tragedy.

Contributors to Longitudinal Success

The questions of school and how or when we will ever use this are valid and necessary, even at a young age. The questions’ legitimacy can be discussed and practical solutions can be implemented with experiential education. The Organization for Economic Co-operation and Development (OECD) tested and ranked fifteen-year-olds from 70 countries and the American education system is currently ranked 31 in the core subjects of Math, Science, and Reading (PISA Worldwide Ranking, 2018). The evidence

through international studies is showing that the longer children stay in the American education system, the worse they end up in relation to their foreign counterparts (Hirsch, 2006). However, the trend continues to show schools increasing academics and removing programs like PE, recess, and unstructured play (Pappas, 2011).

America's job force is no longer looking primarily at the best ACT or SAT scores. It is no longer simply looking at the numbers, yet that is how schools continue teaching – for the numbers. “The global economy now is primarily based on knowledge and technology. Critical thinking and problem-solving skills are paramount, as are the abilities to innovate and collaborate with others” (Gates 2010, p. 203). There is a downward spiral of experience versus opportunity. If one cannot gain employment due to lack of experience, it makes it extremely difficult for one to gain the experience in order to find a job. The system is brutal and starting the experiential education process should begin as early as possible in education. It begins with young children as described by Montessori's (1967) *absorbent mind*. Children are naturally curious. They are naturally creative.

But what does it mean to be creative? Is creativity a skill that can be enhanced and nurtured over time? Resnick (2018) believes that being creative is being human. “Creativity is a step beyond imagination: it is putting your imagination to work” (p. 57). In a day-and-age where society has proven over and over again it's not about who's the smartest or the wealthiest, a good idea is a good idea. An idea that solves a major problem, however, is invaluable. According to a major IBM survey of more than 1,500 Chief Executive Officers from 60 countries and 33 industries worldwide, chief executives believe that – more than rigor, management discipline, integrity or even vision –

successfully navigating an increasing complex world will require creativity (Tomasco, 2010). In the IBM survey, 80% of CEOs expected their environments to grow more complex over the years but only 49% expected their companies were equipped to handle such complexities.

In high stakes careers it is common for burnout or emotional withdrawal to follow failure. Grit and perseverance are essential in business as they are in any other area of life. An article in the Harvard Business Review states that organizations that develop grit will create a culture and environment that is both demanding and supportive (Duckworth & Lee, 2018). Setting, and keeping, high standards is customary for any successful practice. A fundamental characteristic of a gritty organization is restlessness with the status quo (Duckworth & Lee, 2018). Rules and boundaries are necessary for safety and guidance, but appropriate disruption continues to impact social norms every day. We should look for ways to challenge the status quo without challenging the authority.

The good news is some companies value STEAM initiatives in school as they'll be fundamentally obligated to hope for a strong 'next generation.' Some companies even offer paid time off to serve as mentors in schools (Honey & Kanter, 2013) and "companies concerned about the lack of students with strong skills in STEM and manufacturing could support MakerSpaces in schools" (p. 15). With more focus being placed on the job market and how to prepare for *what's next*, it makes sense to invest heavily in the earliest of learners. The common term of *return on investment*, while somewhat dense, has shown us that investing in the youngest learners creates the largest economic return. According to James Heckman's and Dimitriy Masterov's (2007) study of disadvantaged youth, it is estimated that there is a social or monetary return between

\$7 and \$12 for every \$1 invested in early childhood learners. The results, as represented in Figure 1, show higher returns earlier in a child’s life. This pattern holds true for all children, but more advantaged children tend to “receive massive early investments from their parents that disadvantaged children do not receive” (Honey & Kanter, p. 23).

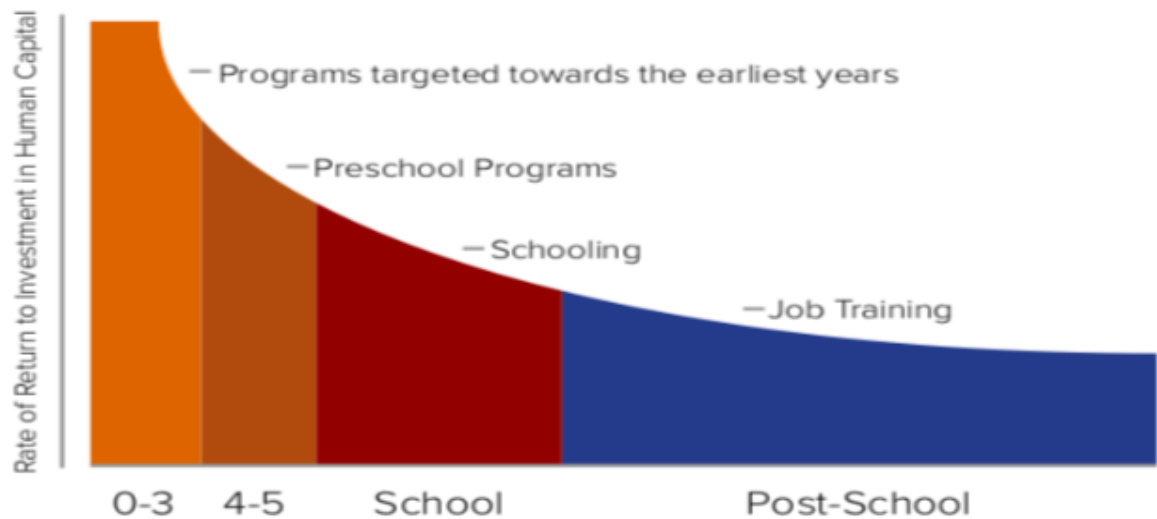


Figure 1: Return On Investment In Early Years (Honey & Kanter, 2013)

The review of literature guided the following research strategies, components, and hypotheses for this study. Very few sources were found to contradict such research. Based on the information available surrounding play and experiential education, the following study found striking similarities throughout the duration of data collection, formulation, and inferences resulting in a consistent, and valid reasoning for increasing joyful learning throughout early elementary programs. Following a similar approach, I chose to look at the effects of play and experiential education within academics as well as social emotional growth.

Chapter 3: Methodology

The purpose of this study was to examine the impact that joyful learning had on academic and social-emotional growth in early elementary learners. This chapter contains examples of the study site, research design, methods of data collection, participants, variables, and analysis of data.

Description of Study Site

Smith Elementary is an urban, independent elementary school comprised of children from ages four through thirteen (pre-K through 6th grade). The vast majority of students are children of color (94%) and over half of the students qualify for free or reduced lunches. As a STEAM (Science, Technology, Engineering, Art, and Math) school, Smith Elementary is well versed in the Maker Movement and supports the children through open-ended projects, guided practice and lessons, and cross-subject curricula like Novel Engineering.¹ This philosophy of learning allows children to use what they are proficient in and match it with a developing trait (i.e. – designing survival, political, and escape methods while understanding *Lord of the Flies*, (Golding, 1954)). Margaret Honey and David Kanter (2013) believe that MakerSpace and the Maker Movement are getting “kids excited about science and technology the way chemistry sets inspired previous generations of scientists and engineers” (p. 14).

Research Design

This study used a mixed methods (Creswell, 2014) design, which combined both quantitative and qualitative methods of research to provide initial evidence that traditional academics are falling behind the social/emotional needs of modern-day early learners (as found in the results of this study). Receiving final results (survey and

¹ <https://teep.tufts.edu/special-teep-class-integrating-engineering-and-literacy/>

questionnaire results, grades, and end-of-semester reports) from teachers and emotional understandings of the children and their families, three main themes were recognized based on the proposed theory of joyful learning and its results. By using numerical quantifiers and subjective reporting concurrently, the research flowed more naturally with the end goal always in mind. The convergent data that were collected before and during the experiment (Creswell, 2014) was set up to be pliable, mobile, and removable based on the design needs. However, other than updating project choices, the majority of the scheduled data collection methods were followed.

Qualitative methods used more open-ended data in an attempt to represent information. The use of daily journals, teacher questionnaires, and quick conversations with children and parents allowed this study to hit the ground running based on the overwhelming need for this type of education within the school. Using the less-structured collection methods, qualitative measures pulled from the subjective emotions and independent understanding of the topic being defined and measured. It was how the participant saw the world around at that moment, and it was my job to interpret that vision for this study. This portion of the study was based on an approach to family and school values and offered a unique look into a key sub-category of the design - joyful learning. Through interviews, surveys, and ‘check-ins’ with teachers, children, and parents, I was able to gather information at different times during the study without waiting for specific sets of data to finalize.

Data Collection

The study was conducted at Smith Elementary, an independent school in Springfield, Illinois.

The study was conducted during the typical school day and included the following participants:

- enrolled K/1st grade students
- full-time teachers
- parents/guardians.

There were 92 people (44 students, 10 teachers, and 38 parents/guardians) actively involved in this research.

My study asked the question: Does play-based, experiential education support joyful learning and facilitate social, emotional, and academic growth of early elementary students? Therefore, detailed grading and written character reports were crucial to the study's design. I had the opportunity to instruct Kindergarten and 1st grade students and isolated the data into groups of those who participated from those who did not. While some of the data that were collected came from control groups who chose not to participate, it is important to know that all collected samples were in line with school policy and ethical standards and only used as baseline benchmarks for what can be understood as typical development as there was no intervention on those students. No personal information was used from participating or non-participating subjects.

Description of the Research Process: Students

The students were randomly assigned between experimental and control 'groups' using a randomizing software.² Each participant was assessed twice during the data-collection period, but not everyone was tested at the same time. Some students took assessments directly after playing while other students were given a surprise assessment

² <https://www.random.org>

in the middle of class. This was to test stress and recall during high stakes reporting like quizzes and formal tests. The students were placed into two groups for each of the two grade levels and labeled: K1, K2, First1, and First2 as well as 'Play' and 'Non Play' based on when our sessions were scheduled. There was another group of students who remained the control group and those data were used as anonymous baselines for each grade level. Activities included less-structured formatting like recess, purposeful play like stacking dominoes to nurture grit and cooperation, pre-chosen and free choice activities, free formed MakerSpace projects, competitive and independent games, and many more that aligned with Smith Elementary's CARES (cooperation, assertion, responsibility, empathy, self-control) character development program. All but four students who signed up participated at some point with the approval of their parents and a signed assent form (see Appendix D).

The children in each group (K1, K2, First1, First2), who gave consent to participate left their classroom schedule (some were pulled from core subjects while others were pulled from their own classroom recess) to join the play/experiential activities for 60 minutes, two times per week. Data sources are found in Table 1 (Chapter 4). K1 and First1 alternated days during the first semester, specifically quarter two (Q2). K2 and First2 alternated days during the second semester, specifically quarter three (Q3). They were not tested on what they choose to do during this time, only on how it affected their behavior or performance during or after participating (i.e. - grades, attentiveness, and attributes of Smith Elementary's character development program).

Pre and Post-Surveys were offered to all participating children. The surveys were personally created to support consistency within the program and were derived from the

STEAM curriculum at Smith Elementary, as well as initial findings in the reviewed literature. The participants were reminded of the STEAM acronym, given definitions of larger words, and had as much time as needed to complete each survey.

Description of the Research Process: Teachers

Each student has a homeroom advisor made up of either a science, math, or language arts teacher. Each student sees up to nine specialist teachers (science, math, language arts, PE, music and movement, art, violin for 1st grade, Spanish, and extended day) and a questionnaire was sent out to all specialists, around how they perceived the study. Other data sources offered by the teachers such as progress reports, semester report cards, and character reports were used as quantitative data to help support the hypothesis and original research questions. By gaining access to the academic and character reports (while keeping them confidential), I was able to see overall growth from the beginning of the study to the end. The detailed reports gave me access to broken down areas in character development, reading, writing, mathematics, STEAM, music and movement, Spanish, and violin. This offered up over 60 specific data points to see if and where joyful learning made the most impact.

At no point was a K/1st teacher, whether advisor or specialist, asked to alter their daily routines in any way without prior consent. They continued teaching their curriculum as planned while also providing their professional opinions about the program (seven open ended questions). Participation was low, but that was ultimately expected due to the chaotic nature of being an early childhood teacher. Official reports provided the bulk of the data that were necessary for the program's success.

Description of the Research Process: Parents and guardians

Parents/guardians were given a forced choice survey with six questions about how they perceive their child's interest and one question regarding their own interest in play (see Appendix C). The values were matched up with the similar child survey to see how parent perception and child interest matched up or differed from one another. Results are discussed in the *Data Analysis* section, to follow. Any hardcopy data (consent forms, surveys) were stored away in my school office or home, locked in a cabinet to which I only had access. Any digital data were kept on a password protected external hard drive. Other than a few impromptu conversations about the study as a whole, the parents involved in the study weren't asked to do anything outside of their normal schedule or routines, with or without their child.

Student and parent surveys were given to find out exactly how much they (or their child) enjoyed the programs available. The children were given a pre-survey and post-survey with forced choice options for answers and complete surveys can be found in Appendix B and Appendix C.

The answers were set up in differing orders based on how much the topics are enjoyed, so each answer resulted in a number valuation from 1 – 4, depending on how many questions were being asked. The more the child or parent enjoyed the topic, the higher the numerical value. For instance, using question #1, the results were formatted as: a – 1, b – 2, c – 3, d – 4. The child surveys had a minimum of 6 points and maximum of 19 points, and the parent survey, which had an additional question, had a minimum of 7 points and maximum of 22 points.

Student responses to the pre-surveys were compared and calculated against the post-surveys to show any increases or decreases in enjoyment of the play sessions. By adding up the total score and dividing it by the number of questions, a clear value was placed on the student's or parent's enjoyment for STEAM and play related projects. Parent responses were used to see if any correlation from their assumptions of their child's enjoyment matched how the child actually responded. Some parents chose to turn in the surveys anonymously while others added their names, so I was able to match specific responses with specific children.

Description of Quantitative Variables

The quantitative dependent variables that were identified included the following, but it is important to note that there was no assumed causation due to the ideas of natural maturation and typical development of early childhood students:

1. How the results (final grade and character reports, pre/post-tests, and formal surveys) were explained by the research?
2. What effect did time of play and experiential learning have on grades, subjective enjoyment of the lessons, understanding of topic being taught, and ability to use the materials?

Most quantitative variables were reliant on the numerical scaling regarding post-survey results and how they compared to the pre-surveys. Finding the key elements of success correlated closely with assessments and each end-of-semester report, including both character and academic. Some major independent variables (teachers and students) for this section were: course being taught, amount of play and experiential education offered, frequency of class for each student, length of class, and materials offered.

Another independent variable was self-inflicted as I was unable to offer a post-assessment for First Grade, ultimately leaving out a major data piece for the group. I felt it would be unusable if the assessment came at any other point in the study other than the original intention. Kindergarten assessments, however, were included as originally planned and offered a clearer understanding of the effect that joyful learning had on academic scores.

Data Analysis

Quantitative data analysis.

The data from the pre/post tests were conducted and evaluated using objective results based from the quantitative portion of the research question:

1. How did assessments, grades, and survey results of playing students compare to those of other, non-playing students?
2. Were there any subcategories where play-based learning had the most impact, positively or negatively?

Qualitative data analysis.

Data from the qualitative portion of the study were analyzed concurrently and throughout the program's longevity. To inform the statistical findings, the data were transcribed, organized, coded based on notes, interviews, and documents, noted, and reviewed for each subset of participants. A journal was kept for observations for each play group. The interpretation portion was only to be used for qualitative analysis and note-taking. However, years of experience in early childhood helped provide an assumed understanding of social cues and behavior.

Chapter 4: Results

Interpretations

Quantitative methods showed hidden successes in the design and helped me see that the study not only supported certain areas of growth (academic, social, and emotional) as expected, but in other areas, it simply didn't detract or inhibit growth based on the averages and norms of the overall group. This meant that the addition of play-based, experiential activities (at minimum, two hours per week, which the study/schedule allowed) in K/1st grade increased joyful learning experiences without compromising academic results. In an academically rigorous school, this was music to everyone's ears.

The primary goal of the study was to use quantitative measures like pre/post-surveys and assessments to explore and evaluate growth. While the study explored the value of play, it is still increasingly hard to convince stakeholders to include it as evidence of success (versus traditional grading reports), even if they value it as a component to overall development. However, the universality and overall acceptance of the topic allowed a high percentage of involvement from all constituencies based on the existing design of the school and the way classes are currently being taught. Meaning, Smith Elementary teachers, staff, parents, and children understand and appreciate play-based and experiential approaches to learning. The introduction of the topics was not unfamiliar, therefore, there will be less time instituting a new curriculum should one be established in the future and based on this design.

The following section illustrates the impact of the study based on mixed methods findings and will be broken down into ten data sources in Table 1.

Table 1
Data Sources

Data Source	Participant	Date Collected
Pre-Survey	K1Child	January 15, 2019
	First1 Child	January 17, 2019
	K2 Child	April 2, 2019
	First2 Child	April 2, 2019
Post-Survey	K1Child	March 12, 2019
	First1 Child	March 14, 2019
	K2 Child	April 24, 2019
	First2 Child	April 24, 2019
Pre/Post-Survey Comparison	Child Participants	Study Duration
Survey	Parent	April 22, 2019
Survey Comparison	Parent/Child	Study Duration
Post-Play Academic Assessment	K1 Child	March 12, 2019
	K2 Child	April 24, 2019
Non-Play Assessment	All Kindergarten	March 15, 2019
Report Card Analysis	K1Child	Study Duration
	First1 Child	Study Duration
	K2 Child	Study Duration
	First2 Child	Study Duration
Journal	Researcher Observations	Study Duration
Questionnaire	Teacher	April 9, 2019

Child pre-surveys.

The pre-surveys and post-surveys were identical for the children. The goal was track enjoyment and participation in each category before they were engaged through the program and after. Since the surveys were made by the researcher, it was important to let each question guide the activities in an attempt to keep the data as clear and consistent as possible for all four child participant groups. In this section, each play group will be

labeled as Kindergarten Group 1 (K1), Kindergarten Group 2 (K2), First Grade Group 1 (First1) and First Grade Group 2 (First 2). For reference to the survey, please see Appendix B.

K1 was the first group to be surveyed, and an initial process error was found almost immediately. When given the survey, the students were reminded multiple times that this was not a test. It was made clear that there were no right answers, nor were there any wrong answers. However, during the first group, I divided and placed the 10 children at three tables: four at one, three at the other two. Peer pressure was strong, and the results seemed to follow as I noticed children looking at other papers and discussing answers. These surveys came back with the most eraser marks due to changed answers, presumably by what their peers had on their paper.

In Table 2, one can see the overall commonality within each topic. While this was seen throughout each group to some degree, it was most prevalent in K1 due to the proximity of the children. This was updated in the other three groups to avoid bias from child to child and offer the best representation of what the child truly felt.

Table 2
K1 Pre-Survey Results of Study Participants Perceptions of Learning, (January 15th, 2019)

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
Child1	4	2	3	3	3	2	17	89.47%
Child2	4	3	1	3	2	3	16	84.21%
Child3	4	3	1	3	2	3	16	84.21%
Child4	4	3	1	3	2	3	16	84.21%
Child5	4	3	1	3	2	3	16	84.21%
Child6	3	3	2	1	3	3	15	78.95%
Child7	4	3	3	3	1	3	17	89.47%
Child8	4	3	2	3	3	3	18	94.74%
Child9	4	3	3	3	3	3	19	100.00%
Child10	4	3	1	2	2	3	15	78.95%
AVERAGE	3.9	2.9	1.8	2.7	2.3	2.9	16.5	86.84%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.33	1.66 - 2.33	1.66 - 2.33	1.66 - 2.33	1.66 - 2.33	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.66	1.0 - 1.66	1.0 - 1.66	1.0 - 1.66	1.0 - 1.66	6 - 10	

The three areas of impact were *Enjoyment of STEAM projects (#1)*, *Value of Independence (#3)*, and *Value of Play (#6)*. These all offered great insight on how to plan the program moving forward. From these preliminary results, I was able to stress the importance of independence through joyful experiences like individual scavenger hunts and free choice MakerSpace projects while also keeping STEAM and play at the forefront of the design. Going into the program, I had group designs planned out completely, but the initial survey results gave more insight to what I should be implementing.

Table 3 shows a more consistent trend of enjoyment across the topics. Based on the survey setup error in K1, First1 was split up around a room, with nobody sharing a table or floor space. While not as strong as the K1 responses to independence, it was still

an area that needed to be explored and was instituted more into their play curriculum as well. As a whole, First1 really enjoyed each topic which made it easier to plan and implement choice options for the group without resulting in any one person disliking the day's events. An area that received full agreement is the usefulness of STEAM (#2) which could be due to the fact that they learn a little more about STEAM careers in 1st Grade than in Kindergarten.

Table 3
First 1 Pre-Survey Results of Study Participants Perceptions of Learning, (January 17th, 2019)

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
Child1	4	3	3	3	3	3	19	100.00%
Child2	3	3	1	1	2	3	13	68.42%
Child3	4	3	2	3	3	3	18	94.74%
Child4	4	3	2	3	3	3	18	94.74%
Child5	4	3	3	3	3	3	19	100.00%
Child6	4	3	2	3	3	3	18	94.74%
Child7	4	3	2	3	2	3	17	89.47%
Child8	4	3	3	3	3	2	18	94.74%
Child9	4	3	3	3	3	3	19	100.00%
Child10	4	3	3	3	3	3	19	100.00%
Child11	4	3	3	3	3	3	19	100.00%
Child12	4	3	3	2	3	3	18	94.74%
Child13	4	3	2	3	3	3	18	94.74%
AVERAGE	3.92	3.00	2.46	2.77	2.85	2.92	17.92	94.33%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

As shown on Table 4, K2 had two categories with full agreement: Enjoyment of STEAM projects (#1) and Value of Play (#6). By this time in the study, both K1 and First1 had already been under my care for over six weeks and perhaps the excitement and anticipation of the program based on what they saw or were told by other students led to such a consensus. Unfortunately, it wasn't until much later in the design that I noticed

Child5 had a missing answer (#2). However, the overall scores lead one to believe that this child would also value STEAM highly in terms of usefulness. Once again, independence was the lowest scoring category.

Table 4
K2 Pre-Survey Results of Study Participants Perceptions of Learning, (April 2nd, 2019)

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
Child1	4	1	3	3	3	3	17	89.47%
Child2	4	3	2	3	3	3	18	94.74%
Child3	4	3	2	3	3	3	18	94.74%
Child4	4	3	2	3	3	3	18	94.74%
Child5	4		3	3	3	3	16	84.21%
Child6	4	3	2	3	2	3	17	89.47%
Child7	4	3	3	3	3	3	19	100.00%
Child8	4	3	2	1	2	3	15	78.95%
Child9	4	3	3	3	3	3	19	100.00%
AVERAGE	4.00	2.75	2.44	2.78	2.78	3.00	17.44	91.81%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.33	1.66 - 2.33	1.66 - 2.33	1.66 - 2.33	1.66 - 2.33	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.66	1.0 - 1.66	1.0 - 1.66	1.0 - 1.66	1.0 - 1.66	6 - 10	

As seen below in Table 5, First2 determined that independence is something that was not as valuable or necessary as other STEAM/play related areas. However, like their First1 counterparts, First2 also agreed completely that STEAM was a useful in life. This is also the time to mention that Child10 was in a particularly poor mood on this day due to the fact that we didn't go right into playing. First2 had a schedule that pulled them from recess, so there was some initial animosity towards the program and myself. The child assumed that we would be going out to recess with the rest of 1st Grade, not taking a test. This may have had an impact on Child10's answers.

Table 5
First2 Pre-Survey Results of Study Participants Perceptions of Learning, (April 2nd, 2019)

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	
Child1	4	3	3	3	3	3	19	100.00%
Child2	4	3	3	3	3	3	19	100.00%
Child3	4	3	2	2	3	3	17	89.47%
Child4	4	3	3	3	3	3	19	100.00%
Child5	4	3	3	3	3	3	19	100.00%
Child6	4	3	2	3	3	3	18	94.74%
Child7	4	3	2	2	2	3	16	84.21%
Child8	4	3	2	3	3	3	18	94.74%
Child9	4	3	2	2	3	2	16	84.21%
Child10	1	3	1	2	2	3	12	63.16%
AVERAGE	3.70	3.00	2.30	2.60	2.80	2.90	17.30	91.05%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

Based on the all four groups, the largest, and most obvious area of potential enhancement was in the valuation of independence. The average value of independence was 2.24, which was considerably lower than the average value of the other groups at 3.02. From these surveys I designed schedules and curricula to suit the needs of each group. There was definitely some bias within the groups because we quickly became known around the school as the ‘play groups’ and when the children weren’t engaged in free play, it seemed to be less fun based on the colloquial label we were given. I fell victim to it on multiple occasions by not only allowing it to be said, but participating in the terminology as well. Perhaps if we were labeled the ‘Independent Play Group’ instead, we would have seen a more comfortable acceptance of the characteristic of independence itself.

Child post surveys.

The post surveys were given on the last day of each session. We had a conversation about the program and talked about what we liked most or didn't like very much. Most of the conversations were positive as it related to the design, and most were upset that it had to end. I tried not to guide the students in any direction before taking the surveys, and I asked open-ended questions that allowed the group to facilitate the responses organically. Like the Pre-Surveys, I reminded the students that there were no right or wrong answers, and to stay true to their own opinions. They were spread across the room with limited access to other children or their responses.

K1 results showed that every category was valued as a group after the study. In the Pre-Survey, *Independence* and *Learn Through Doing* averaged in the indifferent range (analysis can be found in Child Pre/Post Survey Comparisons section), but they were increased dramatically in the post-survey analysis. Table 6 also shows only two students marked 1 (Child8 and Child10) in certain categories, whereas seven 1's can be found in K1 Pre-Survey.

Table 6
K1 Post-Survey Results of Study Participants Perceptions of Learning, (March 12th, 2019)

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
Child1	4	3	3	3	3	3	19	100.00%
Child2	4	3	3	3	3	3	19	100.00%
Child3	4	3	3	3	3	3	19	100.00%
Child4	4	2	2	3	3	3	17	89.47%
Child5	4	3	3	3	3	3	19	100.00%
Child6	4	3	2	3	2	3	17	89.47%
Child7	4	3	3	3	2	3	18	94.74%
Child8	4	3	1	3	3	3	17	89.47%
Child9	4	3	3	3	3	3	19	100.00%
Child10	4	3	3	3	1	3	17	89.47%
AVERAGE	4.00	2.90	2.60	3.00	2.60	3.00	18.10	95.26%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

The results continued the theme of high universal valuation of *STEAM Projects* (#1) and *Play* (#6). The intentionality of independence proved to make the largest change in value (1.8 to 2.6).

First1 results were consistent with K1 results and overall increase in valuation of each category. Table 7 shows the post-survey responses, with one student (Child7) having moved during the study. Child2 answered 1 for 'likes to play' which was down from a 3 in the pre-survey results (analysis can be found in Child Pre/Post Survey Comparisons section).

Table 7
First Post-Survey Results of Study Participants Perceptions of Learning, (March 14th, 2019)

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	
Child1	4	3	3	3	3	3	19	100.00%
Child2	4	3	2	2	2	1	14	73.68%
Child3	4	3	2	3	3	2	17	89.47%
Child4	4	3	3	3	3	3	19	100.00%
Child5	4	3	3	3	3	3	19	100.00%
Child6	4	3	2	2	2	3	16	84.21%
Child7	MOVED	MOVED	MOVED	MOVED	MOVED	MOVED	MOVED	MOVED
Child8	4	3	3	3	3	3	19	100.00%
Child9	4	3	3	3	3	3	19	100.00%
Child10	4	3	3	3	3	3	19	100.00%
Child11	4	3	3	3	3	3	19	100.00%
Child12	4	3	3	3	3	3	19	100.00%
Child13	4	3	3	3	3	3	19	100.00%
AVERAGE	4.00	3.00	2.73	2.82	2.82	2.73	18.09	95.22%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

The K2 Post-Survey has some potential bias included as even though the children were spread out, they verbalized their answers to almost every question. Since the group wasn't completely fluent in reading yet, we were reading as a group and I offered up any explanation needed for terminology purposes. K2 Post-Survey results can be found in Table 8. While some areas decreased in value (analysis can be found in Child Pre/Post Survey Comparisons section) from the Pre-Survey, the average value of independence went up by .26, which was one of the adapted goals for the program based on Pre-Survey results. The valuation of play remained consistent throughout the program. Child9 refused to fill out question #2, and when asked, said, "I just don't know." Child10 was not present for the Pre-Survey and the results were included in the comparison.

Table 8
K2 Post Survey Results of Study Participants Perceptions of Learning, (April 24th, 2019)

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
Child1	4	3	3	1	3	3	17	89.47%
Child2	4	3	3	3	3	3	19	100.00%
Child3	4	3	3	2	3	3	18	94.74%
Child4	4	2	2	3	3	3	17	89.47%
Child5	2	2	1	3	2	3	13	68.42%
Child6	4	2	3	3	1	3	16	84.21%
Child7	4	3	3	3	1	3	17	89.47%
Child8	3	3	3	1	3	3	16	84.21%
Child9	4		3	3	3	3	16	84.21%
Child10	1	3	3	3	3	3	16	84.21%
AVERAGE	3.40	2.67	2.70	2.50	2.50	3.00	16.50	86.84%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

After five attempts at finding the most appropriate space for the surveys, I chose to use the school cafeteria for the last Post Survey. First2 students were spread out over a massive space, each at their own table and were instructed to remain silent throughout. Those who needed help were asked to raise their hands and I would go to them. This worked out extremely well for limiting bias as they could no longer feel pressured to look at what their peers were selecting. As shown in Table 9, the high value consistency of STEAM projects and play remained, while independence remained relatively the same (2.3 to 2.27). However, Child11 was not present for the Pre-Survey, and that influenced the total to drop from 2.4 to 2.27.

Table 9
First2 Post Survey Results of Study Participants Perceptions of Learning, (April 24th, 2019)

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
Child1	4	2	2	3	3	3	17	89.47%
Child2	4	3	3	3	3	3	19	100.00%
Child3	4	3	2	2	3	3	17	89.47%
Child4	4	3	3	3	3	3	19	100.00%
Child5	4	3	3	3	3	3	19	100.00%
Child6	4	3	3	3	3	3	19	100.00%
Child7	2	2	1	2	2	3	12	63.16%
Child8	4	3	3	3	2	3	18	94.74%
Child9	4	2	2	3	2	2	15	78.95%
Child10	4	3	2	2	2	3	16	84.21%
Child11	4	3	1	3	3	3	17	89.47%
AVERAGE	3.8	2.7	2.27	2.7	2.6	2.9	16.97	89.33%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

Child pre/post survey comparisons.

The hypothesis for the Pre and Post-Surveys was that the introduction or increase in play and experiential education would also raise joy and perceived value wasn't as successful as hoped. The significance level was placed at +/- .50 and only one category across all four study groups reached that level. However, focusing in on a specific topic like independence showed that with an increase in purposeful teaching, the overall value of the topic increased as well. This is evident throughout every group and helps support the idea that the more a child is taught about a certain topic, the more he or she may ultimately value its importance.

Three of the four groups stayed within +/- 5% of their original valuations which shows little overall change from the beginning of the study. K1, however, had an increase of 8.42% and was the only group to maintain or increase value in every category. With limited scaling options on the surveys (most questions were valued at 1, 2, or 3), it made it difficult to get the best overall values for any particular category. Perhaps eliminating objective answers and using a more traditional likert scale would have provided a larger change in response. More analysis of this idea can be found in Chapter 5.

K1 and First1 both increased in overall valuation while K2 and First2 both decreased. These results were not anticipated because of the overwhelming excitement the two later groups had. They consistently inquired about the start of their respective programs. It is important to know that these surveys were not initially given to specifically support the study alone. These surveys were a guide to teaching early learners based on what is important to children and how they learn best. As an educator, not just a researcher, I found it necessary to improve upon my own pedagogical awareness for the sake of the children I serve and support.

Given the potential bias of the K1 group, the data largely showed growth from the Pre-Survey to the Post-Survey. Table 10 shows growth in every category from the beginning of the study to the end. The most significant change was in the valuation of independence (.80). While not as significant, it was encouraging to see the value of learning while having fun increase to unanimous consensus (3.0/3.0). K1 tended to enjoy unstructured time like recess and free choice games over more structured components like Makerspace and team relays. The Post-Survey showed an increase in categorical value in both independence (Indifferent to Value) and learning best through doing

(Indifferent to Value) while bringing every category to Value at the end of the study.

With 95.26% agreement in value of these categories, K1 increased their Post-Survey valuations by 8.42%, which was by far the largest out of the four groups.

Table 10
K1 Pre/Post-Survey Comparison

Survey	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
PreAVERAGE	3.90	2.90	1.80	2.70	2.30	2.90	16.50	86.84%
PostAVERAGE	4.00	2.90	2.60	3.00	2.60	3.00	18.10	95.26%
Difference	0.10	0.00	0.80	0.30	0.30	0.10	1.60	8.42%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

The comparisons in Table 11 resulted in the smallest change in value over the categories (.95%). This roughly translates into no change at all based on the high overall valuation of the Pre-Surveys; there simply wasn't much room for growth. While not meeting the significance value of .50, independence grew the most in this group, while still maintaining valuation at Value. First1 valued each category highly in both surveys

Table 11
First1 Pre/Post-Survey Comparison

Survey	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
PreAVERAGE	3.92	3.00	2.46	2.77	2.85	2.92	17.92	94.32%
PostAVERAGE	4.00	3.00	2.73	2.82	2.82	2.73	18.10	95.26%
Difference	0.08	0.00	0.27	0.05	-0.03	-0.19	0.18	0.95%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

The K2 group comparison found on Table 12 shows very little change in the group valuation of the individual topics. While some categories compared lower during the Post-Surveys, no topic dropped in overall value from Pre-Survey to Post-Survey. One participant remarked, “Why do I need to have fun to learn? I’m always learning and sometimes I’m in a bad mood, but I’m still at school.” This showed a very real understanding of the concept and helped me, as the researcher, feel more confident that they were truly thinking about their honest answers without trying to get the ‘right’ answer.

Table 12

K2 Pre/Post-Survey Comparison

Survey	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
PreAVERAGE	4.00	2.56	2.50	2.80	2.80	3.00	17.40	91.58%
PostAVERAGE	3.67	2.63	2.67	2.44	2.44	3.00	16.50	86.84%
Difference	-0.33	0.07	0.17	-0.36	-0.36	0.00	-0.90	-4.74%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

Table 13 shows the comparison results for First2. Like First1, First2 had extremely similar values from the Pre-Surveys to their Post-Surveys. In fact, valuation of independence moved up from Indifferent to Value based on the scaling criteria. While some categories compared lower during the Post-Surveys, no topic dropped in overall value.

Table 13

First2 Pre/Post-Survey Comparison

Student	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Play	Totals (out of 19)	Percentage
PreAVERAGE	3.70	3.00	2.30	2.60	2.80	2.90	17.30	91.05%
PostAVERAGE	3.80	2.70	2.40	2.70	2.60	2.90	17.10	90.00%
Difference	0.10	-0.30	0.10	0.10	-0.20	0.00	-0.20	-1.05%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	15 - 19	
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	11 - 14	
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	6 - 10	

No matter the group, each set of Post-Surveys ended with Values across each category. While a significant level of change was not obvious, it was encouraging to see

that the children eventually understood and appreciated the concepts being nurtured. Of course, data trending in the opposite direction would have been just as insightful, just not as hoped based on the research questions and hypotheses of joyful learning and results.

Parent surveys.

The parent portion of the research wasn't as detailed as initially planned. While most parents were completely willing to discuss the program in passing and through quick questions, sit down interviews were never made available due to the multitude of scheduling conflicts and the overall lack of time made available. However, almost all K/1st grade parents were willing to help by filling out a survey upon pickup. For reference, Smith Elementary has an extensive Extended Day program where over 85% of children stay past the end of the school day. Upon sign out, the children are called down to the office from their classrooms to be dismissed, so the parents took those few minutes to fill out the surveys.

During the days when the surveys were available, I was positioned at the front desk to help anyone that needed it, but only a few had clarification inquiries. For parents with multiple students in K/1st, I asked that a survey be filled out for the individual child because it can be assumed that not all children, even those in the same family, tend to enjoy the same things. Unlike the personal child surveys (first person, I), the parent surveys were about the children (third person, my child) and how they believed they valued the same categories. There was an additional, first person, question at the end about how they valued play themselves. For reference, the full parent survey can be found in Appendix C. Even though the surveys were forced choice, a few parents took

the time to write additional responses on them and when asked about how much they like to play, one parent circled ‘a lot’ but wrote: *Just don’t have/make much time for it.*

Based on the results of the surveys, parents assumed high child valuations for each category. All of the parent responses were broken down into three groups: Anonymous (parents who chose not to put their names on the surveys), KParent (parents of Kindergarteners who added their names), and 1stParent (parents of 1st Graders who added their names). Table 14 shows the cumulative parent responses.

Table 14
Parent Surveys

Parent	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Child Play	I Play	Totals (out of 22)	Percentage
AVERAGE	3.90	2.92	2.84	2.79	2.92	2.87	2.28	20.53	93.34%
VALUE	3.0 - 4.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0	2.33 - 3.0		
INDIFFERENT	2.0 - 2.9	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32	1.66 - 2.32		
DOES NOT VALUE	1.0 - 1.9	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65	1.0 - 1.65		

One area of interest was the I Like To Play (Table 13: *I Play*) category. This was the only indifferent category valuation. With limited knowledge about the anonymous forms, it is hard to know about which grade level the parents were responding. However, the KParents had 80% say that they liked to play a lot, whereas the 1stParents had only 60% say that, and 26% of the Anonymous parents like to play a lot. Based on social and educational norms in America, an attempt to begin to understand the abstract world in 1st grade, children are moved slowly from play “into a world of symbols and concepts” (PBS, 2012). This change in paradigm from a more playful and personalized form of

education in Kindergarten could be making its way into the house, as well, as America attempts its version of trickle-down-education where more academics and less play are deemed crucial to success. Ginsburg (2007) paints a vivid portrait of what it is like to be a parent in America:

Parents receive messages from a variety of sources stating that good parents actively build every skill and aptitude their child might need from the earliest ages. They are deluged in parenting magazines and in the media with a wide range of enrichment tools and activities that tout their ability to produce super-achieving children. They read about parents who go to extreme efforts, at great personal sacrifice, to make sure their children participate in a variety of athletic and artistic opportunities. They hear other parents in the neighborhood talk about their overburdened schedules and recognize it is the culture and even expectation of parents (p. 185).

The idea that more is better for children can often lead to emotional neglect and this hurried lifestyle is contributing to stress, anxiety, and even depression (Ginsburg (2007). Instead of a natural scaffold in education, we are seeing parabolic inclusions of topics and curricula to keep up with the fast-paced environments of the American workforce. Children are coming home to professional parents and have “received an unintended message from this hurried, intense preparation for adulthood” (Ginsburg, 2007, p. 186).

In an attempt to gain a better understanding of parent perceptions, the surveys offered me a chance to see if this was the case based on adult playfulness levels. While it does not prove that work and play are juxtaposed in society, the two are surely not being

mixed as much as we think. The saying, *You've gotta work hard to play hard*, should be updated to fit 2019 and offer the sense that playing hard *is* working hard.

Parent/child survey comparisons.

One issue that is common amongst educators is the lack of communication or incorrect information between parents and teachers. The perceived partnership between home and school can be detrimental to children if bad information is given (or no information at all). At Smith Elementary, the doors open at 7:00 AM for breakfast, and the academic day runs from 8:00 AM – 3:30 PM, with Extended Day (3:30 PM – 6:00 PM) offered to 100% of families as well at no extra cost. This opens up a potential of eleven-hour days for any/all children whose family needs it. Given the average student is at school for eight hours per day, this is 40 hours spent every week with Smith Elementary faculty and staff. Our data suggest that the average Smith Elementary student spends ten hours per day, or 50 hours per week at school, which can almost double the amount of non-sleep time spent at home (compared to modern sleep needs for K/1st students and outside activities).

This type of 'time sharing' is important to understand, so honest and consistent communication is necessary for a successful partnership. The reason it was important to assess the parent information was to acknowledge potential inconsistencies with what parents believe about their children, and how their children actually feel about certain topics and ideas. This process of identifying assumed traits can prove valuable if done on a regular basis throughout a spectrum of options in children's lives. It can allow quick feedback for parents and teachers to make any necessary updates and offer children more chances to be open and honest about their feelings towards what is being offered. As

referenced in the Pre/Post-Surveys, intentionality can make an impact in the beliefs of children and vice-versa. As parents and teachers, we cannot force children to like or value something, but we can influence positive change by respecting the individuality of each child. We can use what we know to be important and mix it with what we know they will enjoy for the best possible results.

Based on the study's design, there was an attempt to see how closely parents understood the learning patterns of their children. Table 15 compares five Kindergarten parents' perceived child valuations to their actual child's Post-Survey valuations.

Table 15
KParent/Child Survey Comparison

Student/Parent	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Child Play	Total	Percentage
K2Child5	2	2	1	3	2	3	13	68.42%
KParent1	4	3	3	3	3	3	19	100.00%
KParent2	4	2	3	3	3	3	18	94.74%
K2Child4	4	2	2	3	3	3	17	89.47%
KParent3	4	3	3	2	2	3	17	89.47%
K2Child7	4	3	3	3	1	3	17	89.47%
KParent3	4	3	3	3	3	3	19	100.00%
K1Child2	4	3	3	3	3	3	19	100.00%
KParent5	4	3	3	3	3	3	19	100.00%

The additional parent question of liking to play was left off since there could be no comparison to what the child participants had available to them. There was no comparison for KParent2 as the child did not participate in the study. This was made

clear and the parent still offered to help the study in this way. The data show that parents, on average, believe their children had higher values on the given topics than their children actually had. Misconceptions can play a crucial role in how learning develops at home and in school. Table 16 shows similar results as the majority of the 1st Grade parents assumed higher valuations overall compared to their children (based on First 1 Post-Survey results).

Table 16
First Parent/Child Survey Comparison

Student/Parent	STEAM Projects	STEAM Useful	Independence	Learning/Fun	Learn/Doing	Child Play	Total	Percentage
First1Child9	4	3	3	3	3	3	19	100.00%
1stParent1	4	3	2	3	3	3	18	94.74%
First1Child11	4	3	3	3	3	3	19	100.00%
1stParent2	4	3	3	3	3	3	19	100.00%
First2Child9	4	2	2	3	2	2	15	78.95%
1stParent3	4	3	2	3	2	3	17	89.47%
First1Child4	4	3	3	3	3	3	19	100.00%
1stParent4	4	3	2	3	3	3	18	94.74%
First2Child9	4	2	2	3	2	2	15	78.95%
1stParent5	4	3	3	3	3	3	19	100.00%
First2Child4	4	3	3	3	3	3	19	100.00%
1stParent6	4	3	3	3	3	3	19	100.00%
Child3	4	3	2	2	3	3	17	89.47%
1stParent7	4	3	3	3	3	3	19	100.00%

Kindergarten play assessments.

In partnership with the Kindergarten mathematics instructor, I was able to use a curriculum-driven assessment for all students, play and non-play. The assessment was

created entirely by the teacher in accordance with her curriculum at the time that also matched the report card design. The question styles included fill-in-the-blank, linear addition/subtraction equations, pattern completion, and multiple choice options and had a total of 18 possible points. One assessment was given on the last play group session day, after they played for an hour. The children didn't know about the assessment and were asked to complete it within ten minutes before returning to class. In essence, it was supposed to act as a *pop quiz* with the intention of raising stress and surprise, as tests, 'popped' or otherwise are prone to do.

Table 17 shows K1 group assessment totals (number of correct answers and the corresponding percentage). Even with the surprise of the assessment, none of the students complained or balked at the idea of doing academic work during their playtime.

Table 17
K1 Play Assessment

Student	Correct (out of 18)	Percentage
Child1	17	94.44%
Child2	18	100.00%
Child3	15	83.33%
Child4	14	77.78%
Child5	17	94.44%
Child6	18	100.00%
Child7	18	100.00%
Child8	17	94.44%
Child9	18	100.00%
Child10	18	100.00%
AVERAGE	17	94.44%

With an average of 17/18 (94.44%), the first session data supported the hypothesis that joyful learning leads to better curricular outcomes compared to traditional test-taking norms of academic-only means (traditional testing ideals). Table 18 shows K2 group

assessment totals (number of correct answers and the corresponding percentage). K2 had an average of 13.3/18 (73.89%). However, the two students (Child1 and Child9) with the lowest scores (2 and 4) had the exact same outcomes when given the assessment on a non-play day. Child9 asked to use the restroom and was gone for six out of the ten minutes. Child1 stayed stuck on one particular questions without attempting to fill in any other answers that may have been known. By removing those scores, the rest of the group averaged 15.88/18 (88.19%).

Table 18

K2 Play Assessment

Student	Correct (out of 18)	Percentage
Child1	2	11.11%
Child2	15	83.33%
Child3	15	83.33%
Child4	17	94.44%
Child5	17	94.44%
Child6	16	88.89%
Child7	16	88.89%
Child8	15	83.33%
Child9	4	22.22%
Child10	16	88.89%
AVERAGE	13.3	73.89%

Two students did not realize the quiz had a back, and came up to complete it after initially turning them in. I gave no help to students during this time, other than helping to sound out certain words. The average between both groups was 16.50/18 (91.67%) and represents the averages of the K1/K2 Play Assessment scores, with Child1 and Child9 removed from K2 for the aforementioned reasons.

Kindergarten non-play assessments.

Since Kindergarten is split into two, fifteen person groups, it was hard to find a time where all of the students were together in the same space at the same time. Usually this meant lunch or recess, but I was able to work with the teachers to set aside ten minutes when the students were supposed to be transitioning from class. They chose to start their classes five minutes late that afternoon to support the study assessment.

As a whole group, the children were asked to find spaces away from one another in the Language Arts room. Some chose tables while others chose clipboards and moved to a space on the floor. This assessment was the same assessment given to groups K1 and K2, so they had prior knowledge of it, but this assessment was sprung on them without the benefit of having a play group or recess directly before taking the test. The whole group averaged 15.03/18 (83.52%), which was 1.47 (8.15%) fewer correct answers than the average play group assessments. The assessment was given at 3:00 PM and one child fell asleep, but those data were removed from the overall averages.

Table 19 shows the group of students who were not participants in the play sessions. As no personal data or information outside of their normal education were being used, it was important to find baseline information to help support or refute the claims of this research. NonPlayChild7 fell asleep during the assessment and without that score, the group average moves to 14.8/18 (82.10%).

Based on the three assessment averages with the aforementioned removed scores, Table 20 shows the averages of each assessment type. The results clearly represent growth immediately after play sessions compared to the traditional style of test taking. I

will discuss this phenomenon in more detail in Chapter 5, but the preliminary assumption was playing before an academic assessment can increase overall scores.

Table 19
KNon Play Assessment

Name	Raw (out of 18)	Percentage
NonPlayChild1	10	55.56%
NonPlayChild2	9	50.00%
NonPlayChild3	18	100.00%
NonPlayChild4	14	77.78%
NonPlayChild5	15	83.33%
NonPlayChild6	15	83.33%
NonPlayChild7	4	22.22%
NonPlayChild8	16	88.89%
NonPlayChild9	18	100.00%
NonPlayChild10	18	100.00%
AVERAGE	13.70	76.11%

Table 20
Group Average Comparison

Group	Raw (out of 18)	Percentage
K1 Play	17	94.44%
K2 Play	15.88	88.19%
Whole Group Non Play	15.03	83.52%

Report cards overall.

Based on the original research question of how test results and reports of the playing students compared to their non-playing peers, the detailed analysis will be broken down into two parts: overall assessment (academic *and* character) and character-only assessments based on the five criteria of CARES. The hypothesis at the beginning of the

study was asserted that the increase of play and experiential education would have positive impacts on academic learning. However, after the study was finished, and cumulative, end-of-year reports analyzed, the data supported a new idea that increased play and experiential education did not detract from academic progress. More detailed analysis on this phenomenon can be found in Chapter 5. The study took place during core classes like math, science, and language arts, and no discernable changes in final grades for the participants were evident based on non-playing children, which constituted the makeup of traditionally developing K/1st Grade students. When analyzing character-only reports, there is a clear distinction between joyful learning opportunities and character growth. The findings can be found in the CARES tables: Table 22, Table 24, Table 26, and Table 28).

With over 60 objective assessments spread between seven content areas, children are graded with one of the following marks: Area of Concern (AC), Developing Toward Expectations (DE), Meets Expectations (ME), or Exceeds Expectations (EE). If the teacher did not assess or have data in a particular content area, s/he would put N/A. With a teacher-written recap in each content area (Advisory - character development, Reading, Writing, Mathematics, Science – STEAM, Spanish, and Music and Movement), Kindergarten reports allow a complete view of what is expected to be successful, or, meet expectations (ME) for all children. Kindergarten has 30 students, and I was able to split the groups into three sets of ten based on the ten non-play students, and the remaining 20 play participants. This makes each sample size identical (10:10:10) and can offer the clearest results.

Table 21 shows the overall averages (academic and character) of K1 from second quarter (Q2) to third quarter (Q3). As in the survey results, each grade was matched with a corresponding numerical value (N/A – 0, AC – 1, DE – 2, ME – 3, EE – 4). It can be assumed that from one assessment period to another, there will be some natural advancement and maturity, however, the data show that all K1 children increased their overall scores in some capacity. I used the Non-Play overall average (+.17) as the baseline for a traditionally developing Kindergartener. This supports the notion that no overall detracting was evident. The standard deviation for the difference was calculated at .076.

Table 21
K1 Report Card Averages

K1 Play Group	Q2	Q3	Difference	Overall Average
Child1	2.32	2.58	0.26	0.15
Child2	2.35	2.48	0.13	
Child3	2.65	2.67	0.02	
Child4	2.48	2.65	0.17	
Child5	2.6	2.77	0.17	
Child6	2.48	2.72	0.24	
Child7	2.5	2.72	0.22	
Child8	2.67	2.73	0.06	
Child9	2.57	2.65	0.08	
Child10	2.67	2.78	0.11	

To support the institutionalized understanding of education, it was important to not only include, but separate social/emotional learning on its own as an area of potential advancement as teachers continue into the age of educating the whole child while not focusing on academic advancement only. Table 22 shows K1 results from Q2 to Q3, but only within the CARES character section of the reports.

Table 22
K1 CARES

K1 Play Group	CARES	Average
Child1	0.8	0.30
Child2	0.4	
Child3	0.4	
Child4	-0.2	
Child5	0.2	
Child6	0.2	
Child7	0.6	
Child8	0	
Child9	0.6	
Child10	0	

When comparing these data to K1 overall reports, they show that average CARES scores doubled the overall cumulative average. This is an indicator that play and experiential learning may have a more important impact on social/emotional development.

K2 (+.17) had similar results to K1 (+.15) in overall average increases and can be seen in Table 23. Three children had >.25 increase which is significant growth in only one quarter while the group carried a standard deviation of .095. Table 24 shows CARES averages were also larger than overall averages.

Table 23
K2 Report Card Averages

K2 Play Group	Q2	Q3	Difference	Overall Average
Child1	2.53	2.63	0.10	0.17
Child2	2.37	2.57	0.20	
Child3	2.67	2.77	0.10	
Child4	2.35	2.67	0.32	
Child5	2.58	2.62	0.04	
Child6	2.53	2.7	0.17	
Child7	2.63	2.7	0.07	
Child8	2.43	2.73	0.30	
Child9	2.1	2.37	0.27	
Child10	2.67	2.78	0.11	

Table 24
K2 CARES

K2 Play Group	CARES	Average
Child1	0	0.20
Child2	0	
Child3	0	
Child4	0.2	
Child5	0.2	
Child6	0.4	
Child7	0	
Child8	0.8	
Child9	0.4	
Child10	0	

Table 25 shows the Non-Play average growth from Q2 to Q3 (+.17) with a standard deviation calculated at .067 and can be assumed that this is a standard growth from a traditionally developing Kindergarten student. However, Table 26 shows crucial data in a lower overall average in CARES growth compared to overall growth (.17 to

only .1). This helps support the idea that an increase in joyful learning increases social/emotional growth at a higher rate in Kindergarten.

Table 25
KNon-Play Report Card Averages

Non-Play Group	Q2	Q3	Difference	Overall Average
Child 1	2.25	2.43	0.18	0.17
Child 2	2.25	2.47	0.22	
Child 3	2.68	2.77	0.09	
Child 4	2.33	2.5	0.17	
Child 5	2.52	2.63	0.11	
Child 6	2.58	2.77	0.19	
Child 7	2.35	2.58	0.23	
Child 8	2.17	2.48	0.31	
Child 9	2.63	2.72	0.09	
Child 10	2.58	2.7	0.12	

Table 26
KNon-Play CARES

Non-Play Group	CARES	Average
Child 1	0.4	0.10
Child 2	0.2	
Child 3	0	
Child 4	0	
Child 5	-0.4	
Child 6	0	
Child 7	0.2	
Child 8	0.6	
Child 9	0	
Child 10	0	

Like Kindergarten, 1st Grade had over 60 objective assessments spread between eight content areas (same as Kindergarten with the addition of Violin). 1st Grade has 29 students, but the sample groups were not as evenly split as Kindergarten. The sample

sizes were 13 (First1): 11 (First2): 5 (Non-Play), which needs to be taken into account when assuming traditionally developing benchmark of +.18 in overall growth and +.16 in social/emotional growth.

Table 27 shows the overall average growth from Q2 to Q3 for First1. With the growth significance set at $>.25$, the data show that as a group, First1 averaged an impressive .26 overall, with eight out of thirteen being at or above the average and the standard deviation calculated at .064.

Table 27
First1 Report Card Averages

First1 Play Group	Q2	Q3	Difference	Overall Average
Child1	2.35	2.68	0.33	0.26
Child2	2.49	2.78	0.29	
Child3	2.25	2.53	0.28	
Child4	2.68	2.83	0.15	
Child5	2.64	2.90	0.26	
Child6	2.44	2.62	0.18	
Child7	2.67	2.93	0.26	
Child8	2.33	2.53	0.20	
Child9	2.62	2.84	0.22	
Child10	2.63	2.96	0.33	
Child11	2.31	2.49	0.18	
Child12	2.71	3.06	0.35	
Child13	2.25	2.57	0.32	

While First1 significantly increased overall academic performance, the average social/emotional growth was not as large. Table 28 shows the overall average was .05. Five of the thirteen children were already Meeting Expectations in Q2, thus had very little opportunity for growth. This was also the first time that I saw multiple children decrease in character development from Q2 to Q3.

Table 28
First1 CARES

First1 Play Group	CARES	CARES AVG
Child1	-0.20	0.05
Child2	0.00	
Child3	0.00	
Child4	-0.40	
Child5	0.00	
Child6	0.00	
Child7	0.00	
Child8	0.40	
Child9	0.00	
Child10	0.20	
Child11	0.40	
Child12	0.60	
Child13	-0.40	

Since the study was complete, we had one student (Child8) leave Smith Elementary for unspecified mental health and family support. Those data are included to show a troubling pattern from one quarter to the other but were not averaged in with the overall data. This was a terribly sad event, but it is important to note that being able to quantify certain trends may lead to more social/emotional and mental health support for other children and families struggling with these issues.

Table 29 represents First2 overall growth from Q2 to Q3. The averages of both First Play groups were identical at .26. However, the standard deviation of First2 was significantly larger than First1 at .11.

Table 29
First2 Report Card Averages

First2 Play Group	Q2	Q3	Difference	Overall Average
Child1	2.28	2.39	0.11	0.26
Child2	2.74	2.90	0.16	
Child3	2.42	2.87	0.45	
Child4	2.44	2.70	0.26	
Child5	2.24	2.37	0.13	
Child6	2.66	2.87	0.21	
Child7	2.60	2.97	0.37	
Child8	2.49	2.12	-0.37	
Child9	2.60	3.01	0.41	
Child10	2.83	3.10	0.27	
Child11	2.51	2.76	0.25	

As in Table 29, the averages of Table 30 were calculated without Child8's data included. Even with that information removed, eight of the ten students either decreased or showed no growth from Q2 to Q3. This was unexpected based on prior groups as this was the first time the group average decreased from one quarter to the next.

Table 30
First2 CARES

First2 Play Group	CARES	CARES AVG
Child1	-1.00	-0.12
Child2	-0.20	
Child3	0.80	
Child4	-0.20	
Child5	-0.40	
Child6	-0.40	
Child7	0.20	
Child8	-1.20	
Child9	0.00	
Child10	0.00	
Child11	0.00	

The 1st Grade Non-Play group had the smallest sample size of any group, which also has the largest standard deviation of any group results at .13. Table 31 represents a small data collection of what could be considered traditionally developing 1st Grade students. Compared with the other 1st Grade groups, the overall increase looks to have been lessened, but when comparing with the three Kindergarten groups (.15, .17, .17), it seems to be consistent with similarly aged children.

Table 31
First Non-Play Report Card Averages

Non-Play Group	Q2	Q3	Difference	Overall Average
Child1	2.65	2.99	0.34	0.18
Child2	2.28	2.31	0.03	
Child3	2.29	2.42	0.13	
Child4	2.66	2.73	0.07	
Child5	2.42	2.76	0.34	

Table 32 shows that within the Non-Play group, four of the five children increased in at least one CARES category. Consistent with the 1st Grade play groups and the Kindergarten Non-Play group, the overall social/emotional averages were less than the overall averages.

Table 32
First Non-Play CARES

Non-Play Group	CARES	CARES AVG
Child1	0.20	0.16
Child2	0.00	
Child3	0.20	
Child4	0.20	
Child5	0.20	

Engagement of learners.

The first, and immediate theme was enthusiasm of participation. I found that I needed to keep field notes between sessions to keep up with the inquiries about my interventions. Each day when the children saw me, they were constantly asking if/when we were having our play sessions. This happened dozens of times each day between each grade, whether we were playing or not, and it lasted throughout the study (Qualitative Analysis, Study Duration). I was approached several times by non-K/1st grade students as well. It was expressed on multiple occasions, through multiple media, that participation would be voluntary but once removed, one had to stay removed or the sequencing wouldn't work out for data collection. Out of the four children who chose not to participate, only one continuously asked to rejoin, but other arrangements were made to support his interest and enthusiasm.

The second theme of the play groups was behavior. Since stakes were high (relative to a kindergartener and first grader), behavior concerns were resolved on the first occasion due to the potential loss of privilege. Most students took this program very seriously and were treating it as an exclusive program in which only they could be involved. Of course, that is only partially true since the study was only open for K/1st students, but ultimately, this program will make its way throughout the school in an attempt to bring more play into all Smith Elementary classes.

The third main theme was student interest. The study evolved very quickly from having one semi-structured component based on academic, social, or emotional development, to a split of guided play and free choice. This kept the purposeful play in tact with classroom scopes but also allowed the children to make independent choices

based on their always-changing ideas of what's fun. Other areas of interest came from non-play participants of all ages (adults included). Smith Elementary serves 200 students on a relatively large campus, thanks to our recent Early Childhood Center expansion in 2018, but paths are crossing all day long in a busy school of specialist teaching philosophies. This means more transitions and fewer open spaces at any given time. Because of the consistent mobility of our groups, we constantly found ourselves getting bumped from room to room, or we ended up sharing the space if both parties agreed. This always had the other children asking what we were doing, since I'm not a teacher after all. Adult interest typically came from teachers during their 'prep time' when seeing (or hearing, more likely) us. These were quick and helpful ways to share ideas, successes, and failures about the program.

Qualitative journal analysis.

Each play session was an attempt to bring something new, exciting, or sometimes familiar to the groups. Forcing children to play is just as intrusive as forcing children to do anything else they simply would not want to do, therefore I felt it was necessary to take notes on perceived enjoyment and participation to adapt and condense the sessions to be as efficient and effective as possible. For all four groups, I started them with something that would challenge their cooperation and perseverance (grit). For Kindergarten, I formed them into teams for a domino-stacking competition. For 1st Grade, they began their first sessions with relay races. I wanted to focus in on CARES as much as possible, so I began with cooperation.

Kindergarten.

Themes emerged quickly from day one in Kindergarten. Most children needed a lot of emotional support when encountering failure (dominoes falling) and when working with their teammates. Even something as simple as passing out the dominoes led to arguments about who should be able to do that and how it was not fair to the others. Very few positive phrases were spoken at the beginning because each child had his/her opinion on how the task should be completed. Once plans were in place, there were some genuine moments of cooperation. When a child left one of the groups, the others stopped working to comfort him. Other groups looked at similar opportunities to move forward without the need to be distracted from the objective. No team completed the task and the limited time of teamwork was sandwiched between arguments and tears. As we did in every session, at the end we discussed the good and the bad from the day, and how we can support each other moving forward. In an attempt to help, a student suggested “instead of yelling at me, ask me for help and I’ll help you” which didn’t go over very well with the group. It was an honest suggestion that led to more arguments about how that child was not really trying to help in the first place. A decent amount of introspection was necessary but that is hard to do at six-years-old. At the end of the first session, I gave the students the option to join again or remove themselves if they weren’t enjoying the program and two students (one child from each group) left. Both asked to join later, but the data would not support fluid participation, so I had to decline. Both sets of parents were notified and understood.

I knew I wanted to keep dominoes in rotation for both groups based on the level of difficulty, the necessity of teamwork, and the need for an unambiguous outcome.

From there, both groups had similar setups, but were updated based on the group dynamics and how the study could best support them. K1 had positive overall reactions to dominoes, so I used competition as a motivator for the second day. We played a game called ‘Hot Foot’ where there were two teams on either half of the gym (we needed the slick surface), sliding beanbags across the floor in an attempt to hit the feet of an opposing player. However, to promote the idea that losing or getting out was not such a big deal, each player could earn his/her way back in with a set of physical tasks like five pushups, ten jumping jacks, or a lap around the gym. Without finality, the children became increasingly content with getting knocked out of the game. This type of attitude towards failure is something to note as education does not often allow students to earn their way back in. In his book, *Failing Forward: Turning Mistakes Into Stepping Stones*, John Maxwell (2007) represents failing as a cycle towards success (p. 188 – 189):

Finalize your goal.
Order your plans.
Risk failing by taking action.
Welcome mistakes.
Advance based on your character.
Reevaluate your progress continually.
Develop new strategies to succeed.

This mindset towards failure matches up closely with Duckworth’s and Lee’s (2018) theory on the status quo and drive towards continuous improvement. If our mission as educators is to prepare students for what’s next, these are superb examples on how to start the process as early as possible.

Contrary to K1, K2 had a very difficult time with dominoes, so I moved away from competition and decided more choice options fit this group. We went to the school’s MakerSpace and opened up three creation stations with Legos, butcher paper

and markers, and MakerSpace materials. The children were overjoyed and split between Legos and MakerSpace. A few ventured over to markers for a bit, but ultimately joined or rejoined one of the other two stations. Smith Elementary takes a hard stance on disallowing toys or games from home, but one of the most popular toys in our school is Bey Blades (spinning battle tops), so a group of boys decided to make their own using Legos. It was their way of circumventing the rules while participating in something they loved to do. They spent the entire hour searching for the perfect pieces, testing them out, battling each other, and then starting the circuit over again to perfect the ultimate top. This was the most focused and engaged I had ever seen this particular group. In the MakerSpace area, hot glue was being spread across a plethora of raw materials for the sake of using hot glue. There were no issues sharing the single glue gun, nor were there any injuries. Both were major successes based on the age group and tendencies for accidents.

Another session in which both Kindergarten groups participated was big blocks. The school had recently purchased a set of indoor/outdoor wooden building blocks and we were some of the first to use them so there were no preconceived notions of how to use them or what to build with them. The blocks were transported between two long carts and a small wheelbarrow that came with the set. This led to the only rule for the groups: no one could run with someone else in the bucket of the wheelbarrow. We held this session in the indoor common space of the Early Childhood Center (ECC). It was for safety reasons and was important to enforce as a few students ignored/forgot that rule a few times. No one misused the wheelbarrow twice because they would have lost the privilege after being reminded a second time. The rest of the children built forts and

towers with the blocks, while some noticed notches carved out for a large ball maze. By the end of the session, K1 had turned the ECC's floor into lava, and the only way across was to complete the obstacle course made from random blocks and other wooden pieces. Since there was only one rule, everything that happened during this session was an impromptu lesson in cooperation and self-control as one did not want to fall into the lava. K2 utilized the wheelbarrow in the same fashion, but turned their focus on a massive ball maze. Their efforts were unsuccessful based on the intended results, but the introduction and continuation of failure neither upset nor deterred the group from continuing course.

The rest of the sessions for Kindergarten were split primarily between MakerSpace and recess. Based on the results of the pre-surveys, Kindergarten as a whole did not value independence, so it was an attempt to open up that critical skill in a joyful way. From the beginning, I defined independence as 'the ability to solve problems by yourself' and MakerSpace and recess offered the abilities for them to do just that. With low stake offerings, the children were able to create, execute, and enhance ideas of what they wanted to do in that moment. For the last few sessions, my goal was to remain as nonintrusive as possible while the children led the session designs. This led to fewer arguments, an increase in participation, and a higher perceived sense of joy among the groups. Based on the post-survey results, the increase in student choice and decrease in structured design supported overall valuation of independence and joyful learning inside school.

First grade.

The first session for 1st Grade was similar. Instead of stacking dominoes, they were split into teams and had relay races around the outdoor bike track. They were given

giant bouncy balls to hop on, tricycles to ride backwards, and large cups with strings attached which acted like a set of stilts. Before each group went, we had a discussion at the beginning about cooperation, teamwork, and sportsmanship and what that looks like and sounds like to encourage the other children. The preliminary discussions seemed to help because most children, whether they won or lost, kept their composure and their spirits high. Not all children were encouraged or encouraging and like Kindergarten, it was hard for some children to get beyond losing or simply ‘not being good’ at something. We spoke at length about how losing in situations like that do not ultimately matter with the stakes so low. It was our introduction into grit and how to overcome failure. Overall, the children had valid arguments for being upset. One child mentioned someone not taking the race seriously and that costing them the win. The tasks were somewhat difficult so it was hard to tell if any one child was trying to mess up or not, but given the outcomes and conversations after, winning was something that all of the children set out to do from the start, so it did not seem likely.

MakerSpace was a very popular choice with 1st Grade. On several occasions, both groups specifically asked if they could go there instead of what we had planned, or at least split our time in half. Considering the continued success each group was having, I supported their choices and we ended up in MakerSpace in over half of the sessions. Because the MakerSpace had more than just raw materials, the children who didn’t want to create had the option to play with Legos, k’nex, color, or use more scientific materials like Snap Circuits, 3D mazes, or creation kits to design certain objects like planes or dinosaurs. Ultimately, the majority of the children chose MakerSpace because they could take their creations with them. The other stations required a cleanup process that

returned all of the materials. An area of acknowledgement was the cleanup process during these days. To some, it looked like the children were blatantly ignoring instructions to clean up. However, to others (and I tried to be in this group), it looked like the children were so focused on their creations and having so much fun, they were having a hard time cutting their creation time short. Either way, it is important to understand that the 'R' in CARES stands for responsibility and it is defined as doing the right thing when it is asked of you or not, and when it was time to clean, not all students followed through with that rule.

In both groups, excitement grew each week based on the number of times I was asked, "do we have play group today" (multiple children, qualitative journal, 2018/2019). There were many days where I couldn't walk past a group of Kindergarten of 1st Grade students without one inquiry or another based on the study. Most of them came from participants, but I received a fair amount of questions from non-participants as well. It was hard explaining to children whose parents did not sign the consent forms *why* they couldn't join, but I did my best to join recesses and other unstructured times to support the clear wants and needs for such inclusions. After all, I do what I do for the service of others, not only to collect data.

I noticed I found myself inside classrooms at a higher rate of occurrence after the program had ended than before it began. This was due to the fact that I recognized a need and wanted to support it, and it also let other teachers know that I was both interested and available to help when possible. I believe this type of collaboration could lead to stronger school culture, improve student/staff relationships, support teacher retention, and help introduce new ideas into curriculums across schools.

Teacher questionnaire results.

Smith Elementary uses the specialist model of teaching, and Kindergarten and 1st Grade Students see a different teacher for each subject being taught. With so many teachers seeing the same students, I found it important to see if they could identify changes in academic performance or behavior while the study was running. The full teacher questionnaire can be found in Appendix E, and for reference, it was emailed to all of the teachers that see K/1st Grade students each week. In fact, one of the participants created an online form since she said it would be easier for the majority of teachers to be able to input responses on a live document. Unfortunately, only three questionnaires were returned but within those responses, themes were common and consistent across the three teachers.

Since the study required a minimum of six hours over each quarter, I generally saw the students once per week at the beginning, but would sometimes be able to hold sessions two times in a week. My work schedule is 10:00 AM – 6:00 PM, with only a few hours of overlap during the academic school day (8:00 AM – 3:30 PM). Factoring in set programs like lunch, optional programs like Extended Day, and my own professional schedule, it was difficult to maintain a consistent schedule that fit everyone. Ultimately, Kindergarten was pulled from either Language Arts or Science and 1st Grade was pulled from Language Arts or recess. Preapproval was necessary from the school, parents, teachers, and children to make this all happen since some of their core classwork would have been cut. However, the results showed consistent results that the program did not detract from any subject area, and increased social/emotional growth over the course of the study.

The main partners in this study were the four advisory teachers that made up Kindergarten and 1st Grade. The remaining teachers had little-to-no-input with the program design. Those who responded were all advisory teachers and they each identified joyful learning, positive growth, and professional support as key themes. An unintended response from each teacher revolved around having smaller class sizes during my sessions. I pulled roughly five students out of a classroom of fifteen, and sometimes thirteen students when they were in whole groups of about thirty. The decrease in students opened each teacher to more impactful styles of learning since they could focus in on a small number of children.

When asked about the impact the program had as a teacher, one teacher responded, “This allows me to focus more attention on my students in the classroom. It also creates a calmer atmosphere for the students that are in the room and gives them more freedom of what they would choose to work on. I am only able to do this with smaller ratios of students” (Teacher 1, Written Questionnaire, 2019). As an unintended response to the program, it will be hard to identify this as a possibility of a similar program study because someone will need to be able to take a group of children from the classroom, and staffing in other settings may not be like we had in our school. Another teacher wrote, “when students return from play group they are always in a good mood and excited to share what they did” (Teacher 2, Written Questionnaire, 2019). The peripheral impacts of the group support the larger thematic view of social/emotional and academic growth, but were condensed down to the day-to-day as well, meaning, there were immediate positive effects of the study.

Joyful learning was a key component to the study's design and even when academic improvement was not as obvious, the idea of fun remained clear. When asked about the academic impact of the specific participant group, one teacher noted, "I do not see direct academic performance based on this playgroup. I do notice that students are excited to participate and they tell me about all of the fun things that you do" (Teacher 1, Written Questionnaire, 2019). A more supportive response referenced the ability to learn as an increase in academics as opposed to the academic results themselves, "Students who attend the play group have shown improvements in their academics. I have seen that students who come back from the group are more focused and able to sit for longer while completing their assignments" (Teacher 2, Written Questionnaire, 2019). Each teacher gave great feedback on how a program like this could be improved, but overall, they all said that this is something that not only could be, but should be introduced into the Early Childhood curriculum.

Chapter 5: Concluding Discussion

Conclusions

The purpose of this mixed methods study was to measure the impact of joyful learning approaches in early childhood students, specifically in Kindergarten and 1st Grade. This chapter includes major themes, reported results, obstacles and limitations to the study, and recommendations for any potential future study done by me or anyone else interested in play-based approaches to learning and also contains discussion and possible options for future studies to help answer the research questions.

1. Does play-based, experiential education support joyful learning and facilitate social, emotional, and academic growth of early elementary students?
2. Will the introduction of play and experiential education (practical, hands-on, kinesthetic projects) in the early childhood setting support a more curious and creative child?
3. How do test results and reports (grades/character) of the playing students compare to their non-playing peers?
4. Does play at school offer any different, positive relations (grades, social-emotional, character growth) from those who only receive play at home (or outside the school)?

It is also important to understand the developmental differences and expectations between Kindergarten and First Grade students as well as the consistently growing expectations between them. The results from Table 33 (Bassok, Latham, and Rorem, 2016) show how teacher expectations have changed over time in relation to what they believe children should know or learn while in Kindergarten. In every category, teacher expectations increased, providing further evidence that suggests elementary curricula is being pushed down.

The results from Chapter 4 offer clear evidence that by increasing play, experiential learning styles, and joyful approaches to learning, what we believe to be qualifiers for academic success can be achieved. Unfortunately, those types of child-interest areas are being cut over time as well and activities such as art, dramatic play, and nature areas are losing importance (Bassok, Latham, and Rorem, 2016). If given the opportunity for an academic institution to include this brand of education, it would only

make sense to think logically about not only *what* is being offered, but *why* it's being offered. It is clear that the American education system has an end goal based on needs of the job force and social wellness and those needs can be met through practical endeavors in teaching.

Table 33
Kindergarten Teachers' Beliefs About School Readiness and Kindergarten Learning, 1998 and 2010

Belief	1998	2010	Difference
Readiness beliefs (percentage indicating they are or strongly agree)	31	70	49***
Most children should learn to read in kindergarten			
Parents should make sure their kids know the alphabet before they start kindergarten	29	62	33***
Children who begin formal reading and math instruction in preschool	34	64	30***
will do better in elementary school	63	83	20***
Attending preschool is very important for success in kindergarten	35	40	5
Homework should be given to kindergarten children almost every day			
How important do you believe the following characteristics are for a child to be ready for kindergarten? (percentage indicating skill is very important or essential)			
Academic skills			
Knows most letters	19	48	28***
Identifies primary colors and shapes	31	59	28***
Can count to 20	13	35	22***
Self-regulation			
Can follow directions	78	91	13***
Sits still and pays attention	61	77	16***
Finishes tasks	54	65	11***
Is not disruptive	79	89	10***
Social skills			
Takes turns and shares	73	87	14***
Is sensitive to others' feelings	62	72	10***
Other skills			
Good problem-solving skills	36	49	13***
Able to use pencil and paintbrush	35	68	33***
Communicates verbally	85	92	7***
Knows the English language	47	59	12***

Note. Samples limited to kindergarten teachers in public schools. All means are weighted at the teacher level using appropriate sampling weights. Figures shown are percentages rounded to closest percentage point. * $p < .05$. ** $p < .01$. *** $p < .001$

Note. Reprinted from "Is Kindergarten the New First Grade?", by Bassok, D., Latham, S., & Rorem, A. (2016). *AERA Open*, 1, p. 6

Being involved so closely with the students and teachers of Smith Elementary, some interpretations that I have developed remain closely related to Gardner's (1999)

theory of Multiple Intelligences. When I was a classroom teacher (2010 – 2015), I never had much of a reason (or much additional time) to analyze assessments, reports, and individual interests like I had during this study. Due to that fact, I missed plenty of patterns, character traits, and themes from certain children throughout the years. Throughout the study, I noticed I was able to understand conflicts more sensitively, support discipline standards more consistently, and prevent negative outcomes/foresee positive outcomes more naturally because I had the ability to understand each child as much as possible. The modern teacher does not have this, what I will call luxury, because class sizes are getting bigger, curriculum is moving faster, and administrative support is being stretched thinner, and parent communication is somehow becoming less efficient. Asking teachers to build such strong, personal relationships with their students isn't always an option with growing class sizes and a decrease in joyful learning options for children.

Ultimately, without strong relationships between school families and teachers, children will continue to suffer inside the classroom without the feeling that their work will ever pay off. By increasing joy, improving practical life experiences, and strengthening communication in every school, we will see significant growth in our children, and not just academically speaking. These joyful experiences have lasting effects and in a day-and-age of historic gun violence and political dissidence, supporting the overall health of children could break the cycle of an unhappy nation. The inclusion of joyful learning is not common in traditional Springfield schools. Oftentimes schools tend to overcompensate in underserved communities in an attempt to bolster academics by removing key components to child development like recess, PE, and art. We see

young black students walking on lines, silently in the halls, hands at their sides or behind their backs to show they are in control of their selves. Then you take a ten minute drive to the county and find similarly young white students buzzing through unattended halls, into classes with couches and touchscreen monitors, having quite a different experience for children of similar ages. If we can't change what our generations have done, then let's setup the next generations for success. By teaching the next generation critical problem solving skills like grit, creativity, and common sense, the world of education will be opened up entirely and it is time that we stop confusing and swapping the term academics for education because as this study shows, academics is only one piece to the overall education of a child.

In every data set, answers to the research questions were made clear and each seemed to support the hypothesis of joyful learning leading to improved performance of early childhood students. On average, the participants valued joyful learning approaches to STEAM as well as social/emotional development with the increase of play and experiential education; academic assessments and reports improved at a consistent or higher rate than traditionally developing students with the inclusion of play; CARES character traits from the play group participants increased at a higher rate than non-play children, but was magnified in Kindergarten; parents tended to misunderstand specific learning styles for their children; and teachers were able to support more children with more manageable ratios. With a larger sample size of both play and non-play children from different schools and cultures, studies like this can help influence national growth and begin the U.S. on a path toward happiness, wealth, and education.

The conclusion of the study is supportive of the hypothesis regarding joyful learning. I fully believe that the intended results approach the actual results, within reason, of course. Not only to the Kindergarten and 1st Grade students of Smith Elementary, but to all students of Smith Elementary and beyond. This was an amazing experience for me to finally see children, parents, and teachers all on the same page regarding education and it sets a powerful precedence of collaboration moving forward. I will be leaving administration at the end of the 2018/2019 school year, and heading back to the classroom where I will be teaching 1st Grade STEAM and it is great knowing that I'll have an appropriate curriculum with which to start.

Discussion of Limitations

Young children have the ability to learn and grow at an incredibly quick rate compared to adults. This study was designed to catch only a snapshot of their growth from one point to another. With the sample sizes relatively small, it made it difficult to gauge longitudinal effects as initially intended. The study was also delayed several months as permission and approval were pending, which shortened the design from a full year to only one semester. Even with the addition of the Early Childhood Center, Smith Elementary offers very few play-appropriate, unused spaces during the day to host uninterrupted sessions. We often found ourselves walking the halls looking for an empty classroom or space to explore and play, especially since the majority of this research was conducted during winter, which meant the fields and outdoor play spaces were uncomfortable or unusable.

The original intention was always to support both qualitative and quantitative methods, but some of the qualitative measures like teacher/parent/child interviews had to

be updated to print (surveys and questionnaires) or removed altogether due to the limiting time available to the study. In a system that relies heavily on quantitative analysis and empirical growth, I did find it helpful to include such data sources for both my own understanding and the understanding of many others familiar with academia.

Recommendations for Future Studies

Given the overwhelming support and success that I found from this design, I would be remiss not to continue moving forward with my hypothesis. A major milestone for me will be when the students that I taught come back to me and say that the thing they remember about me and my class was the fun they had. I know that's how I measured most of my time in school and in limited time as an educator, I know that's how many others remember theirs.

First and foremost, I will not try to do a study of this magnitude under such time constraints again. I believe an entire year would be a great reference point in gauging overall growth of a young child, and perhaps extending the time throughout all of early childhood (PreK – 2nd Grade) for clear patterns and adaptations. I also would recommend not trying this with other teacher's students because there are high stakes when child development is involved, and any compromise could be detrimental to an entire system of children, families, and educators.

Another recommendation would be to spread this out between multiple sites at once, especially within the same district. If, like Smith Elementary, there are not multiple affiliated sites, then finding similar schools across the same region (city, county, or both) would make the largest impact. From there, new sets of data can be formed based on school culture, philosophies, or pedagogies. Expanding further could help narrow down

new and potential biases within certain fields (school type, location, funding, average teacher age, etc.). Included in these updated studies would be a wider variety of response values. By limiting my data from 1, 2, or 3 value options, the information had less of an opportunity to show more personalized beliefs. This can also be referenced within the time limitation.

Finally, an area that I did not find as difficult, but could have been, is the sheer magnitude of choice options. Children are comfortable with the status quo but thrive when given new options for fun. Contrary to popular belief, play, while ubiquitous for all humans, is neither created nor enjoyed the same for all humans. This is not a program that will satisfy every child every time. Like most things in a child's life, patience and participation will be greatly rewarded if the lead designer has the ability to offer what is being requested.

These findings lead the researcher to believe that if we normalize joyful learning in schools to enhance assessment-driven data and teach children how to succeed in a rapidly changing world, then we will make lives better everywhere. Children will be happier, teachers will be less stressed, innovation will be supported, not stifled, and we will be happier as a culture and a country. The results of this study suggest that children not only like to play, but benefit from it as well, yet we are cutting it from our lives at school and home alike. The same cannot be said for many other topics of which I am aware. The literature and data cannot prove that more is always better, otherwise, we would be the happiest, richest, smartest society in the world. Until then, we need to stop forcing our children to sit down, sit still, and open their textbooks to page 1.

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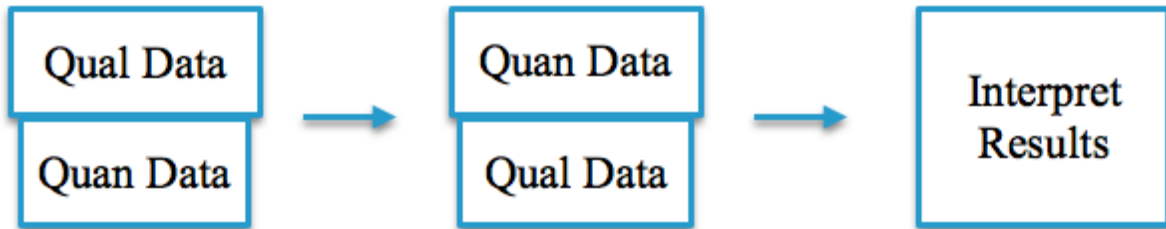
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Appendix A

Data Collection Sequence

Phase



Procedure

**Pre-Tests, Interviews, surveys
outcome
Progress/Character Reports**

**Post-Tests, final reports
Analyze subjects' enjoyment**

Explain

Product

**Collection of numeric data
review
Modification of data**

**Understand process, fidelity evaluation
Themes, display of data**

Discussion,

Appendix B

Student Pre/Post Survey

1. I enjoy STEAM projects
 - a) not at all.
 - b) very little.
 - c) a little.
 - d) a lot.

2. I think STEAM is
 - a) not useful.
 - b) somewhat useful.
 - c) very useful.

3. Independence is something I find
 - a) unnecessary.
 - b) necessary, but only sometimes.
 - c) very necessary.

4. I learn better when I'm having fun
 - a) somewhat true. .
 - b) true.
 - c) not true.

5. I learn best through doing
 - a) somewhat true. .
 - b) true.
 - c) not true.

6. I like to play
 - a) very little.
 - b) a little.
 - c) a lot.

Appendix C

Parent Survey

1. My child enjoys STEAM projects
 - a) not at all.
 - b) very little.
 - c) a little.
 - d) a lot.

2. For my child, I think STEAM is
 - a) not useful.
 - b) somewhat useful.
 - c) very useful.

3. For my child, Independence is something I find
 - a) unnecessary.
 - b) necessary, but only sometimes.
 - c) very necessary.

4. My child learns better when s/he is having fun
 - a) somewhat true. .
 - b) true.
 - c) not true.

5. My child learns best through doing
 - a) somewhat true. .
 - b) true.
 - c) not true.

6. My child likes to play
 - a) very little.
 - b) a little.
 - c) a lot.

7. I like to play
 - a) very little.
 - b) a little.
 - c) a lot.

Appendix D

Child Assent Form

Appendix E



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Assent to Participate in Research Activities (Minors)

The Impact of Play and Experiential Education on Early Childhood Students

1. My name is Noah Hollenkamp, and I'm a doctoral student in the College of Education at the University of Missouri, St. Louis, but you probably know me as Mr. Hollenkamp.
2. I am asking you to take part in a research study because we are trying to learn more about how playing helps you grow and learn new things, both in school and outside of here. Up to 250 people (55 students, 20 teachers, and 175 parents/guardians) may be involved in this research.
3. If you agree to be in this study, you'll have the opportunities to join me and your classmates in playing with games, toys, sports, and using MakerSpace supplies.
4. There is no risk of you participating in this program. It's all about having fun and learning new things!
5. There are no direct benefits to this program.
6. If you don't want to be in this study, you don't have to participate. Remember, being in this study is up to you, and no one will be upset if you don't want to participate or if you change your mind later and want to stop.
7. You can ask any questions that you have about the study. If you have a question later that you didn't think of now, your parents can call me at 314-974-2876 or we can always talk here at school.
8. Signing your name at the bottom means that you agree to be in this study. You will be given a copy of this form after you have signed it.

Participant's Signature

Date

Participant's Printed Name

Participant's Age

Grade in School

Teacher Questionnaire

How would you say this program has impacted the students academically? Please use specific examples if possible.

How would you say this program has impacted the students socially/emotionally? Please use specific examples if possible.

How has this program impacted you as a teacher? Please use specific examples if possible.

Knowing what you know about my research, is there anything that you would update if I were to start it over?

What results did you plan to see when this program first began?

Have those results been met? Have they been changed with more understanding of the program?

If given the option for this program to be added into the curriculum, would you support it? Please use specific examples why or why not.

Making the Neighborhood School the Number One Option: An Intentional Approach to
Marketing a Neighborhood School

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with an emphasis in Educational Practice

August 2019

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Matthew Davis, Ph.D.

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Abstract

Neighborhood schools in the urban school districts are feeling the brunt of the effect of the choice, charter school movement. Neighborhood schools have had to examine different ways to maintain enrollment numbers as high as possible. I examined enrollment trends and different ways of promoting the neighborhood school in which I work so that it becomes the school of choice for families in the neighborhood. I conducted surveys, parent interviews, and used historical data to determine reasons why families leave or stay at Damel-Cosette Elementary. Using these data, I was able to provide definitive ways to maintain and/or increase enrollment in the neighborhood school. Using results from the stakeholders, an advertising blitz was enacted. This blitz included becoming a part of the community organization and speaking about the school. Retention efforts included re-establishing a viable Parent-Teacher Organization and including parents on the Principal Leadership Team. The staff has established some new protocols to address discipline before it escalates and becomes a safety concern.

Acknowledgements

As I reflect upon this amazing journey and think about how it is coming to an end (actually it is beginning), I would like to thank several people who have helped inspire me to finish. First, I would like to thank my wife, Angela Sanders. She took care of the house, while I was out “schooling!” Our kids have been supported at every sporting event, dance recital, and after school activities even if I was not available. Also, my daughters, Addisyn and Adarah, who have always been my reason for continuing my education. During this journey Addisyn graduated high school and finished her first year of college. Even though she does not always show me how proud she is of me in person, she has written a couple of papers and presented in her classes about me and what I do. I appreciate her genuine love and admiration. Adarah is my youngest daughter. I think she understands the importance of what I am doing but did not always like that I had to attend class (“ALL the time,” in her words). She helped me stay focused while completing this work by building with Legos in her room instead of watching television. Isaiah is my bonus son! He is a blessing and keeps my wife off of my back. MY MAMA!!!! According to her, I am still her baby, even though I have a younger brother. (We are all her babies!) If somebody does not know about me receiving this degree, they will after they talk to my mama. Love you, Mother!

I would also like to thank our Equitable Access in Education Cohort. Somehow, we pulled this out. The presence of mind to make sure we finished no matter what is what pushed me. I also could not disappoint the one person who could not edit this paper because she had to complete her section, Lindsay Schuessler. She also was the person who encouraged me to join this cohort just as I was finishing my Educational Specialist

Degree. But also, she really did help me edit and get this done. I am still trying to see if that was a good thing or not. Noah was Noah, wanting to get done as soon as possible, pushing the envelope on the dates, and always *playing* (pun intended)!

I had a group of people in this entire Creative and Generative Design cohort that laughed at my jokes, hated my jokes, got tired of my jokes, but never thought I was a joke. It amazes me how people think higher of me than I do myself at times. I appreciate the past three years.

The family at my school includes students, parents, colleagues, and volunteers. They helped guide this research in trying to make our school the best. If I did not believe they wanted the best for the school, I do not think I would have finished. A special shout out to my assistant teacher, Valerie Wells. She held down the class, while I was finishing a paper (don't tell the district) or collecting data for this project.

I saved this for last because most people read the first and last paragraphs. Dr. Balcerzak from University of Missouri at St. Louis was an amazing inspiration. She had a vision for this cohort and helped us stay focused throughout the program. Thanks!

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Chapter 1: Introduction

As a teacher for almost two decades at Damel-Cosette Elementary, a neighborhood school in the Saint Louis Public School District, I have noticed a downward slope in enrollment in the last four years. The enrollment drop could be contributed to many factors. These factors include the gentrification of the Mid-City neighborhood, numerous administrative changes, and the number of new schools in the area that families may choose. Families of school age children have more options in how their children will receive their education than ever before: charter schools, neighborhood public schools, public magnet schools, private schools, parochial schools, gifted schools, independent schools, county schools through the *Voluntary Interdistrict Choice Corporation* (VICC) program, and homeschooling (City of St. Louis, 2011-2017). Several parents take advantage of our school's outstanding pre-k program, which is provided free of charge by the district then choose another method to educate their students once they reach kindergarten age. Even when students remain at the school as kindergartners, by the time they reach 6th grade the majority have left Damel-Cosette, the neighborhood school. Each year in addition to the school losing some pre-k students as they transition to kindergarten, the overall enrollment continues to decline. Figure 1 shows the attendance for the last four years per grade level at Damel-Cosette:

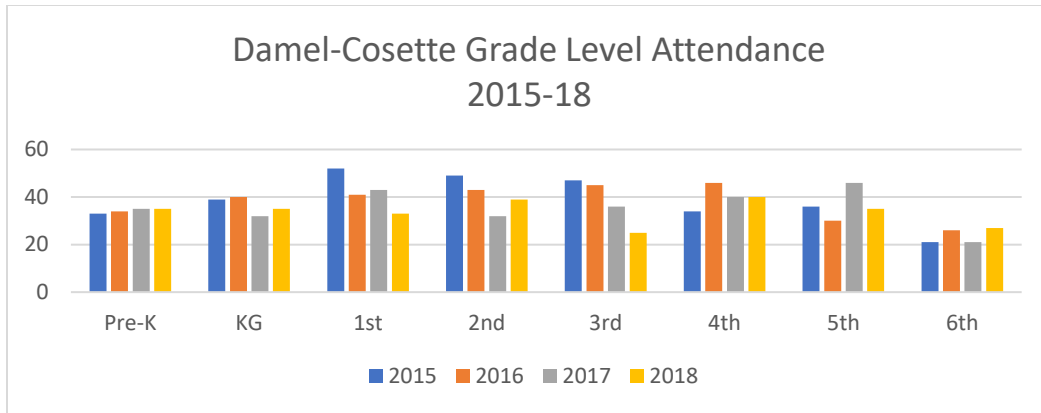


Figure 1: Damel-Cosette Grade Level Attendance 2015 -18

Education has developed into a competitive environment. With so many choices, schools must provide opportunities that entice families. In this highly competitive environment, a neighborhood school is not always the desired option when parents are offered school choice. The researcher based the study on the assumption that differences between the school choices are small relative to opportunities for learning and large relative to advertising and preconceived notions of higher quality of private or charter schools. This may be attributed to different factors including a lack of trust or beliefs of parents in the basic model presented by the district. Other school choices may seem more attractive due to the possible opportunities or because of the misguided assumptions.

Description of Schools

The different school choice opportunities include the above-mentioned district magnet school program. The district provides a lottery in which a student may be chosen to attend one of the schools. The magnet schools in St. Louis Public Schools have names that may attract families even though the neighborhood schools provide some of the same opportunities. Examples of these names are: “*Creative Arts School, Lenova Investigative Learning Center, Academy of Higher Learning, and Love of Language Studies School.*”

(St. Louis Public Schools, 2018) Most neighborhood schools have a name simply followed by elementary. Although some of the magnet schools have a dedicated focus such as *Love of Language School* focused studying different cultures and languages, they are still responsible for providing the same basic educational skills needed for success.

Charter schools can also have enticing names and advertise appealing themes. *Spokane* offers opportunities in foreign language immersion. *Urban Greenspace* publicizes their use of the Montessori Curriculum. These two schools are located in the same neighborhood as Damel-Cosette Elementary School and appeal to some of the families that normally would attend Damel-Cosette. Other charter schools impress families with promises of transportation, creative curriculums, and other extracurricular activities, which may contribute to the reasons why families are leaving the neighborhood school.

Typically, parents have a preconceived notion that private schools offer a higher quality education simply because they are private. Due to this fact, private schools may provide further competition for neighborhood schools. Parents' perceptions and schools' promises of scholarships contribute to even more families possibly leaving the neighborhood schools.

The *Voluntary Interdistrict Choice Corporation (VICC)* is a program developed out of the desegregation settlement in 1981 to create diversity in education by providing opportunities for students in both the city and county to attend schools outside of their neighborhoods (Voluntary Interdistrict, 2018). Many parents still believe that attending a school in St. Louis County is more beneficial to their students than urban schools.

Although the number may be small due to the program slowly being phased out (ending in the year 2024), the VICC program also contributes to the decline in our student population.

With the success of the school's pre-k program there is a constant struggle to try to figure out reasons why parents continue to leave the school after pre-k years. A preliminary survey was given to pre-k parents to determine their thoughts about the school and why they may be leaving the school and district. Over the years parents who leave Damel-Cosette after pre-k cite various reasons including; trying out a charter school, more extra-curricular programs being offered, location, and convenience of being a K-8 school. (Parent Surveys, 2018) It is important to get an understanding from the parents in order to develop a model that will help retain our current population and attract more students to Damel-Cosette.

After reviewing the preliminary survey, the numerous amounts of school choices (appendix A) available for families are a detriment to the enrollment and retention rates of students in our school. In addition to this competitive market, the district's advertising focuses more on the various magnet schools. This lack of advertising and promotion in the community only further inhibits Damel-Cosette's growth. The school itself attempts, but may not succeed, in reaching appropriate audiences that could help Damel-Cosette's student body surge.

Background

Damel-Cosette Elementary is located in "Mid-City" or sometimes referred to as "The Alley" neighborhood. This area is becoming more diverse with a focus on mixed-

income housing opportunities. It appeals to young families. However, the trend seems to be that once these families have children, they tend to seek education for their children elsewhere. The purpose of this research is based on the assumption that Damel-Cosette Elementary needs to connect with these neighborhood families so that Damel-Cosette becomes a viable option for their children's education. Connecting with parents includes having them understand that the how a quality neighborhood school can increase the viability of a neighborhood and help build healthy community relationships. Hopefully, combining this effort of advertising among prospective parents with additional strategies that enhance retaining the current school population will reverse the outflow that plagues our enrollment at present.

Schools are one of the most important pieces in any neighborhood community. Some neighborhoods are built around the educational environment. Parents make major decisions on whether to buy or rent in certain neighborhoods based on schools. According to Brasington, the quality of the school (36%) was the second to only safety (51%) in reasons where people buy houses. (2017) With all the new development in the neighborhood, it would benefit developers to know how important our school can be for their investment. Neighborhoods built around schools help every aspect of the area including but not limited to helping the students thrive educationally.

Purpose of Study

The purpose of this study was to create a comprehensive campaign to promote Damel-Cosette Elementary as the school of choice for families in the Mid-City neighborhood and the designated catchment zone (zone comprised of designated areas

which families are assigned to a specific neighborhood school). The catchment zone of Damel-Cosette (Appendix A) shows the boundaries and schools located in the area.

The school loses families every year through their choices to seek other educational opportunities. As the neighborhood school, Damel-Cosette Elementary should be the school choice for parents in the area. It should be the number one choice for a quality, safe education for all families in the neighborhood.

Students in neighborhood schools build a sense of community and belonging when they attend school in their home environment. Learning extends from the school building to the student's home. Students in the neighborhood can build relationships with each other outside of school which help create a welcoming environment within the school. Students in neighborhood schools usually take more ownership and pride in their school and community, since it belongs to them.

If neighborhood schools are highly regarded like other types of schools, the school would be more economically and socially diverse. Also, as the neighborhood continues to become more economically fit, it will help lower economic students perform better academically as well as create a more socially diverse, economically stable neighborhood.

Research Question

The proposed project explored, 'what are the factors that cause parents to either leave or stay in the neighborhood school?' An analysis of surveys that were completed by parents (current and former) and volunteers as well as conversations with various stakeholders from the neighborhood led to the development of a comprehensive list of

expectations that helped determined a marketing campaign to retain and recruit new families to Damel-Cosette Elementary.

The focus question was: What might the impact of an intentional, community-designed program focused on the recruitment, retention and stability of an urban public elementary school have on the recruitment and retention of students? Other guiding questions included:

- How did the population trends at Damel-Cosette compare to other schools and the district as a whole?
- What were the reasons parents are leaving Damel-Cosette Elementary?
- Were parents aware of the different programs/activities available at the school?
- What were the other choices of schools in the neighborhood?
- What were the expectations of various stakeholders for the school?

The answers to these questions helped develop the appropriate actions that lead to series of activities of the comprehensive retention/recruitment program.

Chapter 2: Literature Review

Parent's Choice

School Choice is a topic that has been on the minds of most Americans during the past few years since the influx of charter schools and a government push for vouchers. Parents are the main focal point when it comes to choosing a school for their child. Up until the year 2000 when charter schools were founded, parents' choices were usually just between private and public. According to Goldring and Rowley (2006) within the "last decade more parents are able to exercise explicit school choice because of specific

educational policies such as magnet schools, open enrollment, tax credits, and vouchers.” Parents now spend more time researching and determining where to enroll their children. Researchers have noticed different reasons behind the choices. According to Goldring and Rowley (2006), “parents choose private schools for their academic and curricula emphases, discipline, and safety.” In the public school arena, parents indicate they choose schools for academic reasons, such as higher quality of instruction, dissatisfaction of their zoned school’s academic performance, for safety reasons and some, for convenience (Goldring and Rowley, 2006). Since the influx of magnet schools due to desegregation policies in the 1980’s (Crouch, 2016) and the rise of charter schools in recent years (Booker et.al, 2004), parents’ choices continue to grow.

Magnet schools were designed to “provide an educational option so attractive that parents and students would be drawn to them voluntarily, reducing the need for compulsory desegregation measures such as busing.” (Blazer, 2012). The program created a divide amongst traditional public schools and continues to provide mixed results (Blazer). “Magnet schools and programs have a positive impact on student achievement as a result of greater per pupil spending; the provision of more resources; the creation of safe, orderly learning environment; great selectivity in student admissions; and the ability to attract highly qualified teachers” (Blazer, 2012). Other research has concluded that there are comparable levels of academic achievement between magnet schools and traditional public schools. Ballou, Goldring, and Liu (2006) examined the effect of magnet schools and after controlling for students’ prior achievement, found no evidence of a positive effect in reading or mathematics test scores for students. Magnet

schools are probably the most popular school choice option due to other reasons not relating to academic achievement.

The introduction of charter schools is an alternative to the traditional public schools. Charter schools are publicly funded schools of choice that are operated by non-profit or for-profit organizations (Cordes, 2014). Charter schools are able to provide an education using state funds as part of their operating budget. The schools are accountable to the governing body of the state, city, or county and must follow discrimination guidelines (Pascual, 2016). The charter phenomenon continues as more and more charters are opening up in urban areas where the population lives in high poverty (Cordes, 2014). Charter schools may or may not pull some of the brighter students from the traditional public schools. Charter schools can bring more diversity and offer special curricula, but results concerning achievement levels vary depending on the researchers. In Texas, the results are more positive relative to achievement. After conducting a study that compared initial year and consecutive years and taking into account the mobility rate, charter schools were found to positively affect student performance in both reading and math in the second and third consecutive years of attendance. However, the effect in the first year of charter attendance was negative for reading and not significantly different from zero in math (Booker, Gilpatrick, Gronberg, and Jansen 2007). Results show that charter schools contribute to modest overall performance improvements for students who are currently enrolled in traditional public schools. Other researchers have found results that show no significant gains by students attending charter schools when all factors are considered. Using distance to the nearest charter school as the measure for competition from charter schools, researchers find no statistically significant impact of charter schools on student

achievement performance in North Carolina (Cordes, 2014). No matter the achievement results, positive or negative, charter schools are part of choice that is affecting the enrollment rates of traditional public schools.

Recruitment and Retention

The different choices available in the education field cause traditional public schools to try to find more ways to attract families. Researchers have suggested ways of retention and recruitment for schools. Newberry (n.d.) suggests that a focus on retention is important because it is far more cost effective to keep a family that is already enrolled than it is to recruit a new family. He offers two strategies that my school has considered regarding retention of transition grade students. Newberry's strategies for transition grades include "Next Year and Beyond Meetings" and "Step Up Days" (n.d.). The first are informational meetings for parents about the next grade level. It is an opportunity to sell the parents on the next year and beyond. "Step Up Days" are for students to experience what it will be like at the next level. It should provide students with the opportunity to hear from teachers, staff, and students. It can also be combined with a fun activity that is unique to that next level. Doing these two things every year for every grade could help us retain students as the years go on. Again, it would also help build community and relationships in the school, something essential to student retention (Newberry, n.d.).

Attracting new families in the neighborhood is another one of the recruitment strategies. Families have to develop a sense of belonging in a welcoming environment. McWilliams and Maxwell (1999) state that schools must have family-centered practices that include not only the children but the entire family. "First, children and families must

be viewed as a unit such that an effect on one will ultimately affect the others. Second, interventions for both the family and the child will have a larger impact than those focused only upon the child. For school personnel, this ecological perspective suggests the importance of addressing family needs, not just child needs, and implies that time spent addressing family concerns will ultimately help the child. Third, family members should have a choice about which or what types of services are delivered and the amount of involvement they have in those services. Fourth, professionals should consider family priorities even if they are different from the professionals' ideas or desires. This means that professionals must be sensitive and responsive to the needs and wishes of families.” As Newberry and McMillian surmised it important to make sure that schools are not just recruiting students but also the families (1999).

Addressing all issues including transportation, neighborhood trends, and family needs can help schools recruit and retain most students.

Chapter 3: Methodology

Data Collection

A mixed methods study was used to inform the research question. Information from surveys completed by current and previous parents, a survey presented to community members and volunteers, and historical data from St. Louis Public Schools and the Missouri Department of Education.

The survey was provided to parents of current and past families (Appendix B). This survey was given in person or by email to at least fifty preschool parents whose child attended Damel-Cosette during the last three years. The survey determined the

wants and needs of families as well as the understandings of what Damel-Cosette Elementary offers its students. The survey included an extensive list of community partners, programs, extracurricular activities that already provide resources for Damel-Cosette, in an effort to assess the accuracy of parents' knowledge about the resources their children would have access to at Damel-Cosette. After compiling the results of all data, quantitative and qualitative, an extensive plan for recruitment and retention for families was developed.

Part of the survey included a section on quality schools. Parents may have different desires and thoughts about what constitutes quality. Knowing what the parents expected contributed to a more focused approach in helping maintain and attract new families to the school. The survey asked for information that helped understand why parents left or thought about leaving the school.

Community support for a school is an important quality, especially for neighborhood schools. The attendance at neighborhood meetings as well as using the results of their surveys (Appendix C) provided an outlook at how Damel-Cosette Elementary would benefit if it made the school more visible in the community.

Other forms of data that helped this study were the historical data containing information on population trends from the Mid-City Neighborhood and other areas in the attendance zone for the school. The enrollment data for Damel-Cosette Elementary for the past 10 years was compared to the overall district enrollment trends as well as with schools in the neighborhood were considered when compiling data.

A promotional campaign for the retention/recruitment of children in the neighborhood school has been created based on results of the data collected during this study.

Chapter 4: Results

The results of the study helped determine the course of action for the researcher.

Questions Revisited

The researcher wanted to answer the following questions using the data various data sources and collection methods: What might the impact of an intentional, community-designed program focused on the recruitment, retention and stability of an urban public elementary school be on the recruitment and retention of students?

Sub-questions:

- How do the population trends at Damel-Cosette compare to other schools and the district as a whole?
- What are the reasons why parents are leaving Damel-Cosette Elementary?
- Are parents aware of the different programs/activities available at the school?
- What are the other choices of schools in the neighborhood?
- What are the expectations of various stakeholders for the school?

Population Trends

Research shows that school enrollment is directly affected by the population trends in St. Louis. With a slight dip in city population (U.S. Census Bureau, n.d.) and the increase in school choice options for families within the St. Louis Public School District, it is not surprising that St. Louis Public Schools has experienced a decrease in

enrollment over time. From 2000 to 2010, the city population has decreased by 8.3%. (U.S. Census Bureau, n.d.). Subsequently, according to the Missouri Department of Elementary and Secondary Education (2018), also known as DESE, enrollment in St. Louis Public Schools (SLPS) has decreased by over 20,000 students since 1999.

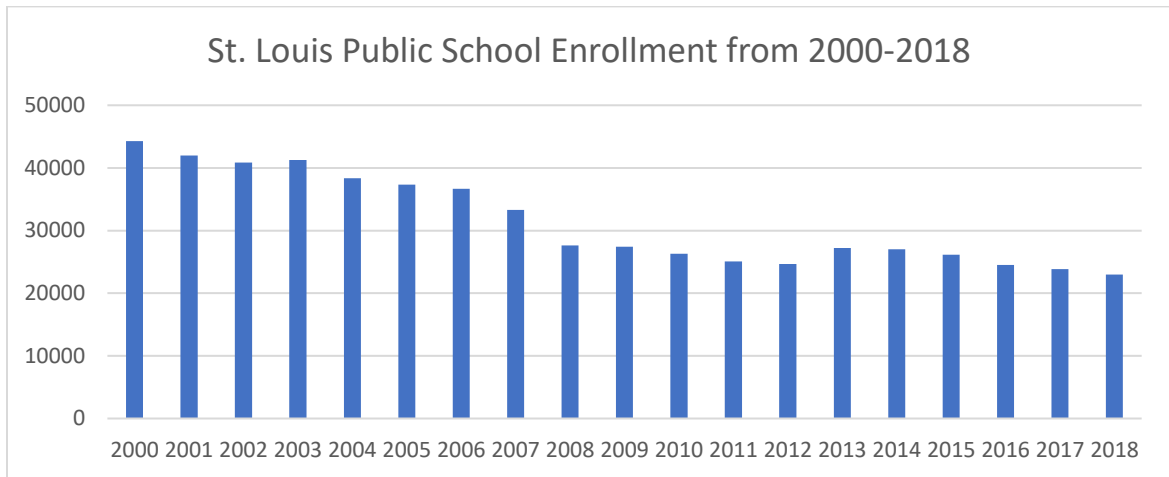


Figure 2. St. Louis Public School Enrollment 2000-2018

Damel-Cosette Elementary School reopened after being closed for about ten years in 2002 following major renovations. After a peak enrollment of 404 students during the 2003-2004 school year, the student population has been on a steady decline. The following figure depicts the recorded population of Damel-Cosette Elementary School from 2002-2018 according to Missouri Department of Education, (DESE) (note that the data starts from 2002 when the school was reopened and enrollment for KG-5th only is shared because the school did not always report Preschool or 6th grade).

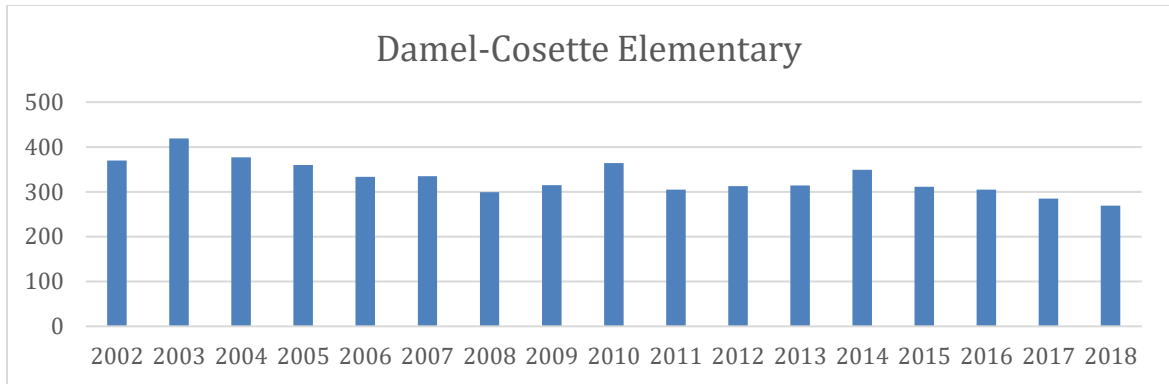


Figure 3: Damel-Cosette Enrollment

According to DESE current total enrollment at Damel-Cosette, for the 2018-19 school year, is 269. The current enrollment for Urban Greenspace, the neighborhood school located closest to Damel-Cosette, is 270. The enrollment of Urban Greenspace has been upward trend since it opened in 2009, starting with 52 students in grades K-3 and now has a total of 270 in grades K-8.

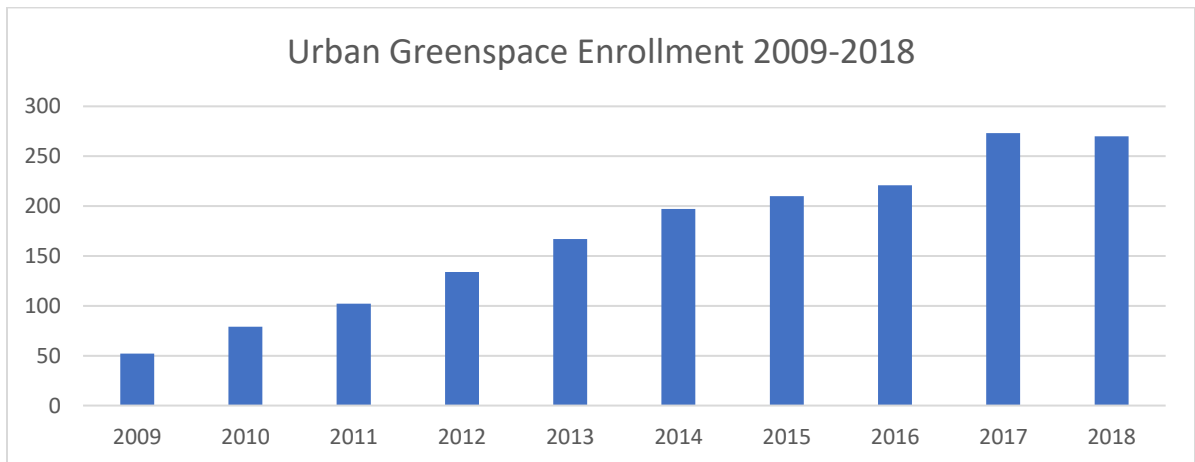


Figure 4. Urban Greenspace Enrollment

Other schools located in the Mid-City area, or catchment zone, have a higher enrollment, but are able to recruit from both the neighborhood and externally, due to their school status within the district. Students who attend the two magnet schools are chosen through a lottery process and enrollment numbers stay constant.

Alternative School Choices

There are various alternative schools located in the Mid-City neighborhood, as well as the catchment attendance zone for Damel-Cosette Elementary. The types of schools include private, charter, and public magnet schools. Damel-Cosette offers grade levels Pre-K through 6th and is considered a traditional neighborhood public school.

Table 1 indicates the various choices parents have when considering schools in this area.

Table 1
Various School Choices in Neighborhood

School Name	Type	Grade-Levels
Damel-Cosette Elementary	Neighborhood Public	PreK-6
Urban Greenspace	Charter	K-8 (fee-based Pre-K)
Taylor Early Childhood Center	Public Magnet	PreK-2nd
Lenova	Public Magnet	PreK-5
Investigative Learning Center (ILC)		
Spokane	Charter	K-6
St. Thomas of Aruba	Private	PreK-8

Alternative schools, in the city of St. Louis area, are easily accessible to families who choose to become part of the Voluntary Interdistrict Choice Corporation (VICC), St. Louis Public Schools Magnet Program, Independent Schools of St. Louis, and various other charters, which have open enrollment policies.

Parental Feedback

Thirty-three families completed the survey given to parents of Pre-K students from 2018-2019 and 2017-2018. The inquiry was conducted to determine how the parents feel about the school and if they awareness of the numerous activities and programs offered at Damel-Cosette Elementary. The following figures depict how the families answered the questions concerning certain aspects of the Pre-K program at Damel-Cosette Elementary:

What was level of satisfaction with our pre-k program this year?



Figure 5. Level of Satisfaction with Pre-K Spring/Fall 2018

What was your child's level of satisfaction with our pre-k program this year?



Figure 6. Kids Level of Satisfaction Spring/Fall 2018

What was level of satisfaction with our school?



Figure 7. Level of Satisfaction with School Spring/Fall 2018

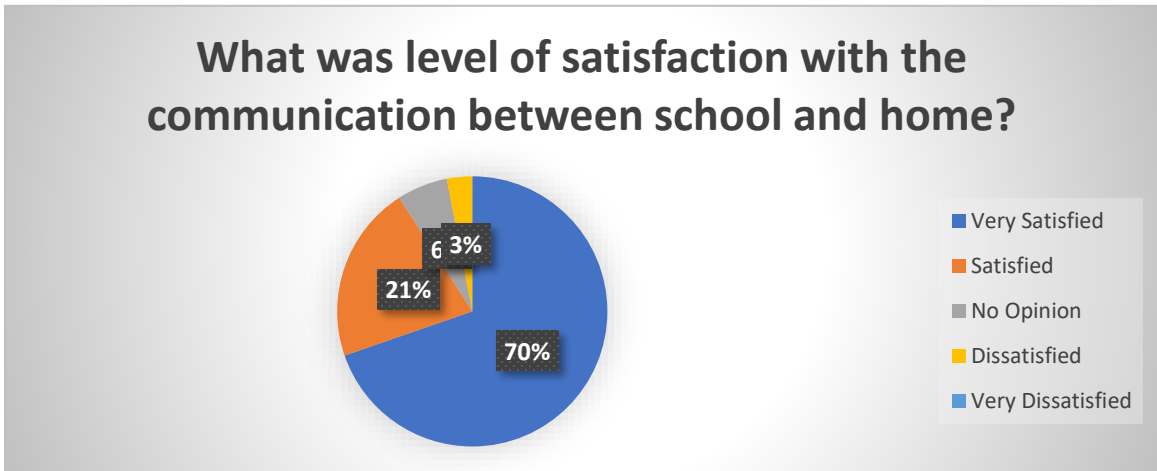


Figure 8. Level of Satisfaction with Communication Spring/Fall 2018



Figure 9. Level of Satisfaction with Discipline Spring/Fall 2018



Figure 10. Level of Satisfaction with Safety Spring/Fall 2018

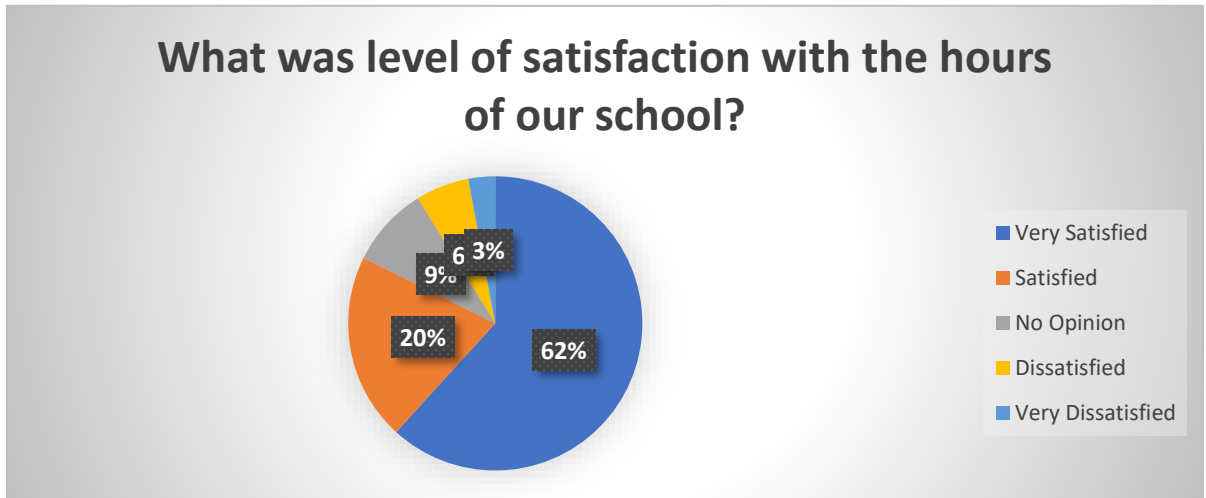


Figure 11. Level of Satisfaction with School Hours Spring/Fall 2018

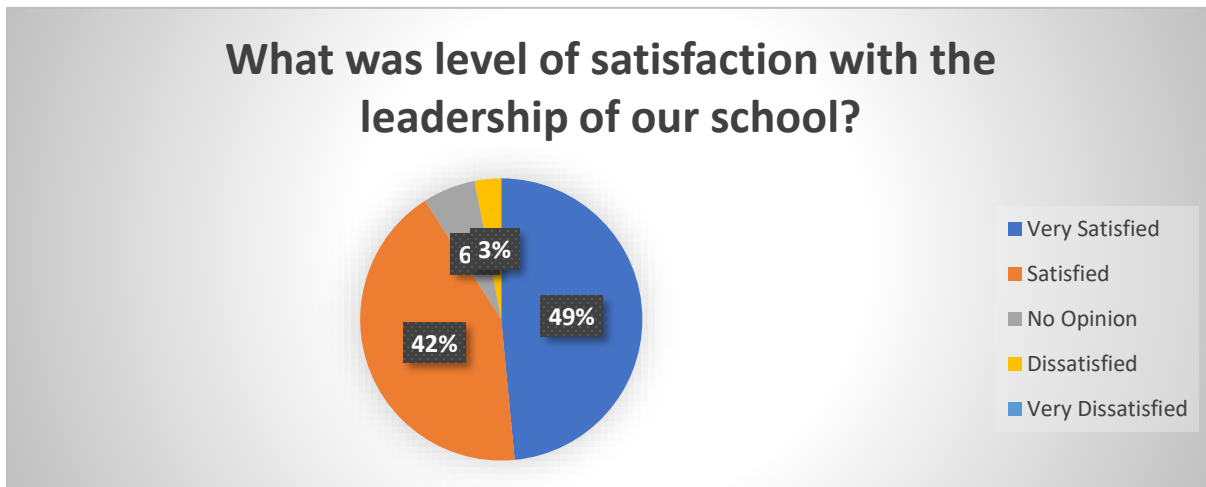


Figure 12. Level of Satisfaction with Leadership Spring/Fall 2018

Other questions of the survey were yes or no questions. These figures show how the parents responded:

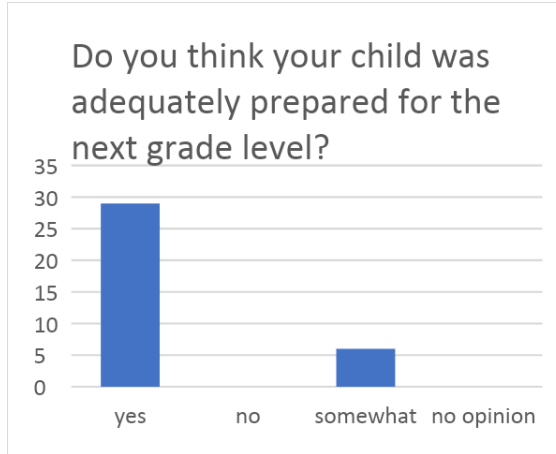


Figure 13. Child Adequately Prepared Spring/Fall 2018

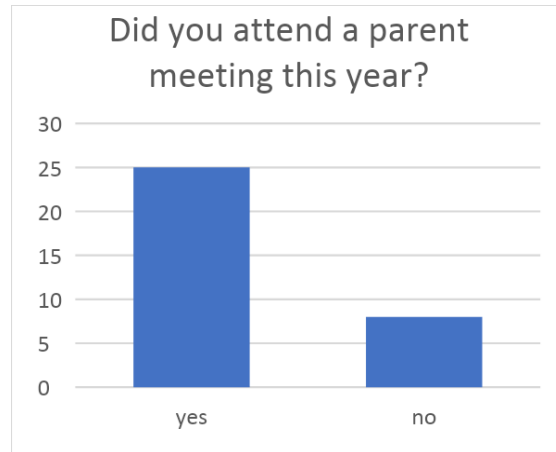


Figure 14. Attend A Parent Meeting Spring/Fall 2018

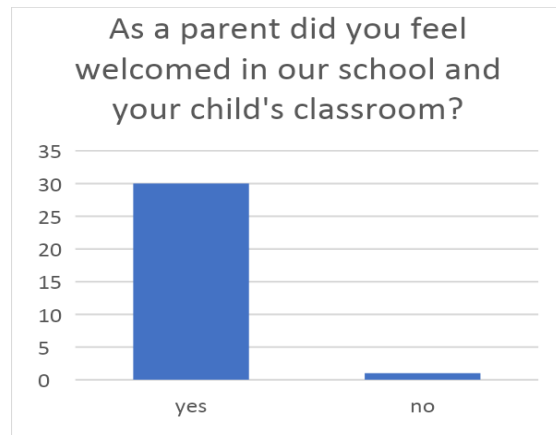


Figure 15. Welcome Feeling in Classroom Spring/Fall 2018

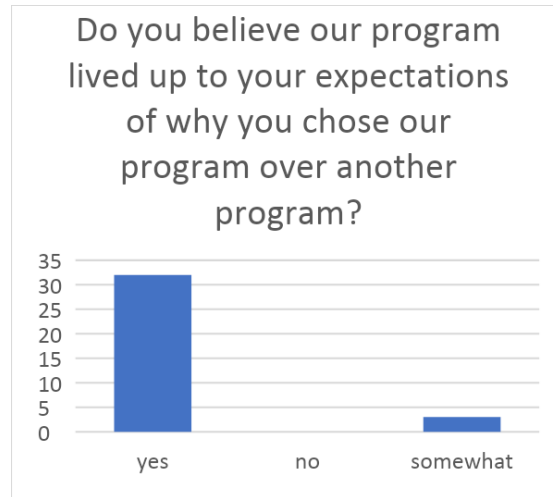


Figure 16. Lived Up to Expectations Spring/Fall 2018

Program awareness.

Damel-Cosette has an extensive list of different programs that are offered for students at the school. Parents answered a question to assess how many programs of which they were aware. Figure 17 shows how the parent answered.

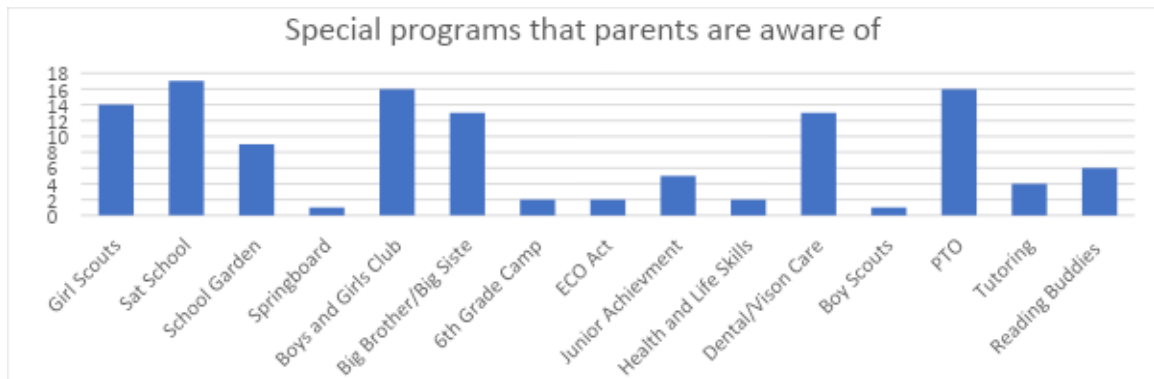


Figure 17. Awareness of Programs Spring/Fall 2018

Only about 14% of the community members knew about any of the programs offered by the school. Of these members, 2 only knew about the Boys and Girls Club, which is where the neighborhood association holds its meetings. Community were asked to complete to a questionnaire (Appendix A). One of the questions asked, “How many

times have you visited Damel-Cosette Elementary?” Of the 21 community members who answered, only 5 (24%) had visited Damel-Cosette. Of the 5 community members who have visited, 2 were volunteers for a reading program and visited only for that purpose.

Several themes emerged while reviewing data received when talking about the positive things that are occurring at Damel-Cosette Elementary: communication, school culture, curriculum/educational expectations, environment and discipline.

Communication.

Data about how the school communicated with various stakeholders was addressed through the surveys and interviews. Communication may have included electronic, visual, and conversations that may have occurred as a result of activities happening in or about the school.

School culture.

School culture can be defined in different ways. One definition of school culture generally refers to the beliefs, perceptions, relationships, attitudes, and written/unwritten rules that shape and influence every aspect of how a school functions. Yet, the term also encompasses more concrete issues such as the physical and emotional safety of students, the orderliness of classrooms and public spaces, or the degree to which a school embraces and celebrates racial, ethnic, linguistic, or cultural diversity. (Edglossary.org) Another definition is “*School culture* refers to the way teachers and other staff members work together and the set of beliefs, values, and assumptions they share.” (ASCD.org) For this study the definition of school culture is the social emotional feelings perceived or portrayed through interactions with students and staff in the school building that promotes a positive and achieving academic environment.

Curriculum/educational expectations.

Curriculum and educational expectations included how staff set parameters to make sure students learn to the highest level. This included factors such as classroom size, prescribed curriculum and classroom supplies.

Discipline.

Discipline for this study included how the school manages discipline problems. Teacher interactions and student feelings were noted in the various methods of data collection.

Volunteer Results

Damel-Cosette has numerous volunteers who served in various capacities in the school. The following is a list of jobs volunteers did at the school: tutors, classroom organizers, STEM teachers, garden workers, reading buddies, and mentors. Other volunteers provided bookshelves, which they stocked continuously with free books for the students and staff. These volunteers also provided various gifts and trinkets to teachers with motivational sayings throughout the year. The volunteers participated in the study to get an outside perspective that may be missed by pre-k parents. Themes that emerged from the volunteers were discipline, leadership, and school culture.

Other Significant Results

Data collected revealed some different types information that can assist in providing more background before answering the main research questions. Figures 18 and 19 show what volunteers, current and former parents, and community members provided for suggestions on improving the school and promoting as the school of choice for the neighborhood.

Possible Improvements
<p>Student</p> <p>Could there be a more positive way of getting results</p> <p>Attitude/tone of teachers</p> <p>Emotional and psychological health of students</p> <p>Consistence in educational environment</p> <p>Smaller class sizes</p> <p>Facilities</p> <p>Parts of building are in great shape, but other parts need paint/plaster</p> <p>More children’s art displayed-make it their school</p> <p>Faculty</p> <p>Leadership</p> <p>Staff/Teachers seem overloaded and under-resourced</p> <p>Curriculum Resources</p> <p>Providing materials for morning reading</p> <p>Reading materials</p> <p>Library books</p> <p>Improved resources</p> <p>Reading volunteers could use better materials and support</p> <p>Volunteers</p> <p>Help visitors/volunteers feel welcome by having staff acknowledge their presence</p> <p>Ability to establish mentor relationships with students</p> <p>Parental Involvement</p> <p>Active parent involvement in all activities during the school year</p> <p>Encouragement of additional parent involvement</p> <p>Miscellaneous</p> <p>Morning drop-off and parking lot directions</p> <p>After school activities for pre-k</p> <p>No homework for pre-k</p> <p>Before and after care for pre-k</p>

Figure 18. Possible School Improvement Spring 2019

Suggestions for Promoting
<p>Beautification Keeping the grounds clean and attractive Promoting it as a “beacon of Light” in the neighborhood Maybe having the older children plant some flowers around</p> <p>Community Ideas Invite neighborhood (not just parents) to activities If there are neighborhood associations make yourself known to them Get neighborhood businesses involved Encourage parents, alumni to talk to new parents Open houses, flyers-if mailed it would be hit or miss and very expensive. Maybe have them available at local businesses Having more information about the school An open house for the neighborhood and neighborhood businesses so they get familiar with Damel-Cosette. Recruiting volunteers from the nearby community Student engagement in the neighborhood Community events hosted by school Strong community support</p> <p>Faculty Consistent visionary leadership Highly educated and dedicated teachers Team building</p> <p>Student Support Health support for students Using the Mission STL Program</p> <p>Academics Demonstrating excellent academics and student growth Fun and challenging extracurricular activities Extra curriculum opportunities</p>

Figure 19. Suggestions for Promoting Spring 2019

When trying to promote the school it is important that the school knows what is expected of a school. Figure 20 is a list of what stakeholders expect when they choose a school.

Stakeholder Expectations of a School
<p>Community Location Neighborhood Vibrant</p> <p>Experience of Students/Discipline Interactions with students Staff that focuses on building knowledge, confidence and kindness Love from the teachers How they trust kids To provide children with a safe place for body and mind Positive energy Character-kindness and integrity Students are not constantly being suspended or sent home “unofficially” Dedication to students learning Teachers can regulate their <u>own</u> emotions and do not use yelling, threats or intimidation to correct students. Atmosphere</p> <p>Curriculum/Educational Expectations Previous year goals and accomplishments Rigor and structure of program High quality education Afterschool learning opportunities School that teaches students how to work individually and how to work together in teams to build good basic skills and to learn how to explore their community and to search for answers to their questions. Gives students diverse experiences Diversity all sorts: international students, language, economic, etc. Expectations and support with personalized approaches STEM Education Engaging learning environment for all students Challenging education for all levels and abilities Up-to-date resources (books) Tutoring</p> <p>Teacher The teacher and how long they been teaching Caring teachers Teachers who are supportive and patient with the students Friendly staff and dedication of teacher</p>

<p>Committed teachers</p> <p>Administrator/Staff Relations</p> <p>Solid administration</p> <p>That all teachers and administrators work together</p> <p>Administrative professionals that care about the long-term good of the school</p> <p>Staff standards</p> <p>Parent/Teacher communication</p> <p>Teacher is structured, has effective classroom management, consistent, professional and sets high expectations</p> <p>How the staff interacts with the children</p> <p>Other</p> <p>Lunch programs</p> <p>Healthy food options</p> <p>Mental Health-supportive services</p> <p>Parental involvement</p>

Figure 20: Expectations January 2019

Chapter 5: Discussion of Results

While examining the data some strong aspects emerged that helped understand some steps that need to be taken in order to answer the research question. When looking at the enrollment of all the schools in the neighborhood and the catchment zone of Damel-Cosette Elementary, two of the schools are magnet schools. They maintain constant enrollment rate because of way the magnet school program is maintained. Their enrollment number is constant as the St. Louis Public School District sets it. Although these schools attract most of their student population from outside the neighborhood, there is a small percentage of students from the catchment zone of Damel-Cosette that attend both schools.

Spokane is a charter school, which is located in both the Mid-City Neighborhood as well as the attendance zone and has an enrollment that detracts from the population of Damel-Cosette Elementary.

Another charter school, Urban Greenspace, is in direct competition with Damel-Cosette for students and families. Damel-Cosette Elementary is located within a mile of Urban Greenspace. The schools are three blocks apart and now compete for the same students. Even though Urban Greenspace is not in Mid-City Neighborhood, it is in the heart of the catchment zone of Damel-Cosette. The school has been recruiting students to keep diversity steady as part of their school's mission. "Today, that catchment includes the neighborhoods of Botanical Heights, Mid City, Shaw, Tiffany, and parts of Southwest Garden." (Quick, 2018) As the enrollment of Damel-Cosette has been on decline, the enrollment of Urban Greenspace has increased. Families are moving into the area and attend Urban Greenspace. "As its reputation grew and its test scores improved, some families of means began to move into the neighborhood in order to apply for the school." (Quick, 2018)

Parent Surveys

The common themes in the parent survey revealed some ideas that can help Damel-Cosette become the school of choice. The common themes focused around communication, school culture, curriculum/educational expectations, and discipline. Although most of the responses were positive, parents also expressed concerns.

Communication

Communication between school and parents is one of the keys to a successful school environment. (Adams and Christenson, 2000) Overall, parents were pleased with the how the school communicated through weekly newsletters and electronically through the *Remind* application. Parents were also pleased with messages sent via texting. Even though the response from parents about school to home communication was

predominantly positive, one parent did note that he/she “was given little time or notice on numerous fundraisers and things.” (Parent Survey, 2018) Positive communication at Damel-Cosette is a strong characteristic according to the parents who took the survey.

Curriculum and Academic Expectations

Parents who send their children to schools want to make sure that they are in a safe nurturing environment that is providing a quality academic experience. Parents who completed this survey answered with the following responses shown in Figure 21 when asked the question: *Do you feel your child was adequately prepared for his/her next level of education?*

Child Adequately Prepared
He was prepared beyond what we expected. High standards and fun atmosphere. High expectations for kids. Effective pre-k teacher who challenges students, which prepares them for kindergarten and beyond.

Figure 21: Adequately Prepared Student, Fall 2018

Most parents were highly satisfied with the curriculum and expectations of the pre-k program, but some still had concerns with some of the methods, “Personally, I don’t like homework for pre-k” or “not enough fun activities for pre-k.” (Parent Survey, Spring 2018)

Curriculum and educational expectations of the pre-k were identified as one of the strong points of Damel-Cosette Elementary. Academics are one of the factors that can determine if parents send their children to a particular school. Showcasing and highlighting the pre-k program in any type of promotional campaign could help Damel-Cosette increase the chances of it becoming the neighborhood school of choice.

Parent Opinions of School Culture

Parents of pre-k students have a different perspective of the culture of Damel-Cosette Elementary. 94% percent of the parents bring their children to school daily and have to see the pre-k staff. The pre-k staff takes opportunities to make parents feel welcomed to school by interacting and sharing daily insights on their child's day or what is happening in the school. Parents were extremely satisfied with the school culture.

Figure 22 shows some sample responses for this.

School Culture
We can tell the staff wants what is best for all of the students. Very professional cares about the students. Sense of community. Family oriented environment. The staff are loving and caring. The pre-k teachers and school staff are friendly. They have an excellent program in place. I love the atmosphere, its warm and welcoming.

Figure 22: School Culture, Fall 2019

Positive school culture results helped determine how to promote Damel-Cosette. Focusing on the positive experiences of the parents who have entered the building and see the how the atmosphere is welcoming and inviting is another way to highlight the school.

Volunteer Results

When trying to create a plan, an outsider's opinions or thoughts make a big difference. Along with parents, volunteers are the people who the school wants to convey the message of Damel-Cosette being the number one option for the neighborhood. The volunteer survey revealed some information that will help develop a plan. Three major themes were uncovered after several volunteers completed the survey were school culture, discipline, and leadership.

School culture.

Volunteers were extremely pleased with the overall school culture. Most of the volunteers reported that when they walk in the school it was a welcoming environment with a peaceful atmosphere. Constant responses noted a caring staff, children who are sweet and loving, an environment that is very clean and inviting, and a school-wide passion toward student learning. “The office was so positive because of the warm welcome and the messages on the sign computer. High expectations and constant attention to children in classrooms in very impressive.” (Volunteer Survey, 2019)

Some concerns that were expressed by volunteers was concerning the attitude and tone of teachers with the students. Parts of the building were in great shape, while many different areas in the school are missing plaster and need to be repainted. One other concern was the class size inconsistency with students moving in and out throughout the school year.

The volunteers’ comments about culture show that Damel-Cosette is inconsistent with its welcome towards students and the passion that is shown for the students. The school needs to be more consistent with this. Building on how outsiders feel when they come in the school, it is important to continue to provide this welcoming environment.

Some of the concerns (i.e. class size) are out of the control of the school. Building beautification should be included as part a comprehensive plan. The school should review with teachers how they communicate with students at all times.

Discipline.

Discipline was a theme that occurred on almost all of the volunteer surveys. When the theme emerged, most volunteers were concerned with how the teachers were

reprimanding the students and the voice tone of the teachers. “I hear quite a bit of yelling,” or “attitude or tone of teacher.” (Volunteer Survey, 2019) Volunteers get very small snippet of the day of the students, however it is important that all impressions be addressed in order to make Damel-Cosette the school of choice for the neighborhood.

Other volunteers noted how the classroom environment is toxic and not necessarily a safe place for students. “Students often explain that they feel discouraged by teachers or they are treated unfairly.” (Volunteer Survey, 2019) This was recognized on a few of the volunteer surveys. Although this is the contrary of what most volunteers observed, it is pertinent that all students always feel safe. Sometimes misperceptions are amplified by word-of-mouth. It is important that the volunteers are able to convey a message of a safe and secure environment when speaking about Damel-Cosette.

Leadership.

The presence of effective administration is important for a school to function at the highest level. “Administration does not interact with students as much I thought they would.” (Parent Survey, 2018) If volunteers have expectations, so should the school. School leaders/administration must be present to interact with students, families, and stakeholders who are part of the school environment.

Another concern was with the relationship between leadership and volunteers. Volunteers, although welcomed into the school, there was not always a communication pertaining to the use of the volunteers. The volunteers enjoyed helping students but did not always have a focus that would benefit the school, or the students in particular. Administration and other school leaders must be aware of the sentiments, so that it does not continue.

Chapter 6: Recommendations

The information gathered for this study helped Damel-Cosette Elementary start to develop a plan to help it become the school of choice for the Mid-City Neighborhood as well as the school's catchment zone. It was important to know the current state of the school through the lens of stakeholders. Currently, there are exceptional programs and aspects of the school that are happening at the school, that receive high praise. Damel-Cosette also needs to work to build a capacity that will invite the neighborhood to embrace it as a quality choice in the neighborhood. The school should build relationships with other schools in the neighborhood since the goal is for all students in the neighborhood to be educated appropriately. An advertising campaign can help Damel-Cosette be more recognized to newcomers in the neighborhood and know some of the positive aspects of the school. Figure 23 shows some recommendations for the school.



Figure 23. Recommendations for Damel-Cosette

Exceptional Programs

The pre-k program at Damel-Cosette was highly regarded in all aspects of the study. Parents who participated in the program were highly satisfied with the quality of education provided for their children. One concern in the pre-k program is the number of

students who live outside of the neighborhood and catchment zone, because of a district policy that allows for parents to choose any pre-k program. It is important for the school to bring awareness to not only the district, but also possible future pre-k parents.

Building a relationship with local daycares and churches and explaining the registration process can help with recruiting neighborhood families.

The Pre-K program effective relationships building with parents should be emulated throughout the school. Pre-K teachers have a distinct advantage of seeing most of their parents everyday due to lack of transportation for Pre-K students. They make sure that parents feel welcomed and respected in the school. Teachers and other staff need to make sure to reach out to parents as much as possible to foster relationships that increase parent/teacher communication and the belief in the school. Pre-k teachers need to help build up trust with their parents as they are transitioning to kindergarten in order to help the parents realize that Damel-Cosette is the best choice beyond Pre-K.

The school offers different activities that are attended by the families of the school. These activities include musicals, health fairs, yard sales, plays, academic themed nights and various other school related interests. Damel-Cosette should extend invitations to the community as appropriate. It will help define the school as a neighborhood entity that encourages community building.

Getting the Neighborhood Involved

A neighborhood school's most important facet is having buy-in from the neighborhood in which it resides. Damel-Cosette Elementary is 'believed-in' by families and volunteers who are involved in the school. As the researched revealed on only 24% of community members who hold their community meetings next door (connected) to the

school had visited at least once. When attending the neighborhood meetings during the research, that the meeting community members were excited to finally see someone from the school and displayed some interest in this project. Staff from Damel-Cosette should make sure that become part of the Mid City Neighborhood Association.

A planned “Community Open House” to invite members of the Mid-City Neighborhood was implemented. The goal was to highlight the various activities that occur at Damel-Cosette. Tours given by current students were followed by an exhibition of different clubs and events as well as a welcome by the administration. Community members were given the opportunity to sign up for and suggest ways they wanted to partner with the school. There were 18 people from the community who attended the Community Open House. The people who attended the meeting shared their contact information and were very intrigued about being active in the school. This was the first visit to the school for about half of the participants. Great connections were established, and more yard signs were distributed. Two neighborhood parents attended and were interested in enrolling their students for the upcoming school year. It is important that the staff at Damel-Cosette follows up with the participants to create a long-term commitment and help with recruitment and retention.

The school is planning other events in hopes of continuing to foster relationships within the community. With help from volunteers from a nearby university, Damel-Cosette has a Community Garden, which is part of the school curriculum. A fall garden harvest event is being planned. The event will be catered toward families in the neighborhood as well as businesses who may benefit from the products in the garden.

Advertising Campaign

It is important that the school become known throughout the community. Research revealed several ideas to help Damel-Cosette start to get noticed. One of our volunteers suggested and designed yard signs for the school. After placing the signs in front of the schools, other signs were handed out to current families and at the monthly community meeting.

The school's social media accounts must be shared on all communication that is disseminated. A social media specialist has also been consulted on updating and streamlining the ease of using the school's website to have an impact on what people see when visiting the site.

During the summer, before school starts the staff and students at the school will complete a door-to-door campaign. Using pamphlets and leaflets, they will walk through the neighborhood to recruit new families as well a general introduction to the Damel-Cosette. The leaflets will include contact and social media information. The goal is for the community to be more informed about the school.

Advertising should not be an aspect that schools should be required to complete. For Damel-Cosette, it is important as the ultimate goal is for the school's population to reflect the neighborhood's population. This school has taken positive initial steps to complete the process.

Building Relationships

Although the various schools in the neighborhood may offer a different focus or have different academic approaches, the ultimate goal should be to educate students. It is important to build relationships with the other schools. Building relationships can help

foster a neighborhood of schools that care for the well-being of every child in the neighborhood. Damel-Cosette will attempt to have administrators at the different schools create a bond with their respective staffs. Joint professional development activities, field trips, and classroom buddy programs are possible programs that can be developed through these relationships.

Internal Needs

The internal needs of Damel-Cosette Elementary should also be addressed in order to create an environment that can make it the school of choice. Teachers and administrators will be notified about the various concerns revealed from the research. They will use this information to plan professional development sessions or Professional Learning Communities (PLC) to address the concerns. The administrator will confer with a leadership team that can help develop plans that can adjust the school's culture to increase the viability with stakeholders who visit.

The school should also address the discipline and safety issues that were mentioned. It is imperative that students always feel safe and the environment is inviting. Damel-Cosette will implement plans where students utilize the counselor when they feel threatened. The counselor will share pertinent information with the leadership and discipline teams to come up with safety plans for the situation. Before the school year starts, there will be a *Meet the Teacher Night*. All stakeholders and families will be invited to start to build a family atmosphere for the school. The entire staff will help everyone feel welcomed to the school by trying to greet everyone who visits the building.

Staff Retention

Damel-Cosette must be the number one choice for the families it already serves. The families must feel welcomed and appreciated in order for them to remain at the school. Several changes have been planned in order to retain current families. These changes include addressing some of the needs of the parents and students. The changes will take place during the summer before school starts and continue into the fall.

The school leadership team will now include at least one parent. This will help bring a parent voice to help address concerns and happenings at the school. Any confidential information concerning individual students will not be addressed leadership team meetings. This team will focus on the overall success of the school and how the school can continue to grow.

Damel-Cosette will also re-establish an effective Parent-Teacher Organization (PTO). Teachers have led the PTO at the school most years. The meetings held would address needs that the teachers thought were pertinent. Parents had input at the meetings, but not about meetings. The family-community specialist has started to reach out to parents in order to have a PTO next year with a functional leadership board. One of PTO members will be chosen to be on the school leadership team.

Parents have been encouraged to share thoughts, compliments, concerns and any other ideas through the use of comment cards and the Remind Application, “a simple way to stay connected to manage school communication and make time for what’s important.” (Remind.com) Increasing the interactions, both positive and negative, should help parents feel comfortable at Damel-Cosette.

Currently several teachers at the school use ClassDojo, which “connects teachers with students and parents to build amazing classroom communities. (ClassDojo.com) All teachers will be encouraged to use ClassDojo. The teachers who use this program now have built an avenue to share exciting news, concerns, homework assignments, pictures with families. Each class can build a “family” relationship amongst each other. In some classrooms where ClassDojo is currently in use, parent friendships have developed. Families who are able to connect outside the school, build community and trust for the school. This also may be a way for parents to mention concerns that can be brought to administration and the leadership team.

As part of the recruitment plan, the staff and students from the school will walk the streets before school to inform families about Damel-Cosette. During this walk current families will also be visited to remind them of important dates, supply lists, and how they can be involved in the school. Damel-Cosette yard signs will be offered to all the current families who are willing to place them in their yards.

The administrator continues to share her business card with all parents. Parents will have direct access to communicating with the principal.

Before the next school year, discipline will also be addressed. The discipline policies will be reviewed and adjusted accordingly. Suggestions from all staff members and parents will be considered before establishing or continuing any new or current procedures. A mentor program between staff and challenging students will be established. Addressing discipline should have an impact on the safety of everyone in the building.

Other Factors

At the start of this research the staff was just going through a rebuilding process. Eleven staff members, including seven classroom teachers from the 2017-2018 moved to different jobs outside of the St. Louis Public School System. During the 2016-2017 school year 10 staff members including the principal found different jobs. The turnover rate does not help with building community within the school. It is important that Damel-Cosette focuses on retention amongst staff, so that the families that it serves do not feel abandoned after forming relationships within the school.

Why the Number One Choice

Damel-Cosette sits in a neighborhood that is in the middle of a gentrification process. There are several families who have lived in this neighborhood for years and years and do not plan on leaving. New housing developments, businesses, and families have moved into the neighborhood with wonderful intentions. The integration of old and new must merge and be compatible for the development to work. Damel-Cosette can be the bridge to helping this community succeed and become beneficial the not only the immediate neighborhood, but also the St. Louis Region. It can be a model of how the make the neighborhood school model work.

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Appendix A

Damel-Cosette Catchment Zone and Nearby Schools



- a. Damel-Cosette Elementary
- b. Urban Greenspace
- c. Lenova Investigative Learning Academy
- d. Taylor Early Learning Center
- e. St. Thomas of Aruba
- f. Spokane

Appendix B

Adams Pre-K Parent Protocol

To help us continue to improve our program and plan for the next school year, we are seeking your opinion about our school and the services we provide. Please complete this form and return it to school by October 31, 2018. I will pick up your completed survey or return them to Adams Elementary and place them in Mr. Sanders's mailbox. Please circle your answers. We appreciate your honest feedback!

- 1) What was your level of satisfaction with our PreK program this year? Very Satisfied Satisfied No Opinion Dissatisfied Very Dissatisfied
Comments: _____
- 2) What was your child's level of satisfaction with our PreK program this year? Very Satisfied Satisfied No Opinion Dissatisfied Very Dissatisfied
Comments: _____
- 3) What was your level of satisfaction with our school? Very Satisfied Satisfied No Opinion Dissatisfied Very Dissatisfied
Comments: _____
- 4) Do you feel that your child was adequately prepared for his/her next level of education? YES NO SOMEWHAT NO OPINION
Comments: _____
- 5) Did you attend a parent meeting this year? YES NO 5a) Did you find them informative and useful? YES NO SOMEWHAT NO OPINION
Comments: _____
- 6) What was your level of satisfaction with the communication between school and home? Very Satisfied Satisfied No Opinion Dissatisfied Very Dissatisfied
Comments: _____
- 7) As a parent or guardian, did you feel welcome in our school and your child's classroom this year? YES NO SOMEWHAT NO OPINION
Comments: _____
- 8) Do you believe our program lived up to your expectations of why you chose our program over another program? YES NO SOMEWHAT NO OPINION
Comments: _____
- 9) How many times did you visit our school this year other than for pick-ups and drop-offs? 0-2 3-5 6-8 9-11 12 or more times
- 10) What was your level of satisfaction with our method of discipline? Very Satisfied Satisfied No Opinion Dissatisfied Very Dissatisfied
Comments: _____
- 11) What was your level of satisfaction with the safety of our school? Very Satisfied Satisfied No Opinion Dissatisfied Very Dissatisfied
Comments: _____
- 12) What was your level of satisfaction with the hours of our school? Very Satisfied Satisfied No Opinion Dissatisfied Very Dissatisfied
Comments: _____
- 13) What was your level of satisfaction with the leadership of our school? Very Satisfied Satisfied No Opinion Dissatisfied Very Dissatisfied
Comments: _____
- 14) What did you like most about Adams Elementary? _____
- 15) Is there anything you think we could improve on? _____
- 16) Which of the following special programs at Adams are you aware of (circle all that apply):
Guitar Club Girls on the Run Girl Scouts Saturday School School Garden Springboard Music and Art Classes
Boys and Girls Club Big Brothers Big Sisters 6th Grade Camp EcoAct Junior Achievement
Health and Life Skills Classes Dental/Vision Care Boy Scouts PTO Tutoring Reading Buddies
- 17) What are the most important things you look for when choosing a school for your child? _____
- 18) Prior to attending our preschool, where were you planning to send your child to kindergarten (please specify)?
Adams Elementary Another SLPS elementary: _____ A Charter School: _____
A County School: _____ A Private School: _____ Other: _____
- 19) After attending our preschool, where are you planning to send your child to kindergarten (please specify)?
Adams Elementary Another SLPS elementary: _____ A Charter School: _____
A County School: _____ A Private School: _____ Other: _____
- 19a) What are your reasons for choosing this school? _____

Appendix C

Parent Survey

Parent Survey

Making the Neighborhood School the school of Choice

1. Are you satisfied with Adams Elementary? yes or no. Please explain

2. If a parent was leaving Adams what might be 2-3 reasons why they would choose to leave?

1. _____

2. _____

3. _____

Appendix D

Volunteer Survey

Volunteer Survey

"Making the Neighborhood School the Number One Option"

Place your completed survey [to Mr. Sanders's mailbox](#) or email albert.sanders@slps.org. Please circle I appreciate your honest feedback!

1. In your time at Adams, what do you think about the culture of Adams?

2. Would recommend Adams Elementary to families or friends? Yes or No
Please explain

3. What are 3 things you think would help promote Adams Elementary as the school of choice for this neighborhood?

1. _____

2. _____

3. _____

Any other questions, concerns, or suggestions (use back as necessary)

Appendix E

Community Meeting Survey

Community Meeting Surveys

1. Have you ever visited Adams during school hours? YES NO

2. Are you familiar with any programs offered at Adams elementary School? If yes, please list

3. Would you consider sending you child to Adams Elementary School? Why or why not?

4. What are your expectations of any school?

5. Can you give one example of when a school has done something exceptional or well?

The Impact of School Choice Enrollment Policies in St. Louis, Missouri on Student
Population

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Abstract

It is often believed that offering different school choice options to families means that those choices are accessible to all. However, research has shown that the racial and social stratification of schools continues to grow and parents are exercising choice in various ways. An increase in options has also created a complex system that parents must now navigate. When a parent does exercise choice and pick a school, the next major step to fulfilling that choice is the enrollment process. This study explores how the enrollment process impacts equitable access to school choice options for traditionally underserved populations. The research was conducted in St. Louis, Missouri and examined enrollment practices at regular neighborhood schools, magnet schools, charter schools, private schools, and a voluntary desegregation program. Using a mixed methods design, qualitative data was first collected on school enrollment processes through interviews and document analysis for each school type across the region. This data was coded and analyzed. Specific themes emerged about enrollment steps and factors for acceptance as well as parental supports. A descriptive narrative of each enrollment process was constructed and aligned to quantitative data on the student population that was then collected for each school. Specifically, student demographic information was collected for race, mobility rate, free and reduced lunch qualification, and special education qualification. This data was then integrated with qualitative themes to determine the impact of enrollment practices on student population. The results indicate a spectrum from simple to complex for enrollment practices across school types with traditional neighborhood public schools having the least complex enrollment process, followed by magnet and charter options, and then private schools with the most complex processes.

Traditional neighborhood public schools also have higher percentages of African American students, students that qualify for free and reduced lunch, and students with special needs, followed by magnet schools and charter schools. The private schools had the lower percentages of these populations. Additionally, specific enrollment practices were affiliated with lower percentages of African American students, poor students, and students with special needs. Based on the findings, recommendations are made on both the school and policy level to improve equitable access to school choice options for all students.

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Chapter 1: Introduction

Defining the Problem

Right now in the city of St. Louis, school age children have more options in how they will receive their education than ever before: charter schools, neighborhood public schools, inter-district public schools, public magnet schools, private schools, parochial schools, gifted schools, independent schools, county schools through the VICC (Voluntary Interdistrict Choice Corporation) program, and homeschooling (City of St. Louis, 2011-2017). With a slight dip in city population (U.S. Census Bureau, n.d.) and the increase in school choice options for city children, it is not surprising that St. Louis Public Schools has experienced a decrease in enrollment over time. From 2000 to 2010, the city population has decreased by 8.3%. (U.S. Census Bureau, n.d.). At the same time, according to the Missouri Department of Elementary and Secondary Education (2016), also known as DESE, enrollment in St. Louis Public Schools (SLPS) has decreased by over 20,000 students since 1991 as shown in Figure 1.

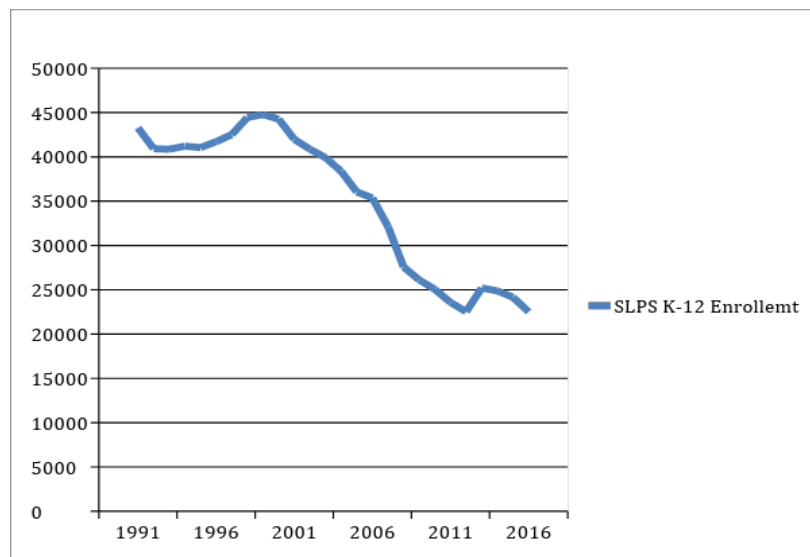


Figure 1. SLPS K-12 Enrollment 1991-2015 accessed from the Missouri Department of Elementary and Secondary Education.

There are a few important events that should be noted during this time period of decline. First, SLPS lost their accreditation with the state in 2007 (Missouri Department of Elementary and Secondary Education, 2017). Second, Charter Schools were introduced to St. Louis City in 2012 with Senate Bill 576 that allowed charter schools to expand statewide (Missouri Department of Elementary and Secondary Education, 2017). Finally, the 1980 Voluntary Interdistrict Choice Corporation program (VICC) was removed from court supervision in 1999 with districts continuing to accept new students for ten more years ending in 2008-2009. The program has since been extended for two five-year terms. Therefore, in 2019 the VICC program will come to an end and will only accept siblings of existing students (Crouch, 2016). This change may have an impact on enrollment in SLPS moving forward. Another aspect that may have an impact on enrollment in SLPS moving forward is that the district has recently gained back full accreditation and will return to elected board control after being under a state appointed board for the last twelve years (Delaney, 2019).

Despite having little knowledge, nationwide, about the effectiveness of many choice options, there has been a push to increase school choice options for families as an alternative. The city of St. Louis has followed this trend. Charter school legislation was passed in Missouri in 1998 and there have been 63 charters opened since then, 21 of which have since closed. There are currently 36 charter schools open serving approximately 30% of public school students in the city (Missouri Department of Education Charter Schools Programs Office, 2019).

However, when given choices there is extensive research demonstrating variability between families that exercise choice, thus resulting in different populations in

schools. This has been the case for the researcher's previous city neighborhood school compared to the nearest charter schools. This school has also experienced a steady decline in enrollment over time similar to that of the district (Figure 1.). However, it is the difference in student populations among the area schools that is most interesting. Recent demographic data for the researcher's former school on the Department of Elementary and Education's website indicates that the school is 97.2% African American, and 100% of students qualified for Free and Reduced Lunch. The nearest charter school is 0.4 miles from the researcher's school. Recent demographic data for this school on the Department of Elementary and Education's website indicates that the school is 42% African American, 42.2% of students are eligible for Free and Reduced Lunch. This represents a difference in population of African American students of 55.2% and Free and Reduced Lunch Students of 57.8% between two schools in the exact same neighborhood. The nearest district magnet school is 0.7 miles from the researcher's school. While this school also has 100% of students who qualify for Free and Reduced Lunch, the school 2017 enrollment data indicates that 73.3% of the student population is African American and 11.8% is Hispanic. Table 1 provides a data comparing the 2017 enrollment data for each of these schools.

Table 1
2017 Demographic Comparison of a Neighborhood Public School, Charter School, Magnet School, and Private School in St. Louis City.

	Neighborhood Public School	Charter School	Magnet School	Private School
Total Enrollment	285	273	418	495
Distance from Researcher's School	--	0.4 miles	0.7 miles	1.7 miles
% of African American Students	97.2%	42.0%	73.3%	66%
% of Students Eligible for Free and Reduced Lunch	100%	42.2%	100%	20%

The consensus of recent research shows that schools are becoming increasingly more segregated (Frankenberg and Orfield, 2013). There is also growing research on both the benefits of choice and the negative effects it may have on equity. This research is often referencing charter schools, but common findings exist in research on magnet options and voucher schools. Professor of Law, Monica De Sousa (2014) points out that “the self-selection enrollment process common to the vast majority of charter schools denies meaningful access to the most disadvantaged students.” In their book, *Educational Delusions?: Why Choice Can Deepen Inequality and How to Make Schools Fair*, Frankenberg and Orfield (2013) explain how charter enrollment policies may contribute to greater segregation or inequity related to choice. Currently, federal guidelines require recipients of funds from the Public Charter School Program (CSP) to use a lottery when making admission decisions if there are more applicants than spots available. Schools still have flexibility with this and can advantage some students over others. For example, the lottery can be weighted by setting minimum criteria for students to meet for

academics or establish requirements for family commitment in the school. The lottery is still being used but could affect the representation of disadvantaged populations (Frankenburg and Orfield, 2013). Although there may be a variety of factors of choice that threaten equity, it is the enrollment process that the researcher will focus on for this work as it is the first step a parent takes once they choose a school for their child.

Research Question and Hypotheses

The purpose of this research was to investigate how the impact of school choice enrollment policies in St. Louis City can be explained through (a) an examination of enrollment policies through document analysis and interviews and (b) an analysis of enrollment data from various school choice options, including neighborhood schools, magnet schools, gifted magnet schools, charter schools, private schools, and the interdistrict transfer program.

Qualitative data was first collected to understand school enrollment policies. The guiding research question was: How do enrollment policies differ among different school choice options in St. Louis City? The specific research sub-questions were:

- How complex is the enrollment process? What steps are involved?
- What is required for enrollment?
- Is student behavior a factor in enrollment?
- Is student academic achievement a factor in enrollment?
- When does enrollment occur and what deadlines exist?
- Is the enrollment process competitive and if so, how?
- How are parents supported with navigating the enrollment process?

Based on the review of the literature, it was hypothesized that:

-Enrollment practices will vary across choice options with magnet schools, charter schools, and private schools having more complex processes and neighborhood schools having less complex processes.

-Academic and behavioral factors will exist as criteria in charter and private options.

-Enrollment processes will be competitive in charter, magnet, and private options only.

-Enrollment windows will vary based on school type and magnet schools, private schools, and some charter schools will have enrollment deadlines.

Quantitative data was then collected. The guiding research question was: how does enrollment vary across each school choice option as a result of these policies? The specific research sub-questions were:

-What is the racial makeup of the school?

-What is the socioeconomic status of the students in the school (as measured by Free and Reduced Lunch status)?

-What percentage of students have an Individualized Education Plans (IEPs)?

-What percentage of students qualify for free and reduced lunch (FRL)?

-What is the mobility rate for students in the school?

A comparison of enrollment policies was then compared with student populations to determine if there is a connection between enrollment complexity and demographics in school populations. Based on a review of the literature it is hypothesized that schools with more complex enrollment processes will have lower percentages of African

American students, free and reduced lunch populations, and students with IEPs, with specific enrollment practices contributing to the disproportion.

Chapter 2: Review of Literature

Research on school choice is extensive and varies in its findings. Because this research looks closely at different choice models, the literature reviewed has been broken down by those options. In addition, research on the significance of historical and regional contexts, how perceptions of school choice options are shaped and influenced, and experiences of families in navigating a school choice market are included.

Charter Schools

The greatest amount of school choice literature found was on the topic of charter schools. It is important to note however, that there are two types of charter schools: charter schools operated by for-profit entities and nonprofit charter schools. Ertas and Roch (2014) sought to find out more about the populations charter schools serve by comparing the distribution of disadvantaged students in traditional public schools, nonprofit charter schools, and charter schools managed by private companies. Using school and census data in Michigan, they found that charter schools managed by Education Management Organizations (for profit charter schools, also known as EMO's) attract students to their schools in different ways than those nonprofit charter schools. Their research suggested that EMO's seek out more African Americans students. However they seem to focus on selecting fewer poor students than regular public schools. Of significance to the proposed research, Ertas and Roch (2014) point out that the majority of the existing literature on charter schools looks at the effectiveness of charter

schools compared to regular public schools, which is important, but it is also important to understand *which* students are at charter schools. This information will explain more fully the impact charter schools have in working to close the achievement gap and provides for a more comprehensive comparison.

Kleitz, Weiher, Tedin, and Matland (2000) also looked at the types of students charter schools are serving, however they took a unique research approach. Specifically, they looked at whether differences in parent preferences resulted in segregation by race and class. Of note are the research methods for this study: The study was based upon evaluation of open-enrollment households in Texas and data was generated from more than a thousand surveys on educational preferences. An analysis of the data found that there were differences between racial/ethnic and income groups in terms of their preferences regarding their children's schools. However, the difference did not extend to a common concern among parents for academic excellence. The researchers noted, "values seemed to differ because of differences in the 'real-world' circumstances faced by groups rather than due to a failure to value school quality" (Kleitz et al, 2000, p. 846). In sum, Kleitz et al (2000) determined that the data disproves the ideas that there are differences in educational preferences of households along race and/or class and that school choice options will result in racial and class segregation. However, Kleitz et al made a point that when asking people about educational quality, no one will speak against it. "Education quality, like racial equality, is an abstract value to which most respondents will pay lip service" (Kleitz et al, 2000, p. 849). Although the work from Kleitz et al (2000) shows that preferences may not differ among groups, it does not look at how policies might

impact actual school enrollment, regardless of preferences. The proposed research seeks to understand this by looking at enrollment processes.

Using a different research approach, Schneider and Buckley (2002) found different results demonstrating that preferences lead to increased segregation in school choice systems. Schneider and Buckley (2002) studied parental preferences in Washington DC by looking at their search patterns online. Key assumptions made by Schneider and Buckley (2002) in the research analysis was that early on search patterns revealed preferences and the attributes that were more important to the decision maker than dimensions looked at later on. The authors drew from several psychological theories of judgment and decision-making. The methods are notably different from previous research on the topic, which often utilizes interviews. As a result, actual preferences are revealed through behavior.

Schneider and Buckley (2002) collected demographic information and search behaviors of parents as they accessed information from a website that provided information and data on all the public schools in Washington DC. They found that there was a clear and strong bias towards accessing the demographic characteristics of the student population (which actually contradict what other studies have found from verbal reports from parents about the importance of race). The second most searched information on the website were the maps showing locations of schools. The authors note that location is important for many factors because “in a highly stratified city such as Washington DC, school location also conveys considerable amount of information about the student body” (Schneider and Buckley, 2002). Of particular importance, the researchers found that many parents say that they are concerned about whether or not the

teachers at a school are highly qualified, yet very few parents actually visited the part of the school websites that provide information on teacher qualifications. There were some differences in searching student demographics based on the searchers' level of education. Student demographics was the most searched category for higher educated parents and occurred more by them than among less educated participants. Test score and program data were accessed in fairly high numbers but was not what was searched first and most frequently by parents. "As for the search paths of parents over time, the data showed a set of parents are using their existing knowledge to cull schools with poor academic performance from their choice set without even looking at the detailed school profiles" (Schneider and Buckley, 2002). The authors conclude that a number of the parents are combining the information they already have about the demographic composition of schools and the demographic makeup of DC neighborhoods with new information learned from their search to select a new school to view in depth. "As they do this they focus on schools they believe to have a lower percentage of back students" (Schneider and Buckley, 2002).

Schneider and Buckeley's (2002) work is an example of what Kleitz et al (2000) said about educational equity and the lip service people will pay. Kleitz reminds us that we cannot just go off what people say, because after all, everyone wants a good education for their child. This is why Schneider and Buckley looked at parent *actions* to gain a deeper understanding of what is important to them when choosing a school. However, what is still unknown is how enrollment policies impact whether or not parents can actually get their children into the schools they desire and whether or not this impacts population demographics. The proposed research attempts to explore what parents are

able to do once they decide where they want to send their children and how enrollment policies might impact their ability to access that choice.

Magnet Schools

Magnet schools were one of the school choice options that were examined in this research. According to the St. Louis Public Schools Magnet Schools Guide (2017), magnet schools are “district schools without boundaries, each offering something unique that you won’t find in a traditional school.” The schools also “focus on a variety of specialized things” like gifted enrichment, international studies, Montessori, career and technical pathways, to name a few (St. Louis Public Schools, 2016).

Grooms and Williams (2015) studied implications for black students in magnet schools in St. Louis Public Schools (SLPS). In addition to the findings, their research has significant implications for the proposed research because of the methods of policy analysis and the fact that the research was conducted in St. Louis City magnet schools. Specifically, Grooms and Williams (2015) wanted to find if magnet schools in St. Louis City further isolated Black students and what Black student achievement among students in magnet schools in St. Louis looked like. The researchers used policy analysis and descriptive statistics from all twenty-three magnet schools in SLPS to examine the relationship between policy, enrollment, and achievement of Black students. Grooms and Williams (2015) found that although St. Louis magnet schools are located in predominantly white neighborhoods, magnets are becoming increasingly majority minority. The researchers also point out that this is occurring despite magnet school policy that says that at least 35% of seats are held for neighborhood residents. The location of the magnets in the predominantly white neighborhoods of a city that is

majority black is interesting and locations of different choice options should be examined in the proposed research to help understand where students might be pulled for enrollment. Furthermore, Grooms and Williams (2015) found that the voluntary interdistrict transfer program in the area did not significantly impact white enrollment in the magnet schools. The researchers concluded that white parents are not choosing to enroll their children in the city's magnets and suggest that this might be due to the other choice options for parents in the city.

When it came to black student achievement in SLPS magnet schools, Grooms and Williams (2015) found that the only schools to make overall annual yearly progress (AYP) in both communication arts and math over all five years of their study were the only three schools with an average black enrollment at or less than 50%. Additionally, these three schools were the only ones in which the black students subgroup also made AYP in both subjects over the five years.

Grooms and Williams (2015) also analyzed socioeconomic segregation among the schools and found that there were thirteen magnet schools located in communities with an average median black family income that is below the city average. However, there was less variance in the average percentage of students who qualified for free or reduced lunch (FRL). The overall AYP averages for schools located in communities with lower average median incomes were lower than the AYP averaged for the 5 magnets located in communities with above average median incomes. Again, the existing research looked at performance of magnet students with an additional effort to understand the demographics. However the proposed research aims to see if the enrollment policies for magnet schools might directly impact student demographics, which Grooms and

Williams have shown to differ from their neighborhood demographics. Attention to the location of the schools and the Census tracts in which they fall will be important to the proposed research.

Interdistrict Transfer Programs

The Voluntary Interdistrict Choice Corporation, or VICC for short, oversees the desegregation program for the St. Louis metropolitan area. According to their website they are specifically responsible for facilitating the transfer of city students to suburban school districts and suburban students to city magnet schools. The VICC program was examined in the proposed research as a school choice option however it is important to note that it is being phased out in 2019 and will only accept siblings of existing students in the future. For this reason and others, the VICC program was analyzed and is individually discussed in the results section.

Research has been conducted on the VICC program and other interdistrict transfer programs on student participation and achievement, but how enrollment policies might impact which students participate in programs like VICC needs to be further explored. Bowers-Brown (2015) researched whether African American students integrated in suburban settings perform better over time than in a heavily segregated inner-city setting. The research was conducted on the VICC program in the St. Louis metropolitan region and used individual student data from the Missouri Achievement Program (MAP) for city, county, and transfers students between the 2005-2006 and 2009-2010 school years. The researchers were able to conclude that participation in such a program improves a student's academic performance. Black transfer students scored higher than black city students. In addition, black transfer students progressed at the same rate as white county

students and the longer the participation in the program, the greater the effect the program had on student achievement. What this research aims to understand is whether or not these differences in achievement may be a result of differences in student populations (socioeconomic status, IEP status, transition status, etc.) of VICC and other choice options, even if they are the same race, and the role the enrollment process may have played in those differences.

Holme and Richards (2009) studied school choice within the Denver, Colorado region to examine the ways in which interdistrict choice patterns relate to existing patterns of stratification between school districts. An important piece of background information to note when considering this research is that according to *School Choice for Kids* by the Independence Institute (2016), the state of Colorado has open school enrollment, meaning “students in the state can enroll in a public school other than their assigned neighborhood school.” This is different than the interdistrict transfer program in St. Louis, which aims to increase integration. Despite these differences, the research methods and findings from Holme and Richards (2009) are still significant to this research.

For their research, Holme and Richards (2009) first analyzed district data to determine which districts within the region sent the most transfer students, which received the most students, and which were the largest "net senders" and "net receivers." District data were then analyzed to determine how "net senders" and "net receiver" districts differed in terms of the student free and reduced price lunch status and race/ethnicity. The researchers found that the overall impact of interdistrict choice is pretty small in terms of the overall demographics of most individual school districts.

However their analyses suggested that interdistrict choice made existing between-district stratification within the regions worse. For example, they found that on average, higher income students were more likely to take advantage of interdistrict choice. In the Denver metro area, students transferring out were slightly less likely to be white compared to the district average and they were more likely to be black and Hispanic than students who did not transfer. Denver Public School (DPS), which was largely non-white and high poverty, was the top sender. Within DPS they found that out-transfers were disproportionately more likely to be higher income and nonminority than DPS students overall. In addition, transfer students were less likely to qualify for free and reduced lunch than DPS student and were more likely to transfer to districts with student populations that were higher income and lower minority. So in this choice system, certain populations were more likely to take advantage of the options. What is unknown is how the enrollment processes impacted participation in the choice options. However, it is interesting to note that there were clear differences in populations. This research looked at what differences in student populations in different St. Louis choice options exist and further try to draw a connection to the enrollment practices of each.

Finally, Sirer & Maroulis et al (2015) researched how “geographic, social, and psychological constraints” may limit the extent to which competition occurs in school choice programs. Using the Chicago Public Schools (CPS), the researchers found differences in choice movement between high- and low-achieving students, with disadvantaged students less likely to exercise school choice. In addition, they found that “higher initial achievement was also associated with selecting higher achieving destinations” (Sirer & Maroulis et al, 2015). They do not offer reasons for why this may

be but hypothesize that enrollment requirements may be one reason for differences in the demographics of students that exercise choice options.

Historical Contexts

Because this research is being conducted in a St Louis City, it is important to understand some unique aspects of education in the region. Feldman & Watson (2012) studied the recent histories of two urban districts, one of which was St. Louis Public Schools. After a review of the research and applicable theory, Feldman & Watson (2012) offered their suggestions for how to solidify the success of each system in the future as well as highlight examples of positive innovations occurring in each district. It is not necessarily the conclusions of their research that is significant to the current research, but their research on the history of St. Louis Public Schools. They provide important information to understanding education in the city through a detailed summary of the history of SLPS, highlighting key events and people. Their research found that the district increased significantly in size in the 1840's because of a population boom in St. Louis. Shortly after, the first high school for African Americans opened in SLPS in 1873. For nearly the next hundred years, the district "remained a model of African American education" (Feldman & Watson, 2012, p. 556). It was not until the last forty years that SLPS saw a steady decline in enrollment. According to Feldman & Watson, the district had an all-time high enrollment of 110,000 in 1967, but in 2009 enrollment was just 26,000 (p. 556). In addition to the enrollment decline, student performance on state assessments decreased and there was mismanagement of financial resources (Feldman & Watson, 2012, p.556). Eventually state officials decided that an outside, independent advisor needed to reform the district and an outside consultant was used and a former

business executive was brought in to serve as superintendent. To save the district \$64 million they closed sixteen schools and laid off of more than 1,400 employees. Despite the improvement to the district's financial problems, many academic problems still existed (Feldman & Watson, 2012, p. 557). Eventually in 2007, SLPS lost its accreditation with the Missouri Department of Education and a three-member temporary school board was put in place to run the district. During this time, there was also a constant turnover of district leadership. By the beginning of the school year in 2008, SLPS had seven superintendents in a four-year span. Yet another superintendent was brought in for the 2008 school year while another \$16 million budget shortfall was announced. As a result, seventeen more schools were closed, more employee positions were cut, parent and teacher organization days were reduced, and community education centers and other programs were trimmed. At the same time, a network of charter schools began to open around the city (Feldman & Watson, 2012, p. 561).

From their research on the history of SLPS and other urban districts, Feldman and Watson (2012) found that the challenges urban districts face are not unique. Financial challenges that are seen all over the country and are met with reform and overhauls result in regression in student progress "in almost all cases" (p. 563). In addition, the authors call for replication of successful programs, consistency in district leadership, and increased student responsibility for learning (p. 566-567). Little was discussed in Watson and Feldman's (2012) research about the effect of increased choice amongst challenges and reforms however. Developing a better understanding of how St. Louis Public Schools is impacted by increases in school choice options is needed.

Navigating School Choice

Andre'-Bechely's (2005) case study research shares the experiences of three mothers in navigating public school choice. Through the process, their stories tell how they become part of the inequities of the district's choice programs. The research shows how school choice policies that are intended to be more "equitable and democratic for parents," actually continue to produce the educational inequities that they were intended to reduce. The research also shows how bureaucracy and policies for school choice can actually advantage and disadvantage certain groups. Using a case study approach, Andre'- Bechely shares three stories about navigating competitive school choice options from the perspective of a white mother, a Latina mother, and an African American mother. By comparing the experiences the authors showed how bureaucratic politics and the technicalities of school choice policy work differently for different people. Specifically, unwritten institutional rules about race and access changed for each mother's situation, but it was clear that the rules centered on the benefits associated with being white. These findings are critical to this research that looks more closely at some of these policies, specifically enrollment policies, and the impact they have. Andre'-Bechely's (2005) research is similar to this research because both seek to learn more about how parents have to navigate school choice policies. In a way, Andre'-Bechely's research explored all aspects of school choice policies, while the current research sought to understand how enrolment policies specifically impact families. Andre'Bechely's research also used only a qualitative case study approach while the current research used a mixed methods approach including interviews, document analysis, and data analysis. Andre'-Bechely's (2005) findings however were important in posing the hypothesis that

enrollment policies for certain school choice options negatively impact students of color and poor students.

Schneider, Teske, Marschall, and Roch (1998) investigated how informed parents were as consumers of school choice. The authors share that empirical research consistently shows that citizens know little about public policies. Despite this, the authors point out how some education reformers are attempting to create a market-like approach to education that gives citizen/consumers greater choice in this public service.

Interestingly, Schneider et al (1998) found that on average, poor parents had very little accurate information about objective conditions in schools. However, even without this knowledge, there was evidence that their children were enrolled in schools that were higher on the dimensions of education that their parents said they valued. This is significant to the proposed research because it is often the enrollment policies in the arena of school choice that can be complex and if a parent does not understand them clearly, it can be a determining factor in whether or not a child attends a school. If parents are generally uninformed about school conditions and choice options, how informed are they about enrollment policies? How capable are they of understanding and meeting the requirements of the varying policies? How does that impact their ability to navigate school choices in St. Louis?

Enrollment Policies

In England in the 1980's, major education reforms occurred. Known as The Education Reform Act, the reforms encouraged market like conditions and increasing competition through multiple means. The intent of the legislation was to increase standards. West, Pennel, and Edge (1997) researched how school enrollment in England

was impacted by those reforms. Specifically, they looked at the operation of school enrollment and explored how policies and practices affected equity. Although this research occurs in another country, it is highly similar to the proposed research that aims to understand the impact of changes in education policy in the United States. Similarly, our country has seen a shift in education towards increased choice, also with the intent to increase student achievement. However, more needs to be known about how this increased choice might affect equity.

West, Pennel, and Edge (1997) began their research by presenting the legislation background and a description of school choice options. They explain how the increased competition among schools has led to the schools using strategies to ensure they have the best students. They note that this is particularly dangerous when the schools are allowed to set their own enrollment guidelines. In England the central government does not regulate or monitor local enrollment practices leaving considerable room for schools to “cream or skim” who they enroll using covert tactics. They state “Any school that operates its own admissions policy is in a position to use some form of covert selection to ensure that its intake is as favorable as possible” (West, Pennel, and Edge, 1997).

Enrollment practices noted in the research that helped schools filter the students they enrolled included interviews, the very nature of the application that has to be completed (which the researcher poses may intimidate some parents, be impossible to complete for some parents, or the application may ask for information that the parents may not have), references to criteria applied at a school (eg. ability of potential pupils and parents to play a full role in the whole life of the school), and the amount of information provided to parents about school choice and enrollment favors (this resulted in some parents knowing

more and being able to work the system in their favor) (West, Pennel, and Edge, 1997). The researchers found that since the Education Reform Act, enrollment policies in England changed. Administration of schools' admission has become more fragmented and equity has been the most significant issue to arise from the policy change (West, Pennel, and Edge, 1997). It was not the intent of the legislatures to negatively impact equity, but the law has lead schools to position themselves to attract high attaining students. This is important to note for the U.S. because increasing inequity is also obviously not an intended consequence for us when it comes to school choice, but the researcher posits it is posing a similar threat. A key finding from West, Pennel, and Edge (1997) is that with the increased attention to student performance and without the government regulating or monitoring enrollment, it was easy for schools to cream students using a range of covert tactics to ensure they look good. The findings from West, Pennel, and Edge, 1997 are important to the current research because they explore a similar question, just in a different time and place.

In Missouri, Charter schools are exempt from most state rules and regulations, except those that explicitly apply to charters. They are also exempt from most district rules and regulations. According to Missouri law, charter schools must enroll children that live in the district in which the charter operates, nonresident students eligible to attend the district in which the charter operates through urban voluntary transfer programs, and nonresident students transferring from unaccredited school districts. If the number of applications a charter school receives exceeds capacity they must have an admissions process that assures all applicants an equal chance of admission. They can do this by establishing a geographical area around the school whose residents will receive

enrollment preference (as long as it does not create racially or socioeconomically isolated schools), giving enrollment preferences to siblings of current students, or by giving enrollment preferences to school employees (Education Commission of the States, 2018).

Chapter 3: Methodology

This mixed methods case study examined how school choice enrollment policies impact schools, specifically related to enrollment and student population.

Research Design

This study used a mixed methods design; meaning qualitative and quantitative data were both collected and analyzed. The two forms of data were integrated by connecting the data in a distinct way. Quantitative research is a method that “tests objective theories by examining the relationship among variables,” typically with measurement instruments. This allows the data to be numbered and analyzed statistically (Creswell, 2014, 247). Qualitative research is a method for “exploring and understanding the meaning individuals or groups ascribe to social or human problems” (Creswell, 2014, 246). The research process involves “collecting data in the participants’ setting, analyzing the data inductively, building from particulars to general themes, and making interpretations of the meaning of the data” (Creswell, 2014, 246-247). Each of these research methods are integrated in a mixed methods approach. Mixed methods design is a newer approach to research and has become more common in field such as education (Creswell, 2014, 217). Its strength is that it drawing on both quantitative and qualitative research while minimizing the limitations of the approaches in isolation (Creswell, 2014, 218). The reason for collecting both quantitative and qualitative data in this study was to address the multifaceted ways in which school choice enrollment policies can

impact school populations. Enrollment policies are best measured qualitatively and student population information is best measured quantitatively. However, school enrollment policies were researched first in order to lay the framework for interpreting any relationship it may have with school population data. This research approach helped to explain the effects of those policies and patterns of student enrollment.

There are different types of mixed methods designs depending on how the qualitative and quantitative data are integrated. In this mixed methods design, an exploratory sequential design was used, involving two phases. In the first phase qualitative data was collected, analyzed, and then the results were used to build on the findings through quantitative methods (Creswell, 2014, 225-226). The purpose of this approach was to have the quantitative phase further explain the findings in the qualitative phase. The intent was to develop better understanding of the impact of policies through analysis in the qualitative phase (Creswell, 2014, 226).

Combining qualitative and quantitative approaches was necessary to allow for a more complete analysis of school enrollment policies in St. Louis City and the effects they have on both school enrollment and equity. Qualitative analysis of policies was a necessary first step to being able to understand and evaluate enrollment practices. Quantitative analysis of enrollment data was necessary to defining the effect those practices have on student population and the equity of school choice.

A visual model of the procedures for this sequential exploratory mixed methods design of this study is presented in Figure 2. The qualitative research takes the priority in this research because the information it provided was necessary to interpreting the quantitative research. We could not analyze the effects of school enrollment if we did not

seek to understand enrollment policies from various school choice options. As previously stated in the literature review, West, Pennel, and Edge (2017) found certain enrollment practices that helped schools filter the students they enrolled, including interviews, the very nature of the application that has to be completed, references to criteria applied at a school (eg. ability of potential pupils and parents to play a full role in the whole life of the school), and the amount of information provided to parents about school choice and enrollment favors (this resulted in some parents knowing more and being able to work the system in their favor). Understanding these enrollment practices is essential to understanding the impact they may be having on certain populations in this school choice context. Therefore the qualitative component was first in the research sequence and was a combination of document analysis and interviews of school personnel regarding enrollment policies. This informed the quantitative research portion that followed, which consists of an analysis of enrollment and demographic data for the school choice options. The qualitative and quantitative research were integrated at the quantitative phase to determine the impact the qualitative data (enrollment practices) had on the quantitative data (actual enrollment and student population). The results were also integrated during the discussion of the research.

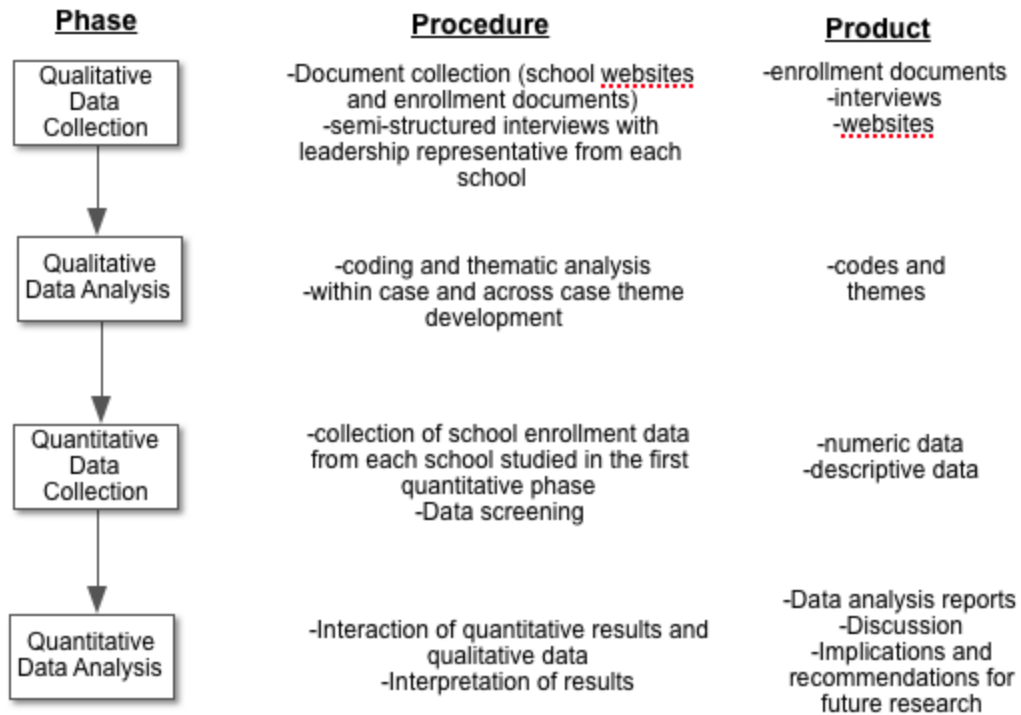


Figure 2. Model for the Mixed Methods Procedure (Sequential Exploratory Mixed Methods Design).

Potential threats to validity in the qualitative phase could have been in the interpretation of the data, researcher bias throughout the process, and selection of the sample. Several strategies were employed to protect the validity of the research. First, triangulation was used; meaning different data sources were used to build a sound justification for the themes that were developed. In this research there was an analysis of a variety of enrollment documents, school websites, and interviews with school staff about the enrollment policies. Another method to protect validity was member checking. This means taking the specific descriptions and themes back to participants to determine whether they feel they are accurate. Therefore, after analyzing documents and interview transcripts, the researcher went back to the interviewees with the descriptions and themes found to check if they agree with the interpretations. Next, rich and thick descriptions

were used to share the findings so that the results can be evaluated for consistency with outside stakeholders' experiences. Member checking also helped ensure researcher bias was not influencing interpretations, uniquely. Presenting negative or discrepant information was very important to protecting internal validity of the qualitative portions of the research.

Population

The target populations in the first qualitative phase of the research were various elementary school/school choice options in St. Louis City. In the second quantitative phase of the research, the target population was the same schools/school choice options for the data analysis. Determining the schools used in the qualitative phase was based on the school type within a designated geographical region. One to three of each type of school was selected: neighborhood public schools, magnet schools, gifted magnet schools, and charter schools. The VICC program was treated as an enrollment option however it could only be analyzed once, as there is one common enrollment process for the program. In the city of St. Louis there are 35 neighborhood public schools, 14 elementary magnet school options (2 of which are currently gifted schools with a third being transitioned to gifted), and 20 elementary charter school options. Specific schools were based on geographic location, ensuring samples were taken from various parts of the region. Charter schools, regular magnet schools, and neighborhood schools that are closest in proximity to each other were identified. This avoided any bias in the selection of schools used and pulls from various regions in the city. It also allowed for comparisons of schools in similar neighborhoods. To avoid saturation, the research only studied two neighborhood public schools as they follow the same procedures. Additionally, one gifted

magnet was studied and one regular magnet school was studied as they also follow the same procedures across schools. One parochial private school was studied and one independent private school was studied to ensure variety in type of private school. However, three charter schools were studied because there are some differences across charters.

For the purpose of the quantitative phase of the study, enrollment data for each of the schools researched in the qualitative stage were analyzed. This is necessary to explain the impact of enrollment policies of these schools.

Variables

For the qualitative analysis, transcriptions were completed for interviews, documents and websites, were organized categorically and chronologically, then all data was reviewed repeatedly, and finally coded using the coding software Dedoose, Version 8.2.14. Next, a list of major ideas that emerged were noted followed by the generation of a detailed description of each enrollment policy. During the analysis, schools were scored according to complexity of the enrollment process based on the quality and significance of enrollment steps, acceptance criteria, and amount of supports provided to parents during the process.

The second phase of the research was the quantitative portion. This involved the collection of school enrollment data from the Missouri Department of Elementary and Secondary Education and then analysis of that enrollment data. During the analysis, qualitative data was integrated with quantitative data. The research question, “How can the impact of school choice enrollment policies in St. Louis City be explained through an analysis of enrollment data from various school choice options” determined the variables

for this study. The independent variable was the school choice type (neighborhood, charter, magnet, gifted magnet, or interdistrict transfer programs) and their corresponding enrollment policy. School enrollment by various categorical criteria, was the dependent variable.

Data Collection and Analysis

Phase 1 qualitative data collection.

The first qualitative phase of the research focused on understanding enrollment practices of school choice options. This was done through document analysis of enrollment information, websites, and transcripts of interviews with school staff. The first step involved purposeful selection of sites. One to three of each type of school choice options were used, with an intention of selecting from across the city, including north city, midtown, and south city. The interdistrict transfer program stands alone as a school choice option. One to three schools for each school choice option is sufficient and avoids saturation, which could happen easily in this study because many school options follow the same enrollment policies. The next step in the data collection process was to determine the types of data to be collected. For each school, the enrollment information on the website was analyzed. In addition, any flyers, information, and enrollment paperwork provided by the school was examined and analyzed. Additional data was collected through a semi-structured interview of a school staff member that handles enrollment. Interviews were recorded and later transcribed.

Analyzing the documents was done through multiple observations. Each observation focused on one of the research sub-questions with an additional initial and end overall review. For the interview data collection, the school was contacted to identify

a staff member that is a point person for enrollment information for that school. The school was able to determine who would be best to answer questions about enrollment as this varied at each school. The person identified by the school was the person that was interviewed. An interview protocol was used during the interviews. Some general questions based on the research sub-questions were prepared in advance to guide the interview and ensure necessary information from each school was provided. Some additional questions varied for each school based on the initial document analysis and unique aspects of that school. In addition, some follow-up questions and probing questions varied. The overall content of the interviews was intended to answer the research question and sub-questions, clarify information from the document analysis, and gather missing information. Respondents received the questions prior to the interview to ensure they felt prepared and comfortable answering the questions fully. Space on the protocol was available to record notes and comments. Respondents were notified in advance that the interview was to be recorded and then later transcribed. These transcriptions were reviewed once complete and additional notes and comments were recorded. The researcher was involved in all parts of the data collection process because of the researcher's background and involvement in the research topic.

Qualitative data analysis and interpretation.

Data analysis and collection occurred simultaneously for the qualitative research. Text and image data obtained through the document analysis and interviews was coded and analyzed for themes.

The steps in the qualitative analysis were (1) organizing and preparing the data for analysis, (2) reading and looking through all the data, (3) coding the data, (4) using the

coding data to develop categories and themes, (5) advancing how descriptions and themes were represented in the qualitative narrative, and (6) making an interpretation of the findings or results (Creswell, 2014, 197-200). Interviews needed to be transcribed, reviewed, and coded and documents needed to be reviewed and coded. This included informational and enrollment documents and interviews with school staff from each school. Once coded, it was reviewed to determine the common themes about all enrollment policies and individual school option policies. To advance how the descriptions and themes were represented, a narrative passage was used to convey the findings and the complexity of each school's enrollment policies was explained. This includes a detailed discussion of the themes including sub-themes, specific illustrations, multiple perspectives, quotations, and tables/visuals.

Phase 2 quantitative data collection.

The second phase of the research involved collecting quantitative data, integrating the quantitative enrollment data with the qualitative data, and analyzed. Enrollment data was collected from the Missouri Department of Elementary and Secondary Education and compared to the themes and descriptors from the qualitative data to understand how they relate to each other. A comparison of each school's enrollment population was compared across school types, regions within the city, and by enrollment practice.

Quantitative data analysis and interpretation.

Data screening included descriptive statistics for all the variables. The research question "How does enrollment vary across each school choice option as a results of these policies?" predetermines the use of descriptive statistics. Because the purpose of this analysis was to learn about the relationship between several independent variables

and an outcome variable, individual comparisons were made and presented in a table and an average was determined to help show relationships and differences.

The final step was to interpret the findings, going back to the research question and hypothesis. Whether or not the hypotheses were supported or refuted is addressed later in the paper. An explanation of whether the results are significant or not is also discussed as well as threats to validity, flaws in the experimental procedures, and how the results might be generalized to people, settings, and time periods. The final step in interpreting the results is a consideration of the implications for the findings for the population studied and future research.

Ethics and Human Relations

The researcher is a resident and a public educator in a wealthy neighboring public school district in St. Louis County. She formerly worked at a neighborhood public school in St. Louis City and has experienced the challenges related to increased choice and competition, student mobility, and differences in school enrollment procedures and school policies. She has personal and professional relationships with others who work in various capacities in a variety of school choice options in the city. While the researcher does not have children of their own, the researcher works with many children and is friends with parents and families in the city impacted by school enrollment policies. All of these relationships and experiences create a potential for bias and could introduce the possibility for subjective interpretations of the research.

In order to limit bias as much as possible, steps were taken to ensure reliability and validity: extensive verification, triangulation, member checking, and negative and discrepant information is presented. Finally, the researcher's academic advisor

conducted additional audits on the research. Although these arguments are not strong enough to eliminate the possibility for bias, they do minimize it enough to make it reasonable to conclude that the research is reliable and valid.

In order to comply with the regulations of the Institutional Review Board (IRB), the permission for conducting the research was obtained by filing a Request for Review Form and providing information about the research such as the description of the project, methods, procedures, participants, and research status. Because human subjects were used, the researcher completed the Ethics and Human Subjects Online Module and passed the CITI assessment and all ethical rules were followed. The interviews with the participants were recorded and the study was conducted in a normal social setting, was not a sensitive or private topic, and the subjects were all over eighteen years of age. All interview participants signed an informed consent that states that the participants were guaranteed certain rights, agree to be involved in the study, and acknowledge their rights were protected. To maintain the privacy of the interviewees, fictitious names are used in the description and reporting of the results. Study data has been stored in a secure location and will eventually be destroyed. Participants were notified that the data was going to be shared with others, but that their identity will not be identified.

Chapter 4: Results and Discussion

Qualitative Results Associated with Research Question 1

The first phase of the research involved the collection of qualitative data through interviews and document collection in order to answer the first research question: How do enrollment policies differ among different school choice options in St. Louis City?

The interviews were then transcribed and the transcripts, school websites, and enrollment documents were coded and analyzed using a coding software. Two major themes emerged through this coding process: steps in the enrollment processes and factors for acceptance, as well parental supports offered in the enrollment process.

Theme 1: Enrollment steps and factors for acceptance.

Qualitative data showed that across the schools studied, enrollees were required to complete a variety of steps to enroll a child at the school, with some schools having more steps than others. Qualitative data also showed that across the schools studied, some consider specific factors for acceptance that others did not consider. Each step in the enrollment process or factor for acceptance a school has, the more complex their enrollment process was for potential enrollees.

Within this first major theme of enrollment steps and factors for acceptance, subcategories also emerged including financial requirements for acceptance, student behavior expectations, academic expectations, school attendance expectations, residency requirements, enrollment caps on the number of students that can be enrolled, required site visits for families, and limited grade level entry points. The financial category informed a subtheme supported by data about tuition requirements and application fees. Students who wish to attend schools with these enrollment criteria pay tuition to attend the school and/or must pay an application fee when applying. The behavior category resulted from a review of discipline records and a site visit. This category informed a subtheme supported by data about students who wish to enroll at schools with these factors for acceptance must undergo a review of report cards any discipline records for behavioral concerns and/or may be asked to visit the school for a site visit to observe how

the student functions in the school setting. Closely related to this sub theme is attendance. Schools that included attendance as a factor for acceptance review student attendance records before accepting students. The subtheme of academics could include one or more of the following: a review of academic records, an admissions test, or a placement test. This includes schools that require a review of a student's academic records as a factor for acceptance, schools that require a set level of achievement on some sort of academic test as a factor for acceptance, or schools that require a placement test to be taken by the student as a step in the enrollment process. The residency subtheme indicates whether or not there are specific residency requirements for enrollment in a school. All schools were located in St. Louis City and all the public options require city residency. The residency subtheme specifies a certain residency within the city. For example, some schools may only enroll students from certain zip codes in the city. It is also important to note that while the neighborhood schools have a primary area in which they enroll students, they are able to enroll students from any zip code within the city.

All schools studied were located within St. Louis City. The residency subtheme is specifically related to residency requirements in limited areas within the city. The enrollment cap subtheme included schools that have a cap on the number of students they enroll resulting in either a waitlist or lottery when the maximum enrollment is reached. Closely related to this is the subtheme was limited grade level entry. Schools that consider the grade level a student is entering as a factor for acceptance may only allow students to enter at certain grade levels as part of their policy or based on openings they have available in the at grade level. Also related is the limited enrollment subtheme. This includes schools that have enrollment deadlines or that only enroll students at certain

times in the year. Finally, the subtheme of site visit indicates an enrollment step that requires the parent or guardian to attend a meeting and/or participate in a tour.

Figure 3 shows the first major theme and its accompanying sub-themes found in the qualitative data. The first major themes that emerged were enrollment steps and factors for acceptance.

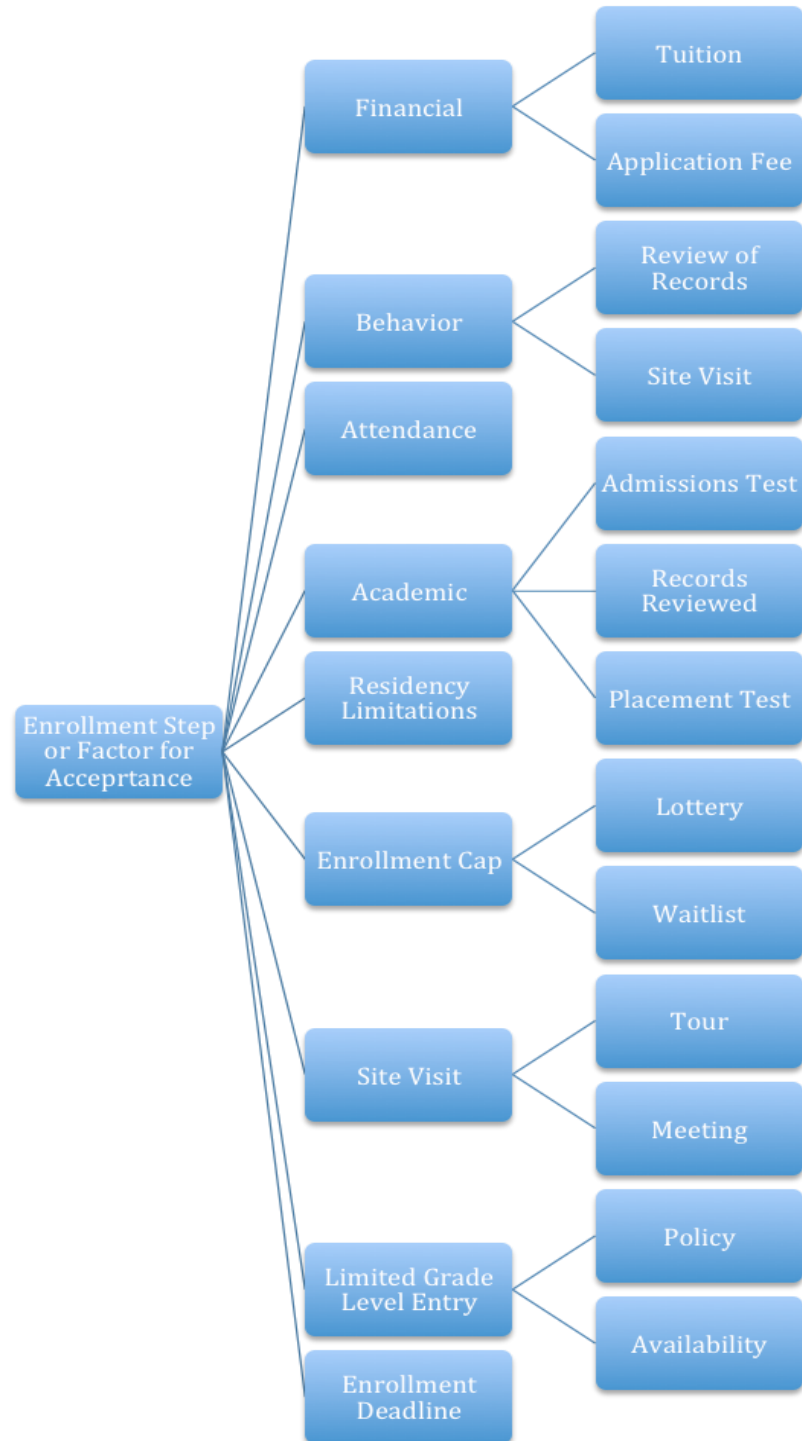


Figure 3. Theme 1: Enrollment Steps and Factors for Acceptance.

The number of enrollment steps and factors for acceptance evidences complexity of school enrollment practices. Schools that require more steps in the enrollment process

or factors for acceptance were considered to have more complex enrollment practices.

There were a total of 16 enrollment criteria and factors for acceptance that emerged through qualitative analysis. The number of criteria each school has appears in Table 2.

Table 2
Total Number of Enrollment Steps and Factors for Acceptance By School, 2018-19

School	Number
Neighborhood 1	0
Neighborhood 2	0
Magnet	3
Gifted Magnet	5
Charter 1	5
Charter 2	3
Charter 3	6
Private 1	11
Private 2	8
VICC	5

The quantity of enrollment steps and criteria for acceptance indicated that certain school types have less complex enrollment practices, such as the two neighborhood schools, while other school types have more complex practices, such as some of the charter schools and the private schools. But the number of enrollment steps and factors for acceptance each school has is not enough to determine complexity because some factors or steps are more complex than others and some may impact the equity of enrollment in more significant ways. Therefore, qualitative data was used to analyze which practices might disenfranchise certain populations more than others in the second phase of the research. These results are shared in the Qualitative Results section. The

potential challenges each step or factor can cause for families and the threat it could have on the equity of enrollment in a school for vulnerable populations is described in the summary discussion of the qualitative research question below.

Theme 2: Parental supports.

The second major theme to emerge from the data was the ways in which the schools support parents in navigating enrollment processes. This includes offering translating services, optional tours, support with completing enrollment paperwork, offering enrollment paperwork in various forms such as paper or online, having detailed websites that are easy to navigate, and engaging in marketing and recruitment. The more support offered throughout the enrollment process is closely related to enrollment complexity, with schools with more complex processes offering more support to parents than schools with less complex processes in many cases. There were a total of 6 parental supports that emerged through qualitative analysis. The number of supports each school has appears in Table 3.

Table 3.
Number of Parental Supports Offered by School, 2018-2019

School	Parental Supports
Neighborhood 1	3
Neighborhood 2	2
Magnet	4
Gifted Magnet	3
Charter 1	6
Charter 2	4
Charter 3	4
Private 1	3
Private 2	5
VICC	4

Transportation.

Student transportation emerged several times throughout the qualitative data, however it did not emerge necessarily as an enrollment step or factor for acceptance. Instead, schools indicated both in interviews and on their websites whether or not they provided transportation for students. While this is an important factor for some parents in how they select a school for their child, the researcher does not consider it a parent support with regards to the enrollment process. However, given the significant role transportation plays for certain families in making a decision about school choice, it is still examined in this research with regards to race, FRL status, and special education identification. Five schools in the study provide transportation to students, including both neighborhood schools, both magnet schools, and Charter School 1. The VICC program also provides transportation for students.

Quantitative Data: Student Demographics

Following quantitative analysis, enrollment data was collected for each school.

Table 4 represents the racial makeup of each school studied.

Table 4
School Demographic Data: Race, 2018-2019

School	% Black	% White	% Asian	% Hispanic	% Indian	% Multirace	% Other
Neighborhood 1	96	4	0	0	0	0	0
Neighborhood 2	98	0	0	2	0	0	0
Magnet	72	12	5	11	0	0	0
Gifted Magnet	23	67	8	0	0	0	2
Charter 1	98	0	0	2	0	0	0
Charter 2	28	45	7	13	0	7	0
Charter 3	43	50	0	4	0	0	3
Private 1	10	72	3	9	2	0	4
Private 2	88	8	0	0	0	4	0

Table 5 indicates the percent of students who qualify for free and reduced lunch (FRL), mobility rate, and the percent of special education students with Individualized Education Plans (IEPs).

Table 5
School Demographic Data: Free and Reduced Lunch, Mobility Rate, IEP Population, 2018-2019

School	% FRL	Mobility Rate	% IEP
Neighborhood 1	100	31	12
Neighborhood 2	100	61	12
Magnet	100	23	18
Gifted Magnet	23	8	6
Charter 1	100	36	8
Charter 2	63	19	16
Charter 3	39	5	11
Private 1	6		5
Private 2	53		0

School Narratives

Once all qualitative data was collected and analyzed, and all quantitative data was collected, a picture of each school emerged. For privacy reasons, no school names or school personnel are included.

Neighborhood school 1.

Neighborhood School 1 is located in mid St. Louis City in a heavily gentrifying neighborhood. The student population is 96% African American and 4% white. 100% of students at the school qualify for free or reduced lunch and there is a mobility rate of 31%. 12% of the students have an IEP.

To enroll at the school a parent or guardian must come to the school and complete basic enrollment paperwork such as student information (name, birth certificate, etc.), parent/guardian information (drivers license and contact information), and provide proof

of residency in St. Louis City. Although the school is considered a neighborhood school and has a primary area of residence in which they draw from, the school will enroll students from any city zip code. Once the enrollment paperwork is complete the student is entered into the system and can start school. If necessary, after the student is enrolled the school will work with the parent to get any necessary health records (such as immunization records) and academic records (such as IEPs). The school does provide transportation. Tours are offered to parents if they are interested. If needed, the district can provide translating services. There are staff members available to assist with completing enrollment paperwork if necessary. Enrollment documents are all paper based which means the parent must go to the school to enroll. Enrollment is offered year around during school hours with limited hours during summer months when the secretary is in the office less. Students can enter into any grade level at any point in the year. There is no cap on the number of students the school can enroll. The district website provides basic information about what documentation is needed for enrollment. The school website does not include any information. To find out about enrollment, a parent would need to call the school.

Neighborhood school 2.

Neighborhood School 2 is located in north St. Louis City. The student population is 98% African American and 2% Hispanic. It has the highest mobility rate of any of the schools studied at 61%. One hundred percent of the students at Neighborhood School 2 qualify for free or reduced lunch and 12% of the students have IEPs.

Enrollment at Neighborhood School 2 is the same as Neighborhood School 1. Parents would come to the school and complete the same enrollment paperwork, provide

proof of residency in the city, and then the student would be enrolled. As with Neighborhood School 1, Neighborhood School 2 has a primary area of residence in which they draw from but will also enroll students from any city zip code. The school also provides transportation and works with families after enrollment to obtain any necessary health or academic records. Enrollment is offered year around (with limited times during the summer months when school is not in session) and students can enter into any grade level. There is no cap on the number of students the school can enroll. Like Neighborhood School 1, there is some enrollment information on the district website and none on the school website. Parents would need to call the school to find out more information. All enrollment documents are paper based and the school has staff that is available to support parents with this paperwork. Translating services are also available from the district in Neighborhood School 2.

Magnet school.

The magnet school included in the study is located in mid St. Louis City. The student population is 72% African American, 12% white, 5% Asian, and 11% Hispanic. The school provides transportation and because it brings students from all over the city, nearly all students use that transportation. In addition, because it offers such extensive transportation the school also serves as a district site for some specialized special education classrooms such as autism classrooms. As a result, their population of students with IEPs at the school is 18%, the most out of any school in the study. The reach of the transportation they provide also makes them a school that immigrant populations are often referred to and as a result, the school has an ELL population of 22%. One hundred percent of the students at the magnet school qualify for free or reduced lunch and the

mobility rate is 23%. Again, the reach of the transportation offered by the school means students in transition are often placed in the school.

Enrollment at the school is the same as enrollment at all magnet schools in the district. To enroll in a magnet, a parent must complete the magnet school application to be entered into the magnet school lottery. This happens in two rounds. The first round of application opens October 1st and closes on November 2nd, leaving a one month window for applying. The second window opens November 22nd and closes January 4th. After each window closes a lottery is held. Within the lottery there are prioritized rankings. At the elementary level there are preferences given to students who have siblings in the school already if the application is submitted in one of the two windows, then to students who live in the neighborhood within the transportation departments boundaries for walking to school (however this priority is limited to 35% of the school population), then finally to students enrolled at other schools in the district. Because some magnet schools do not fill up in the two application windows, any applications received after January 4th are processed on a first-come-first-served basis for those schools until they are full or until May 23rd. The school has a cap on the number of students they can enroll in each grade therefore there are limited spots and in some cases, no available spots. Students can enter the magnet school at any grade level, if there is availability. The district magnet website keeps an updated list of the magnet schools and available spots. Once the student is offered a spot through the lottery they are enrolled in the school by the magnet office. The magnet school will then reach out to the family with any additional documents or paperwork they may need, such as media release forms, permission slips to keep on file, etc. They can help families with accessing necessary medical records or school records

after the student is enrolled. The magnet school in the study sends a welcome letter to each student that is accepted and extends an invitation to come tour the school. When necessary, the district magnet office will offer translating services. The school website contains no information about enrollment and the magnet school application process. However, the district website has an entire page about magnet school application processes that clearly outlines requirements, deadlines, and includes important documents such as the application. There is also contact information for a person who can answer questions or assist with completing applications. To help families know more about magnet school opportunities the district does some light marketing but this marketing is based on the entire magnet program, not necessarily individual schools. There is also a magnet school fair held each year for families to attend to find out more about magnet school options.

Gifted magnet.

The gifted magnet school that was included in the study is located in mid St. Louis City. It is one of three district elementary gifted magnet schools. The district also has gifted programs in select elementary magnet schools and classrooms. The gifted school in the study has a student population that is 23% African American, 67% white, 8% Asian, and 2% other. The mobility rate is 8%, 23% of the students qualify for free and reduced lunch, and 6% of the student population has an IEP.

The gifted magnet application procedure has some similarities and some differences with the regular magnet application procedure. There are two application windows. The first window opens on September 17th and closes on November 2nd. The second window opens on November 22nd and closes on January 4th, the same dates as

the second window for regular magnet schools. Applications after the second window are taken on a first come first served basis until all the spots are filled or until the start of school. Students cannot enter the school midyear, so new students must start at the beginning of a school year. Like the regular magnet schools, the gifted magnet school has a cap on the number of students it can enroll in each grade therefore there are limited spots and in some cases, no available spots. Often times the case is that the older the grade, the fewer the spots that are available. Students can enter the magnet school at any grade level, if there is availability. The district magnet website keeps an updated list of the magnet schools and available spots. Also like the regular magnet schools, priority is given to siblings of students already in the grade level. Students can only enter the gifted magnet at the start of an academic year. Students are not enrolled mid-year.

What makes the gifted magnet application different from the general magnet application is the testing that occurs. Parents must make an appointment with the Gifted and Talented office to have their child's IQ and academic achievement assessed. If students score in the 90th percentile or above on both assessments, then they are eligible for potential acceptance. If a student scores in the 89th percentile or below on either test they are notified of their ineligibility. The district has conducted some universal screening of students at certain grade levels across the district to help identify additional students who qualify for gifted. Figure 4 is a visual model of the application and eligibility process from the district's Gifted and Talented webpage.

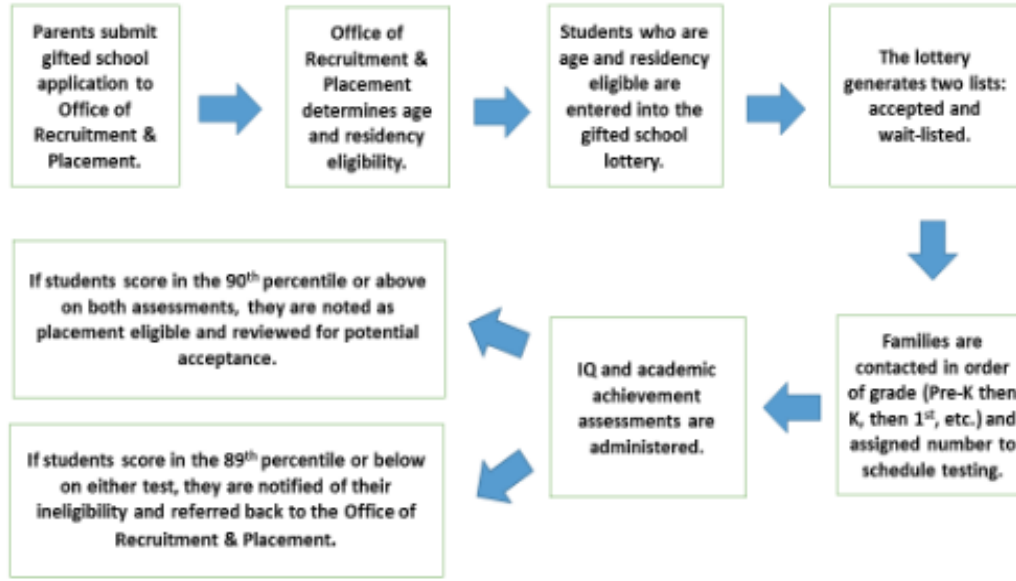


Figure 4. Flowchart for the application and enrollment process for the Gifted and Talented Magnet Program in St. Louis Public Schools. Accessed from the St. Louis Public Schools Gifted and Talented website.

Once a student qualifies as gifted based on their assessments, their application is received, and they are selected in the lottery, they are offered a placement in a school or site based program. If the offer is accepted the student will be enrolled in the school by the magnet office. The magnet school will then reach out to the family with any additional documents or paperwork they may need. The school can help families with accessing necessary medical records or school records after the student is enrolled. If necessary, translating services can be provided and both the gifted and magnet offices are willing to help parents with any step in the process. Like other magnet schools, transportation is available for students. Additionally, the school website does not contain application information but the district website has a page with information about the magnet school application process, including gifted magnet schools. The district also does marketing for the gifted programs throughout the schools including on billboards, in newspapers and other periodicals, on the radio, and on busses.

Charter school 1.

Charter School 1 is located in North St. Louis City and is part of a larger charter network. The student population is 98% African American and 2% Hispanic. One hundred percent of the students qualify for free or reduced lunch and the mobility rate is 36%. The IEP population is 8%.

Parents can apply to Charter School 1 in a couple of ways. They can enroll in person at the school or regional office, complete an application online, or complete one over the phone. The school also holds enrollment fairs where parents can learn more about the school and enroll on the spot. The application is very basic and mainly consists of contact information and residency information (must be a city resident to attend). Traditionally the school has held a lottery in February. This year they are now enrolling students on an ongoing basis until they reach their enrollment max. Once a grade level is full, students are added to a waitlist in the order in which they apply. Students can enroll and enter at any grade level as long as there are spaces available. This change leaves an unknown application deadline and it creates an advantage for parents that apply earlier and a disadvantage for parents that apply later.

Following the application process, students who are offered a seat enroll in the school. The school works with parents to provide necessary academic and health records. The school does require all incoming students to take a placement test. Results of this test are not used to determine enrollment, but they do require everyone to take the test. This is done on at one of their weekend enrollment fairs. Parents are also required to attend an orientation at the school.

Out of all the schools in this study, Charter School 1 offered the most parental supports. One aspect of this is the quality of their website. Charter School 1 offers one of the most user friendly and informative websites of all the schools studied. All the information needed to apply was available on the website and easy to find. There is also an option to apply online, among many options. Other information about the school is also present and easily accessible. One unique factor about the website is that it has a translating function with the option of 31 different languages. The network the school is a part of also offers translating services if needed. The school does offer transportation to students and specifies that all school supplies are provided. Both the school and their network do marketing across the city through radio, newspaper, and bus advertisements. The school also targets the school and immediate community through robo-calls and by visiting places in the community such as churches, daycares, and grocery stores.

Charter school 2.

Charter School 2 is located in southwest St. Louis City. The student population is 28% African American, 45% white, 7% Asian, 13% Hispanic, and 7% multiracial. Sixty three percent of the students qualify for free and reduced lunch and a mobility rate of 19%. The percentage of students with IEPs is 16%.

Among the charter schools in this study, Charter School 2 has the fewest enrollment steps and factors for acceptance. To enroll in the school the parent must complete an application. The application is available online but a paper application is also available to be completed at the school. After the application is received, then a randomized lottery is held to determine who will be offered a spot. Because a lottery is held, the school has an application deadline and enrollment is ongoing only if they are not

at capacity. The only preference given in the lottery is sibling preference. The kindergarten lottery is held first in January. Students can enter the school at any grade level however there is a maximum number of students that can enroll, therefore enrollment is limited by space. The second lottery happens on May 1st after the school determines how many open spaces they will have for the next year. The lottery continues to occur every month for any open seats.

Once a spot is offered to a student they are then enrolled in the school. There are people available at the school to assist with paperwork and accessing any academic or medical records. Tours are also offered and if translating services are provided if needed. The school does draw students from all over the city however transportation is not provided. Parents must get their child to and from school every day. The school website offers limited information about the school and enrollment process however there is a place to apply online. Charter School 2 does hang banners outside the school to advertise for enrollment but does not do much marketing or recruitment beyond this.

Charter school 3.

Charter School 3 is located in mid St. Louis City in a rapidly gentrifying neighborhood. The student population is 43% African American, 50% white, 4% Hispanic, and 3% other. Thirty nine percent of the students qualify for free and reduced lunch and the mobility rate is 5%. The percentage of students with IEPs is 11%. To apply to Charter School 3, a parent must complete an electronic application. A lottery is held in March to determine who will be offered a spot in the school. Because a lottery is held, the school has an application deadline and enrollment is not ongoing. Within the lottery, priority is given to siblings, the children of staff, and students in the immediate

surrounding neighborhood area. The school only enrolls students in kindergarten, first grade, and second grade. In addition, there is a maximum number of students the school enrolls and enrollment in kindergarten through second grade is limited to availability. As a result, the school usually does not enroll students outside of their immediate surrounding neighborhood area because the lottery does not get to that point. Because most of the students come from the surrounding area, the school does not offer transportation. Once a student is selected in the lottery, the student can be enrolled. New parents to the school are then required to have a meeting with the school principal.

Charter School 3 has an online application but offers assistance with completing the application and if necessary, parents can come to the school to use a computer to apply. The school does do some marketing but only within a specific neighborhood in their enrollment area that is made up of lower income housing. Staff will go take time to go door to door with information about the school. They also host a variety of community resource fairs and collaborate with local businesses to hold job fairs. Tours of the school are offered on a weekly basis. Parents can sign up for the tours on the school website. The website also contains detailed information about enrolling at the school and has a place to apply online. If necessary, translating services can be provided.

Private school 1.

Private School 1 is located in south St. Louis City. It is a parochial school with a student population that is 10% African American, 72% white, 3% Asian, 9% Hispanic, 2% Indian, and 4% other. The free and reduced lunch rate is 6%. Information about the mobility rate is not available for private schools but the school reports that it is less than

10%. The school is a site for special education classrooms for the Archdiocese and reports that 5% of the students have an IEP.

Private School 1 has an application process with several steps. First, parents come in for a tour. Then there is a paper-based application that includes information about employment information and financial records because the school is tuition based. Additionally, there is information about the family's religious beliefs because it is a parochial school. The application also has some short answer questions about why the family is interested in the school. There is an application fee that must be paid when submitting the application. Once an application is submitted, student academic and behavior records are reviewed. If the records demonstrate good behavior and sufficient academic skills then the student is invited to a shadow day at the school and the parents meet with the principal. If necessary, the principal will follow up with the family or previous school about the records. The school does have a maximum number of students they will enroll at each grade level so applications are only considered for grade levels that have openings available. Private School 1 has one classroom per grade level. The school reports that at some grade levels they are at capacity but there are grade levels with openings. If there is no availability, students are placed on a waitlist. This means enrollment can happen on an ongoing basis based on availability. Students can enroll at any grade level pending availability and whether or not the school deems the student to be a good fit for the school and classroom however the school typically does not enroll new students into 8th grade. The school does have a junior kindergarten program that serves as a feeder program for the school. Because the junior kindergarten classes are

smaller than the elementary class sizes there are still some openings for new students at the kindergarten level.

Scholarships and financial assistance are available for families in need. The application window for scholarships with the Archdiocese is open for one month in February. Local parishes also offer financial support. The school reports that about 48% of families in the school have some sort of financial assistance. Current families in the school do not have to reapply each year, but they do have to complete financial paperwork each year and a shorter re-enrollment form that they must complete by the end of February to keep their spot. If necessary, the Archdiocese can provide translation services for families that may require that service. The school does not provide transportation services but because it is private, enrollment is not limited to residency with St. Louis City. The school is available to help with paperwork support and because the application process is so intimate, they are available to assist in any ways necessary. Private School 1 has a website but it contains little information about enrollment. There is some information about the school and for families that are currently enrolled in the school. The school does not do much marketing or recruitment but the Archdiocese of St. Louis does have advertising campaigns for Catholic education in general and has helped provide individual schools with promotional materials. Although the school is a Catholic school, not all the students enrolled in the school are Catholic. Students of other faiths can enroll in the school.

Private school 2.

Private School 2 is located in north St. Louis City and is an independent private school. The student population is 88% African American, 8% white, and 4% multiracial.

Fifty three percent of the students qualify for free or reduced lunch but because it is a private school, the mobility rate is not reported. According to the school there are almost no students in the school with an IEP.

To apply to Private School 2, families will need to complete an application online or at the school. The application window opens in July and applications must be completed by the end of January every year. Unlike most private, independent schools, they do not have an application fee. Once the application is received the admissions coordinator contacts the family to schedule a tour. Each family must also set up a meeting with the principal or Chief Operating Officer. Each child takes a test as part of the application process. The admissions coordinator tests early elementary students and older students return to the school in February to take reading and math assessments. Based on the application, tour, meeting, and testing, the student will come back for a day visit on a regular school day. This allows the school to see how they function in the school and interact with students and staff. Once the application process ends the school determines who is accepted and acceptance letters are mailed out in mid-March every year. Once the student is accepted they are enrolled in the school. The school contacts the parent for any additional information that is needed.

Private School 2 does have limits on the number of students they have in each grade level; therefore enrollment is also limited on available spaces at a grade level. Students can enroll at any grade level but the school explained that there are fewer available spaces in the older grade levels. Additionally, the school explained that students do not usually meet enrollment criteria in the older grade levels so that also makes it rare. Although the application window closes in January and acceptance letters are mailed out

in March, if there are spaces still available after this process the school will assess applications until the school year begins or the classes fill up. Private School 2 also has a junior kindergarten program and most of the students enrolled in junior kindergarten stay for kindergarten.

The school has a staff member responsible for admissions that is there to assist parents in any way. They also work to connect interested families with current families to help with the application process. Because it is a private school, there is no city residency requirement and students can apply to the school no matter where they live. As a result the school has students from all over the metropolitan area. Transportation is not provided so families must be able to transport their students, however there is free before and after care for students. The school does not have translating services but report that there has not really been a need. The school's website contains important information about the school and the application process. It is user friendly and easy to navigate. The website has a place to complete an application electronically and there is also a paper option available at the school. Students do not have to reapply to the school each year but must complete enrollment information each year, including financial paperwork to determine financial aid. Private School 2 does require tuition but unlike most independent private schools, tuition is based on need and all families receive some level of financial support. The level of support varies from a small percentage to full scholarship. Private School 2 has done some light marketing like advertisements in local magazines. They do a great deal of fundraising in the St. Louis community to support student financial aid.

Voluntary interdistrict choice corporation transfer program.

The Voluntary Interdistrict Choice Corporation (VICC) has offered an interdistrict desegregation transfer program between St. Louis City and some St. Louis County school districts since 1981. The program is phasing out and beginning with the 2019-202 school year will only accept siblings of students already in the program. The VICC program is a unique choice option and therefore will be discussed independent of other schools. However, because of the significant impact it has had over the years on the education landscape of the region and because it is a large choice option for city families, the researcher felt it was important to include it in the research.

The VICC program currently has about 4,000 students participating in the program. For a student to be eligible to participate in the program they must be African American and live in St. Louis City. Therefore, 100% of the city students that participate are African American. Historically, to apply for the program parents must complete a paper application. There are two application windows. The first window opens in November for families that applied the previous year and did not get in because of space. The second window then opens for everyone else in January. The application requires proof of residency and it must indicate that the student is African American. The burden of proof of residency lies on the parent and therefore they may need take additional steps to prove they are a city resident. The application also asks about student behavior and attendance history. Applications are processed in the order in which they are received so it is advantageous to submit an application as soon as the window opens, particularly if there is interest in a specific school district. The office will continue to process applications as long as spaces are available until July 15th. If a student meets the

eligibility requirements and the parent indicates that they do not have a discipline history, a behavior form is sent to the student's current school to be completed and returned in 15 days. If the school form is returned with copies of recent report cards and indicates that the student has had good behavior and good attendance, the student will be admitted to a school. If a student has an IEP their services must be resource services only. Students who require self-contained placements (or are in the regular classroom less than 80% of the time) are not eligible to participate in VICC. Additionally, students with IEPs that have behavior challenges, even if related to their diagnosis, do not qualify because of the behavior requirements. Students entering kindergarten only need to be age eligible and meet race and residency requirements to be considered for acceptance. Once a student is accepted into the VICC program they do not need to reapply each year unless they withdraw from their school and want to come back. The application process can take weeks and even months depending on how long it takes to get all documentation and information.

Originally in the VICC program, the students in the city could attend any county school district in the program. Eventually the city was divided into three areas and county school districts were assigned to specific areas. Therefore students only have the option of a few school districts based on where they live. The number of students that are admitted to the VICC program depends on the number of available seats the county school districts have available. Once the numbers of available seats in the program at each grade level are filled, then students are no longer admitted, even if they meet requirements. Students who are admitted to the VICC program then enroll with the school districts. This process then varies depending on the school district.

Transportation is provided through the VICC program. However, if a family moves out of the designated area of the city that for their county school district they will have to provide their own transportation or be able to get to a bus stop in the area of the city that is for their county school district. If a family moves within the designated area for their county school district then they can still receive transportation.

In the past the VICC program has done advertising and marketing. They have used radio ads, prints ads, and have held enrollment fairs and information meetings. This was done at times when they had large numbers of spaces to fill or when interest in the program was lower. Now that the program is phasing out they no longer do any marketing or advertising. The VICC program does have an office in Clayton and there is staff available to help with the application process as needed. Once the student is enrolled in a county district they are treated like a resident. The VICC office does have counselors available to support students, families, and districts throughout their participation in the program.

Summary and Discussion of Research Question 1

The first research question aimed to find out how enrollment practices differ among different school choice options in St. Louis City. The specific research sub-questions aimed to find out how complex processes were, what steps are involved, factors that are considered for acceptance, and how parents are supported with navigating the process. The qualitative data collected resulted in specific themes related to steps in the process and factors for acceptance, as well as parent supports. Results were summarized in tables as well as a narrative description of each school. From this, a clear picture emerged.

Differences in enrollment practices among choice options: a comparison.

Based on the qualitative data collected on each school from their website, enrollment documents, and interview transcripts, three levels of school enrollment procedures emerged. At the simplest level, there are neighborhood public schools. These schools essentially enroll anyone who is a resident of the city and of elementary age. Parents simply complete the information intake forms and provide proof of residency and the student is enrolled. There are no additional steps beyond this or additional factors for acceptance. The process is also consistent across the neighborhood schools, so parents need to know only one procedure. The narratives above show a simple and straightforward process for neighborhood schools.

At the next, more complex level are charter and magnet schools. These schools may require anywhere from two to seven additional enrollment steps or factors for acceptance. The narratives about these schools are slightly longer and show a variety of enrollment procedures, from just a couple of steps to multiple steps. Additionally, each school has different steps or factors for acceptance, leaving parents with the responsibility to learn each unique process.

At the most complicated level is private schools. The schools require 8 or more steps or factors for acceptance. The longer narratives explaining the process create a visual to show the more complex enrollment processes these schools have. The private schools also have different requirements and parents are responsible for learning each unique process. Additionally, these are the only schools that have a financial factor (see below).

Potential impacts of enrollment steps and factors for acceptance.

As discussed earlier, the quantity of enrollment steps is not enough to understand complexity, as certain steps and factors for acceptance are more complicated than others and in combinations can have greater effects on equity. Potential threats to equity for each of the themes identified in the qualitative research are described below.

Financial steps for acceptance and potential threats to equity.

The financial barrier sub-theme consisted of two possible steps. First, there is the step of tuition. Schools that require tuition could deter or even keep low-income or poor families from enrolling (see Table 11). Even if financial aid is available and if that is not made clear to parents, they may not know it is an option or may be concerned they will still have to pay something. Tuition would likely be a significant factor for a poor or low-income family when it comes to enrolling in a school and therefore has a significant impact on the equity of enrollment for this group.

The second financial sub-theme is an application fee. Schools that require an application fee could deter or even keep low-income or poor families from applying if they cannot afford the fee. Because of this, an application fee could have a significant impact on the equity of enrollment for this group.

Behavior factors for acceptance.

The behavior sub-theme considers a student's behavior as a factor for whether or not a student is accepted. This appeared in two ways. First, schools conducted a review of student records including discipline records and report cards. According to a 2018 report from the United States Government Accountability Office, black students, boys, and students with disabilities are disproportionately disciplined in K-12 public schools.

Furthermore, “these disparities were widespread and persisted regardless of the type of disciplinary action, level of school poverty, or type of public school attended.” If behavior is a factor for acceptance boys, students of color, and students with disabilities could disproportionately be denied acceptance to schools (see Table 12 and Table 20).

The second way behavior could be considered as a factor for acceptance is by having students visit the school for a site visit. The purpose of this is to see how the student interacts with other students and the staff and to see how they adapt to the culture of the school. This could be challenging for students who have experiences and identities that differ from the majority of the school’s existing population, thus making it harder for these students to be accepted into the school. This also adds a major step onto the enrollment process for a family because it disrupts their normal routine and could impact the students attendance and learning at their current school.

Attendance factors for acceptance.

A key to student learning is making sure they are at school every day ready to learn. School accreditation and funding in Missouri is also tied to student attendance. Therefore, some schools look at a student’s attendance record as a factor for acceptance in their school. This would mean that students who have missed several days or who are chronically tardy to school would not be accepted. When looking at student attendance it is important to consider why a student might be tardy or absent. For students who are poor, there are often many obstacles to getting to school. Using attendance history as a factor for acceptance without consideration for the student’s situation could limit the opportunity for poor and underserved students to access a school of their choice. Additionally, at the elementary level, the child usually relies on an adult to get them to

school on time each day. Denying a child admission to a school because of attendance could be a consequence for a child for the actions of an adult. Finally, according to the U.S. Department of Education Office for Civil Rights (2016), more than 6.5 million students, or about 13 percent, missed three or more weeks of school during a single school year and over half of these students were from communities of color (African American, Native American, Pacific Islander and Latino). Students with learning disabilities were disproportionately affected as well. Using attendance history as a factor for acceptance could limit the opportunity for students of color and with special needs to access a school of their choice.

Academic steps and factors for acceptance.

There are two ways academics emerged as a factor for acceptance and one way it emerged as a step in the enrollment process in the qualitative data. First, as a factor for acceptance it could be done as a records review and/or an assessment. This means that a student with poor grades or who did not score high enough on an assessment may not be accepted.

A student's academic ability is a direct result of the education they have already received, both formally from their schooling and informally at home. Students who may not have access to quality learning opportunities, such as poor students and students from traditionally underserved communities, could be limited in their ability enroll in a school of their choice if they can not demonstrate the desired level of academic achievement (see Table 13). Additionally, for students with special needs this could drastically impact their ability to be admitted to a school. Ironically, under this theme, it is students who show a

need for a quality education that are denied admissions to a school and the students who already show ability are admitted (see Table 19).

Second, as a step in the enrollment process, schools may ask students to take a placement test. This is different from an assessment that determines acceptance because the student's performance on the test does not determine their acceptance, but it is just a step the parent must take to enroll the child. Placement tests add an additional step that must be covered to enroll in a school. This requires someone to be able to get the child to the test and extends the timeline it takes for a child to be enrolled. It could also deter students from enrolling at a school because they do not want to have to take a test or they think it would show that they are not intelligent.

Residential limitations for acceptance.

All the schools studied are located in St. Louis City. However, the research indicated that some schools enroll within limited areas of the city. This also includes schools that prioritize areas of the city in their lottery. The threat to equity this can cause depends on the areas in which they will enroll and the areas in which they will not enroll. If the areas they focus on are predominantly white or wealthy areas of the city, this could limit access for poor students or students of color. However, if they focus on poor neighborhoods or areas that are predominantly students of color, this could give more choice opportunity to these students.

Enrollment caps and deadlines.

Schools that have an enrollment deadline do not enroll students on an ongoing basis. Instead, there is a set time of year in which they will enroll students. This enrollment window can be anywhere from a couple of days to several months. Many of

the schools that have an enrollment deadline have a limit on the number of students they will enroll and the deadline leads to a lottery or waitlist process. Some schools also have deadlines because they do not enroll students once the school year has begun.

Schools that have an enrollment cap have a limit on the number of students they can enroll. To ensure they do not go over that number they do one of two things, start a waitlist or hold a lottery for the available seats. If a school holds a lottery, there is a deadline in which all student applications are due. Then a randomized lottery is held. Some schools with lotteries offer preferences for certain students, such as siblings of existing students or students within certain areas of the city. If a school has a waitlist, they will accept students until they reach their enrollment maximum. Once they reach this maximum they add students to the waitlist. If for some reason a student does not accept their offer to enroll or leave the school, students from the waitlist will then be offered a spot in the order in which they are placed on the waitlist. With a waitlist, it is advantageous to apply to the school as early as possible.

To meet enrollment deadlines, parents have to intentionally plan several months ahead of the next school year to apply to give their child a chance to attend the school. Additionally, each school has different enrollment deadlines so the parent would need to understand each of these and complete all the necessary application steps during the enrollment window. Enrollment deadlines could be challenging for families in transition who may not know several months in advance where they will be or what their school needs may be. Additionally, if parents don't know that the deadlines exist or how far in advance they should be applying to schools, they could miss out on opportunities to

attend a school. Parents that are new to the area or are looking for a school midyear will also not be able enroll in schools with limited enrollment windows.

School site visit steps.

Some schools may require an additional visit to the school site by the parent or guardian enrolling the student, separate from the visit the parent may have made to apply or enroll a child. This could be for an additional parent meeting with an administrator or for an informational meeting.

Schools that require a site visit place an additional step on parents in the enrollment process. This may mean parents may have to take off work or find childcare for young children in order to attend the meeting. For parents that are paid an hourly wage in their work, this could mean they will miss out on income. Therefore this could enrollment step could pose a challenge for single parents or poor parents (see Table 15).

Grade level entry limitations.

Finally, schools that have limited grade levels in which students can enroll may do so out of availability or because of a policy. Schools that have an enrollment cap only have a limited number of seats available at each grade and in some cases, no available seats. This means students are only able to enroll in certain grade levels. Obviously for children who are not at the age level that has openings, this means they can't enroll in the school. Additionally, for families with multiple children this could mean that they are not able to enroll all of their children.

Some schools may also have a policy that they only enroll students at certain grade levels. Often times it is the early grade levels that they will enroll and the older grade levels that they do not enroll. This could be for student culture or academic

reasons. As a result, schools may not enroll students of certain ages, even when they serve students of the same age.

Parent supports.

Parental supports also emerged as a theme in the qualitative research. Schools offered support to parents throughout the enrollment process in a variety of ways. The potential impact these supports have on creating a more equitable process is described below.

Translating services.

Some of the schools offered translating services for parents who do not speak English or who have limited English proficiency. This is an important support for these families because it helps them complete the enrollment process. For some, it might even be necessary to be able to complete the process. Schools that do not offer this service would likely have fewer ELL students and schools that do offer the service would be more likely to have linguistically diverse students.

Tours.

Tours that are considered a parent support are offered optionally to parents as a way to learn more about the school. Through these tours parents can ask questions and get a more in depth understanding of how the enrollment process works. These allow the parent to become more comfortable with the school and the school to learn more about how to support the parent.

Support with paperwork.

All of the schools involved in the research offered parents support with completing necessary paperwork and forms. For some schools this also extends to

helping parents access necessary academic and medical records. This support is important for parents who can not read or do not understand aspects of the paperwork, which is understandable given the complex way some questions are asked in order to be in compliance with a law or standard.

Multiple modes to complete paperwork.

Some of the schools in the study had paper-based forms to complete, some had electronic forms, and some offered both. There are positive and negative aspects to each, so when both are an option, parents are able to choose what is easiest for them. Paper based forms may require parents to come to the school to complete the forms or mail or fax them in to the school. Electronic forms may be hard for people who do not have a computer or access to the Internet to complete. Paper forms can be completed by anyone whether or not they have a computer or Internet. Completing them at the school also makes it easier for parents to received help from the school if needed. Electronic forms might be easier for some parents to complete because they can apply online at home and not have to make a trip to the school. Schools that offer both paper and electronic forms allow the parents to pick whatever form is easiest for them to complete.

Transportation.

While transportation is not considered in this research as a form of parent support, it is an important support for families to be able to access choice options around the city. For some students, transportation is necessary for them to be able attend a school. If the school is not located in a safe walking distance from the child's home, then transportation would be needed to be able to get to and from a school. If a school does not offer

transportation, students must be in walking distance or have parents who are able to provide their own transportation. This limits who is able to attend the school.

Schools that provide transportation to students broaden the area and population of students that could enroll in the school.

Marketing and Recruitment

A system of school choice has led to some schools competing to attract students to attend their schools. This has led to schools doing some marketing and recruitment. Schools that market themselves may do so in a variety of ways. Some may advertise on buses, in newspapers or magazines, on the radio, and on signs around the community. Some go out into the community and knock on doors, visit churches, or pass out flyers at stores. Some schools may invite the community into the school and hold informational fairs. Marketing a school helps families know about the school and can get important information about how to enroll in the school to parents. This could be particularly helpful for parents who might not know about the school choices available to them and the different enrollment processes at each school.

Helpful website.

Each school in the study had a website, however the amount of information available on the website varied. Some websites contained little to no information about the school or the enrollment process while others had detailed information that was easy to find. Some of the school websites contained detailed enrollment information but it was difficult to find. Additionally, some school level websites did not have enrollment information available but it was available on the district or network website. Informative, easy to navigate websites are important because it is the first place many people might

look to learn about a school. It also provides an easily accessible place to check in with throughout the process for information and answers to questions. Schools that do not have information available on the website require parents to call or visit the school to find out the information they need.

Data Analysis and Discussion

The second research question integrated quantitative enrollment data with the qualitative student population data to find out how enrollment varies across each school choice option as a result of the enrollment practices. Specifically, how do the practices impact the racial makeup of the school and the free and reduced lunch population and IEP population in the school. A comparison of enrollment policies was then compared with student populations to determine if there is a connection between enrollment complexity and demographics. This impact is discussed below.

Race.

Most recent U.S. Census data (2010) for race in the city of St. Louis is listed in Table 6. Understanding the racial makeup of the city provides an important context for understanding the racial makeup of schools in the city.

Table 6
2010 Census Data for St. Louis City

Race	Percent of Population
African American	47.6%
White	45.9%
Hispanic or Latino	3.9%
Asian	3.1%
Two or more races	2.1%
American Indian and Alaskan Native	0.3%
Native Hawaiian and Pacific Islander	0.1%

Within the city, there are differences in populations across regions. Specifically, north city is 94% African American, mid St. Louis City is 35% African American, and south St. Louis City is 26% African American (City of St. Louis, MO 2011). Table 7 shows the difference in African American populations across schools in each area of the city. Because the city of St. Louis has areas that are predominantly African American or predominantly white, schools were compared based for race based on the area of the city in which they are located.

Table 7
Comparison of African American Student Population by School and Region, 2018-2019

North City	Mid City	South City
Neighborhood School 2: 98%	Neighborhood School 1: 96%	Charter School 2: 28%
Charter School 1: 98%	Charter School 3: 43%	Private School 1: 10%
Private School 2: 88%	Magnet School: 72%	Gifted Magnet: 23%

The data indicates that neighborhood schools and Charter School 1 (located in North City) have the greatest percentage of African American students relative to other school choice options in their surrounding area. Schools in North City had the highest percentage of African American students. Both neighborhood schools and Charter School 1 (located in North City) have African American populations that are disproportionately higher than the percent of African Americans in the city. The magnet school and charter schools throughout the city also have higher populations of African American students compared to gifted magnet schools or private schools in their surrounding area. This difference is greatest in the central corridor of the city where the population of African Americans is 35% but 96% of the students at Neighborhood School 1 are black.

When considering steps in the enrollment process and factors for acceptance, the only significant difference in race was related to schools that had enrollment caps, lotteries or wait lists, and limited grade level entry (as discussed earlier, these are all closely related) compared to schools that do not. Table 8 shows the average percent of African American students for schools that have these limitations compared to schools that have no limitations.

Table 8
Comparison of African American Student Population in Schools With and Without Enrollment Caps, Lotteries/Waitlists, or Limited Grade Level, 2018-2019

Schools with enrollment caps, waitlists, lotteries, and limited grade level entry	Schools with no enrollment caps and ongoing enrollment
Gifted Magnet 23%	Neighborhood 1 98%
Magnet 72%	Neighborhood 2 96%
Charter school 1 98%	
Charter School 2 28%	
Charter School 3 43%	
Private 1 10%	
Private 2 88%	
Mean 52%	Mean 97%

This shows that although different choice options are available to students of all races, African American students are less likely to exercise choice outside of neighborhood schools. Having enrollment caps, lotteries or waitlist, and limited grade level entry could contribute to this difference. Eliminating school enrollment caps, lotteries, waitlists, and allowing students to enter any grade in place of ongoing enrollment and enrolling all interested students could potentially lead to more even populations of African American students across school choice options.

However, it is not the practices of the school alone that could be contributing to the difference in African American populations in neighborhood schools compared to charter, magnet, and private schools. It could also be due to the actions of parents. In areas of the city that are more racially mixed like mid city and south city, the differences in African American student populations are more evident across school choice options.

Specifically, in mid city and south city, charter schools, magnet schools, and private schools are less likely to be black as shown in Table 7. In these areas, school choice gives parents an option to self-segregate their children. White parents are opting out of their neighborhood school for magnet, charter, and gifted schools. This is consistent with numerous research studies that suggests white parents are more likely to choose schools with lower proportions of black students, regardless of school quality, and more likely to choose schools with their peer groups, regardless of quality (Stein, 2015; Billingham and Hunt, 2016; Musset, 2012).

Overall schools with more complex enrollment processes have fewer African American students compared to the schools in their surrounding area. Specific enrollment practices by the school as well as parent actions contribute to this.

Transportation and race.

Table 9 shows the average percent of African American students at schools that offer transportation compared with schools that do not offer transportation.

Table 9.
Comparison of African American Student Population in Schools With and Without Transportation Services for Students, 2018-2019

Transportation	No Transportation
Neighborhood 1- 96%	Charter 2- 28%
Neighborhood 2- 98%	Charter 3- 43%
Magnet- 72%	Private 1- 10%
Gifted Magnet- 23%	Private 2- 88%
Charter 1- 98%	
Mean- 77%	Mean- 42%

Schools that offer transportation have higher percentages of African American students compared with schools that do not offer transportation. When considering the racial stratification of the city of St. Louis and the potential for students to attend schools across the city through choice options, transportation plays a crucial role in students being able to access the different choice options around the city. Schools that do not offer transportation to students create a barrier for certain students to be able to attend their school unless they can provide their own transportation to and from school each day. For schools on the predominantly white south side of St. Louis City, this means students who live further away on the predominantly African American north side may not be able to attend their school if they do not have transportation. Even within regions of the city, transportation is important to students being able to attend any school that is not a safe walking distance from their home. For some parents, particularly some African American parents, transportation is an important support they rely on from schools.

Socioeconomic status.

Free and Reduced Lunch (FRL) data was collected on each school and then compared across school type and area of the city. Then it was compared across each enrollment steps and factor for acceptance to determine the impact each may have on this population.

First, Table 10 shows the average percent of FRL students across regions of the city and choice type.

Table 10.
Comparison of FRL Student Population By Region and Choice Type, 2018-2019

	North City	Mid City	South City	Average
Neighborhood Schools	Neighborhood 2- 100%	Neighborhood 1- 100%		100%
Magnet Schools		Magnet- 100%	Gifted 23%	62%
Charter Schools	Charter 1- 100%	Charter 3- 39%	Charter 3- 63%	67%
Private Schools	Private 2- 55%		Private 1- 6%	31%
Mean	85%	80%	31%	

North city and mid city had higher percentages of FRL students than south city. The schools with the highest percentage of FRL students were the neighborhood schools and Charter School 1 (located in north city). The private schools had the lowest percentage of FRL students. A significant difference in FRL population can also be seen between the regular magnet school (100%) and the gifted magnet school (23%). This indicates that poor families in St. Louis exercise choice less than wealthier families. Instead, poor families are more likely to attend a neighborhood school. This is consistent with the body of existing research on school choice and socioeconomic status (Holme, 2009; Musset, 2012; Mader, 2018). An analysis of the impact of enrollment practices on FRL populations is discussed below. But it is again important to emphasize the ways in which wealthier parents self-segregate from poorer families by exercising choice. While having school zones allows families with means to access schools they like, choice gives them the option to flee the schools they don't like. The difference in those who exercise choice outside of their neighborhood school is reflected in the high costs that come with

choice, “like navigating complex application or lottery systems, researching all the available school options, commuting farther to school each day, paying fees for uniforms or after-school programs, or meeting additional expectations of parent involvement throughout the school year” (Mader, 2018). Exercising choice requires a significant amount of effort, time, and resources.

White wealthier parents may exercise choice to self-segregate, school policies and practices still do have an impact on how poor families are able to access a school.

Differences in FRL populations existed among several enrollment steps and factors.

Table 11 shows a comparison of the FRL populations of schools with financial factors for acceptance (tuition and/or application fees) compared with schools that do not have any financial factors.

Table 11

Comparison of FRL Student Population at Schools With and Without Financial Factors for Acceptance, 2018-2019

Financial Factors	No Financial Factors
Private School 1- 6%	Neighborhood School 1- 100%
Private School 2- 53%	Neighborhood School 2- 100%
	Magnet School- 100%
	Gifted Magnet School- 23%
	Charter School 1- 100%
	Charter School 2- 63%
	Charter School 3- 39%
Mean- 30%	Mean- 75%

Public schools cannot charge tuition or an application fee therefore the private schools are the only schools that have financial factors. It is not surprising to see that the

schools that have financial factors have fewer poor students as indicated by the FRL populations. What is of note is that Private School 2 which is located in north city and offers some level of financial assistance to 100% of its students has a much higher percentage of FRL students compared to Private School 2 which is located in south city and does not offer as much financial support. However a comparison of all the school types located in north city show that Charter School 1 (100%) and Neighborhood School 2 (100%) have nearly double the FRL populations than the Private School 2 (53%) which is also located in north city.

Next, Table 12 shows a comparison of FRL population for schools that have behavior criteria for acceptance versus those that do not.

Table 12
Comparison of FRL Student Population at Schools With and Without Behavior Factors for Acceptance, 2018-2019

Behavior Factors	No Behavior Factors
Private School 1- 6%	Neighborhood School 1- 100%
Private School 2- 53%	Neighborhood School 2- 100%
VICC	Magnet School- 100%
	Gifted Magnet School- 23%
	Charter School 1- 100%
	Charter School 2- 63%
	Charter School 3- 39%
Mean- 30%	Mean- 75%

Again, it is only private schools that look at student behavior as a factor for acceptance. The difference in FRL population shows that schools that consider behavior as a factor for acceptance have fewer poor students. As just discussed, the same schools

also have financial factors so through the current research methods it is hard to determine which factor has the most impact on the ability of poor students to enroll in a school or whether it is the combination of each that has the impact. VICC is included in the table to show that it is a choice option that considers behavior as a factor for acceptance, however FRL data is not collected for VICC so comparison of data across schools is not available.

Students that come from poor families may have higher levels of trauma or adverse childhood experiences given their situation and have access to fewer resources to mitigate that trauma. These experiences and trauma could manifest as behavior problems at school. Therefore when seeking ways to make choice options more equitable, it would be important to eliminate behavior as a factor for acceptance. Reviewing a child's behavior records or having a child make a site visit to see how they adjust to the culture of the school functions as a way to skim students with behavior challenges and as a result, poor students who may have behavior issues as a result of their situation.

Table 12 also shows the same relationship between FRL population and attendance factors for acceptance. The only schools that review a student's attendance history are the same schools that look at behavior, the private schools and the VICC program. While it is important for to be at school and on time every day, poor families often face additional obstacles to getting to school every day. Whether it is inconsistent transportation, sleep, housing, food, or other basic needs, the challenges can be significant. Using attendance as a factor for acceptance does not help a family improve their circumstance but could deny them access to school choice options.

The next comparison was made between FRL population for schools that have academic factors for acceptance and schools that do not. Table 13 shows this comparison.

Table 13
Comparison of FRL Student Population at Schools With and Without Academic Factors for Acceptance, 2018-2019

Percent of FRL students in schools with academic factors for acceptance	Percent of FRL students in schools with no academic factors for acceptance
Gifted- 23%	Neighborhood 1- 100%
Private 1- 6%	Neighborhood 2- 100%
Private 2- 53%	Charter 1- 100%
	Charter 2- 63%
	Charter 3- 39%
	Magnet- 100%
Mean- 27%	Mean- 84%

The data indicates that schools that have an academic factor for acceptance (not including academic enrollment steps) have a lower percentage of students who qualify for free and reduced lunch. Private school 1 conducts a review of student academic records among other things to determine if a student will be admitted to the school. Private School 2 and the Gifted Magnet School each have academic tests that are given as part of the criteria for acceptance. Charter School 1 does have a placement test that is a step in their enrollment process but it is not a factor for acceptance.

By creating academic standards for acceptance schools begin to cream the students they accept and using academic standards acts as both a deterrent and filter for poor students. Academic achievement can be a direct result of opportunity and not just intelligence. Poor students who have fewer opportunities for experiences and enrichment

outside of school are more likely to enter school already behind their peers, setting a trajectory for underachievement throughout their educational experience (Ryan, 2006). Because the Gifted Magnet School is a school for gifted children, a need for an academic factor to determine gifted eligibility is necessary. However, equity flaws in their eligibility process are evident when the number of poor students is significantly lower than other schools in the district and schools in the area surrounding the school. A careful examination of assessment tools and qualification criteria and a process that ensures all students are screened is necessary to help make gifted qualification a more equitable process.

The next relationship examined was a comparison between free and reduced lunch populations for schools that have enrollment caps, lotteries and waitlists, and limited grade level entry. As discussed previously, these factors for acceptance are all connected. Schools that have a limit on the number of students they enroll have waitlists or lotteries and therefore have limited enrollment windows and grade level availability. The only schools that do not have them are the neighborhood schools, which do not have a maximum number of students they can enroll and therefore do not have waitlists or lotteries and students can enter at any grade level at any time. Table 14 shows the comparison of FRL populations in schools with and without enrollment limitations.

Table 14
Comparison of FRL Student Population at Schools With and Without Enrollment Caps, 2018-2019

Percent of FRL students at schools with enrollment caps	Percent of FRL students at schools without enrollment caps
Charter 1- 100%	Neighborhood 1- 100%
Charter 2- 63%	Neighborhood 2- 100%
Charter 3- 39%	
Magnet- 100%	
Gifted- 23%	
Private 1- 6%	
Private 2- 53%	
Mean- 55%	Mean- 100%

For poor families, hard deadlines or prioritizing early applications makes it hard to access a school. In contrast, schools that allow students to enroll on an ongoing basis and accept all students regardless of time of year, grade level, or school enrollment, allow greater flexibility for poor families who might not have the time or resources to navigate complex processes. The high mobility rate among poor families is also a contributing factor to this. If a family moves to an area after schools have completed lotteries and filled up waitlists, they will not be able to exercise that choice. But they can always enroll in the neighborhood school. Additionally, an expectation is placed on neighborhood public schools to enroll all students regardless of the number of students they have in a grade level or at the school. If necessary, the school is expected to hire more teachers, open new classes, increase class size, or expand in order to accommodate the students.

Other choice options are able to control this, creating enrollment caps and deadlines that can be hard for poor families.

The next comparison made related to free and reduced lunch population was between school that have site visits for parents as an enrollment step and schools that do not have site visits an enrollment step in Table 15.

Table 15

Comparison of FRL Student Population at Schools That Require a Parent Site Visit and at Schools That Do Not Require a Parent Site Visit, 2018-2019

Schools that Require a Parent Site Visit	Schools that Do Not Require a Site Visit
Private 1- 6%	Neighborhood 1- 100%
Private 2- 53%	Neighborhood 2- 100%
Charter 1- 100%	Magnet - 100%
Charter 3- 39%	Gifted- 23%
	Charter 2- 63%
Mean- 50%	Mean-72%

Schools that require parents to attend a meeting, tour, or informational session at the school site have a lower FRL population than schools that do not. This enrollment step places an additional burden on families before or after they can enroll. For poor families that may not have the time or resources to be able to make an additional visit to the school, this could deter them from applying or keep them from being accepted. Many of the schools that do not require parents to make an additional site visit as an enrollment step still offer optional tours and may invite families in after the enrollment process. Getting parents into schools is important, however making it a required additional step in the enrollment process can make it harder on poor parents.

The final comparison made related to FRL status was between schools that offer transportation and schools that do not. As previously stated, even though transportation is not an enrollment step, factor for acceptance, or parent support in the enrollment process, it came up numerous times in the data and is an important parent support when it comes to school choice overall. Table 16 shows the average percentage of FRL students at school that offer transportation compared with schools that do not offer transportation.

Table 16

Comparison of FRL Student Population at Schools With and Without Student Transportation, 2018-2019

No Transportation	Transportation
Private 1- 6%	Neighborhood 1- 100%
Private 2- 88%	Neighborhood 2- 100%
Charter 2- 63%	Magnet - 100%
Charter 3- 53%	Gifted- 23%
	Charter 1- 100%
Mean- 53%	Mean-85%

Schools that offer transportation to students have a higher percentage of students that qualify for FRL than schools that do not offer transportation. For poor families that may not have cars or who work jobs with hours that do not allow them to take their children to and from school, transportation is an important support they rely on from a school. For these families, transportation is necessary to accessing any school beyond walking distance from their home.

Overall schools with more complex enrollment processes have fewer poor students as indicated by their lower percentage of students who qualify for free and

reduced lunch. Specific enrollment practices by the school as well as parent actions contribute to this. As a result, poor parents are exercising less choice and neighborhood schools are left with higher concentrations of poor students and having the challenge of serving the city's highest need children.

Special education.

Parents of special education students have long fought for equitable access in educational systems throughout our country. As our system moves in the direction of choice, special education parents may face new challenges in this fight. IEP populations were compared across school types and across enrollment steps and factors for acceptance to examine the impact they may have on special needs students. Table 17 shows the percentage of students with Individualized Education Plans (IEPs) by school type.

Table 17
Comparison of IEP Population by School Type, 2018-2019

Neighborhood Public Schools	Magnet Schools	Charter Schools	Private Schools
Neighborhood 1- 12%	Magnet- 18%	Charter 1- 8%	Private 1- 5%
Neighborhood 2- 12%	Gifted- 6%	Charter 2- 16%	Private 2- 0
		Charter 3- 11%	
Mean- 12%	Mean- 12%	Mean- 12%	Mean- 2.5%

Private schools have significantly fewer students with IEPs compared with all public options. While neighborhood schools, magnet schools, and charter schools all have a consistent average across school type, there are some differences within each school

type. Examining enrollment practices and factors for acceptance helps explain some of those differences.

First, the percentage of students with IEPs at each school was compared for schools that have financial factors for acceptance. Again, public schools cannot charge a fee so it is only the private schools that have a financial factor. Table 18 shows this comparison.

Table 18

Comparison of IEP Population at Schools With and Without Financial Factors for Acceptance, 2018-2019

Schools With Financial Factors	Schools With No Financial Factors
Private 1- 5%	Neighborhood 1- 12%
Private 2- 0%	Neighborhood 2- 12%
	Magnet- 18%
	Gifted 6%
	Charter 1- 8%
	Charter 2- 11%
	Charter 3- 16%
Mean- 2.5%	Mean- 12%

Schools that charge tuition have a lower percentage of students with special needs. In contrast with the impact seen on FRL population, there is not much of a difference between Private School 1 and Private School 2, which offers financial aid to all families. Interestingly, Private School 1 self-reported that they have more students with IEPs than typical parochial private schools because they have a special education classroom that is only at certain schools. Despite this, the private schools still have fewer students with special needs. This is not surprising given the resources public schools have

for diverse learners and the legal requirements they are expected to follow. For students with special needs, the private school option might not meet their needs. However, if school choice is to be equitable, all students, including students with special needs, should have the option to attend all schools.

The next interaction between exceptional learners and enrollment processes that was examined was the relationships between academic enrollment steps and factors for acceptance and special education populations. Table 19 shows the percent of students with IEPs at schools with academic factors for acceptance and enrollment steps with those that do not have any.

Table 19

Comparison of IEP Population at Schools With and Without Academic Factors for Acceptance or Enrollment Steps, 2018-2019

Schools With Academic Factors For Acceptance or Enrollment Steps	Schools Without Academic Factors For Acceptance or Enrollment Steps
Private 1- 5%	Neighborhood 1- 12%
Private 2- 0%	Neighborhood 2- 12%
Charter 1- 8%	Magnet- 18%
Gifted- 6%	Charter 2- 16%
	Charter 3- 11%
Mean- 5%	Mean- 14%

Schools that have academic factors for acceptance or an academic enrollment step have fewer students with IEPs than schools that do not have any academic factors or steps. Unlike with FRL status, Charter School 1 is included in this comparison because it does have a placement test as an enrollment step. While this did not have a significant effect on FRL population, Charter School 1 does have a much lower percentage of

students with IEPs compared with the other public schools. It appears that even though the placement test would not exclude a student with special needs from being accepted to the school, having a placement test could deter an exceptional learner from applying. The private schools and the gifted magnet do have academic factors for acceptance that would exclude students who have special needs that impact their learning. Having academic factors for acceptance limits accessibility to all choice options for students with special needs. Eliminating this would help ensure more equitable access.

The final analysis of the interaction between enrollment practices and special needs populations is looks at behavior factors for acceptance. Table 20 shows the percent of students with IEPs at schools with behavior factors for acceptance compared to schools without any.

Table 20
Comparison of IEP Population at Schools With and Without Behavior Factors for Acceptance, 2018-2019

Schools With Behavior Factors for Acceptance	Schools Without Behavior Factors for Acceptance
Private 1- 5%	Neighborhood 1- 12%
Private 2- 0%	Neighborhood 2- 12%
VICC	Magnet- 18%
	Gifted- 6%
	Charter 1- 8%
	Charter 2- 16%
	Charter 3- 11%
Mean- 2.5%	Mean- 12%

As mentioned previously, it is only the private schools and the VICC program that examine behavior as a factor for acceptance, either through a review of records and/or a required site visit. Some students with special needs may also exhibit more challenging behaviors in school, either because of their disability or as a reaction to their disability. As a result, a review of their records or trying to participate in a site visit may keep them from being able to attend a school, even if it is a manifestation of their exceptionality. Honoring the unique needs of each student in their learning and social-emotional development is important to ensuring special needs populations have access to all school choice options. Determining whether the interaction between academic and behavioral factors for acceptance, much is still unknown. Further research would be needed to understand the level at which each impacts special education populations. However, a combination of both means students who are academically low and students with behavior problems will likely not be accepted.

Although VICC does not track student demographic data, it is important to note from the narrative description of their enrollment process that students cannot be accepted into the VICC program if they have an IEP that requires services beyond a resource room. In addition to this, if a student has an IEP and they have behavior problems related to their disability, they will not be accepted into the program.

Discussion of Results Relating to the Research Purpose and Hypotheses

The purpose of the research was to examine how school choice enrollment policies impact schools, specifically related to enrollment and student population. The collection, presentation, and analysis of qualitative and quantitative data illustrate the different enrollment policies various choice options have and shows the impact they have on the schools population of students.

It was hypothesized that enrollment practices would vary across choice options with magnet schools, charter schools, and private schools having more complex processes and neighborhood schools having less complex processes. The research confirms that practices were different across some school types and within some school types. The research also confirmed that neighborhood schools do have the least complex enrollment processes. At the next level of complexity are magnet schools and charter schools. The most complex enrollment practices were in the private schools. The research confirmed that academic and behavioral factors exist for private schools but disconfirmed that they exist for charter options. The research confirmed that the enrollment process is competitive for charter, magnet, and private options because they have a limit on the number of students they will enroll. As a result their are enrollment deadlines and lotteries or waitlists are used. It was also confirmed that this varies based on the school.

The above data were examined for impact on the demographic similarities and differences within school enrollments across school types. It was hypothesized that neighborhood schools would have higher percentages of African American students, free and reduced lunch populations, and students with IEPs. The research confirmed that neighborhood schools have higher percentages of students with IEPs and who qualify for free and reduced lunch than private schools and most charters and magnets. When accounting for region of the city, neighborhood schools had higher percentages of African American students and FRL students than other school types in their same region.

The integration of the qualitative themes and quantitative student data helped show that certain enrollment practices impact student population, including:

-Schools with academic factors for acceptance have lower percentages of poor students.

-Schools with academic factors for acceptance or enrollment steps have fewer students with IEPs.

-Schools with behavior factors for acceptance have lower percentages of poor students and students with IEPs.

-Schools with financial factors for acceptance have lower percentages of poor students and students with IEPs.

-Schools that require parents to make an additional site visit have fewer poor students.

-Schools that have enrollment caps and therefore limited enrollment windows, lotteries/waitlists, and limited grade level entry have lower percentages of African American students and poor students.

Overall the research supports the literature that shows how increased competition among schools leads to schools using strategies to cream students to ensure they get what they consider to be the best students. This especially happens when schools are allowed to set their own enrollment guidelines. Ertas and Roch (2014) found that charter schools tend to select fewer poor students than regular public schools and the researcher supported this with the exception of one charter school, which had the same FRL population as the neighborhood schools. Andre'-Bechely's (2005) shared the experiences of three mothers in navigating public school choice to show how bureaucracy and policies for school choice can actually advantage and disadvantage certain groups. The current research supported this and provides a roadmap of the work parents would need

to do to understand each school's unique enrollment policies. Navigating school choice is a complex process for even the most educated, informed, and equipped parents.

Mader (2018) found that in New York City, increased choice has led to greater racial and socioeconomic segregation (more so than housing segregation) and as a result, "the schools they leave behind face ever-greater challenges as they struggle to serve the city's neediest children" (Mader, 2018). While the current research does not compare whether or not school segregation is increasing or decreasing, it does indicate that neighborhood schools are more likely to have higher populations of African American students and students who qualify for free or reduced lunch. Neighborhood schools in St. Louis are left with the biggest challenge of serving the city's most vulnerable students.

CHAPTER 5: Concluding Discussion

Limitations and Recommendations for Further Study

The small sample size of this study is one potential limitation of this study. However, the small sample size, thoroughly examined, could inform future research on the topic. In this study, the careful sampling of school types provide a representation of the variability in enrollment processes, likely to impact school diversity in student populations. An analysis of all the schools in the city would help provide a more detailed understanding of how school choice enrollment practices might impact student population. Because several school choice options follow the same enrollment procedure, the research could potentially be conducted by including the quantitative data for the schools with the similar enrollment procedures without needing to extensively collect additional qualitative data. In addition, a larger sample size could help clarify the impact

of individual steps or factors for acceptance when there is an interaction of multiple steps and factors for acceptance within schools. For example, the private schools in the study were the only ones that had financial factors, behavior factors, and attendance factors for acceptance. Whether it was the interaction of each of these factors or one factor more than others impacting student population is unknown. Future research conducted on a larger scale could help clarify this.

Once a parent decides to exercise their choice to send their child to a school, the first step to making this a reality is enrollment. This is why the current research focused on the impact of enrollment on equitable access. However, once a student enters the school, other factors could impact the ability of certain populations to stay in that school. Future research could extend the current research to understand how school policies impact how certain populations are able to stay at a school.

Because each city and state has different dynamics when it comes to school choice, generalization of this research to other cities could be a limit of the research. This study was collected within St. Louis City, with its own school choice legislation, social dynamics, regional dynamics, and educational history that might be unique to the area. Conducting a similar study in other cities or across multiple cities would show the impact of school enrollment practices on student populations on a larger scale.

The supports schools provide parents emerged in the research and are described in each narrative, however the impact these supports have on parents was not carefully examined. Future research could investigate what supports are most effective and why. Specifically, future research could look at what supports could increase equity or mitigate the threats to equity certain enrollment practices have.

Finally, qualitative data on school enrollment procedures was collected directly from the schools. What parents are told when they inquire about a school's enrollment requirements could differ from what the school told the researcher collecting data. An extension of this research would be to collect data on what parents experience as they navigate school enrollment across choice options in St. Louis. As Andre'-Bechely (2005) found in their research, parents experience different things as they navigate school choice because the bureaucracy and policies for school choice can actually advantage and disadvantage certain groups. Therefore, what parents may experience could differ from what the researcher experienced when collecting qualitative data. Research from Stein (2015), Billingham and Hunt (2016), Musset (2012) and others also indicates that parents use choice to self segregate into schools with other families of similar socioeconomic and racial backgrounds. Collecting data on parent experience and preference could also help explain the extent at which differences in school populations are a result of parents making choices that lead to self-segregation or a result of parents not being able to access choice policies.

Implications

School choice options continue to expand and a system of choice seems to be here to stay. So as the system grows and develops it will be important to consider issues of equity related to school choice and proactively work to ensure equitable access to choice options for all and respond when there are threats to equity. It is known that parents are going to exercise choice in different ways, however changes in school policies and state policies could help ensure that traditionally underserved populations exercise choice and that a system of school choice is equitable.

Implications for schools.

There are multiple things schools can do to be more accessible to all students. Limiting the requirements they set for acceptance and creating a simple enrollment process should be the goal. To do this, schools should first eliminate their enrollment cap. This would mean that all students who wish to attend the school would have the opportunity. If necessary, the school would expand as demand continued to increase. While Missouri legislation on charter schools established that charters can set an enrollment cap, that does not mean they have to. Charter schools interested in serving all students can eliminate this cap from their policy. Magnet schools and gifted magnet schools could also expand to ensure all students interested in the schools have an opportunity. St. Louis Public Schools has started to do this with the gifted program by opening new gifted magnet schools and opening gifted programs within schools.

Second, eliminating an enrollment cap would mean that schools would no longer need a lottery or waitlist and therefore would also not need deadlines. Ongoing enrollment would make the school more accessible to all students and their situations. Next, schools should eliminate academic, behavioral, and attendance based criteria for acceptance. Each of these criteria intentionally cream the students a school accepts and exclude high need populations and the most vulnerable students. Instead, schools should be committed to educating all students, regardless of their academic ability, social emotional skills, or attendance. Instead of excluding students, the discussion should be about how to support their needs.

Additionally, if there is more information or further steps schools want from families, it would be good to remove these from the enrollment process and reach out to

families after they are enrolled. For example, instead of making a parent meeting or placement test a step in the enrollment process, the school could fully enroll students and then work to set up meetings that accommodate parents or evaluate student understanding once the student start schools. This would still mean the school and parents get the information they need without deterring or excluding certain parents.

While private schools do have to charge tuition, it is important for them to consider how they can make themselves more accessible. Private School 2 is a good example of steps private schools can take to do this. 100% of the students at the school receive some level of financial aid. While the school had fewer poor students and students with special needs, it have a much higher populations compared to the other private school. The more a school can remove financial factors related to enrollment, the more accessible they will make their school.

Schools should be knowledgeable about the research that exists around school choice. Awareness that wealthier parents exercise choice more often and have different preferences is important for a school that wishes to provide all children with a quality education and decrease educational inequity. As schools work to market and recruit themselves in a choice market, being intentional about where they do this and who their target audience is important. Specifically, schools could target African American families, poor families, and students with special needs in their recruitment process. Enrollment processes should prioritize enrolling the students and schools should focus on getting more families to exercise choice. In addition, schools should have an understanding of the population of their community and other schools around them and seek to reflect a similar population in their student population.

Implications for school choice policy in St. Louis.

While having a system of school choice can help improve educational opportunities for some, it is important for policy makers to acknowledge that this same system can “increase segregation between schools without necessarily improving school performance” (Musset, 2012). Policy makers for school choice must consider that poor families and wealthier families exercise choice in different ways, which is leading to greater stratification in schools. School choice policy should be intentionally designed to get larger proportions of families to choose, especially traditionally underserved populations. If school choice systems are well designed and managed, the negative impacts it has on equity can be managed. While recommendations can be made to make their enrollment practices more equitable, not all schools are committed to equity. Filtering out certain students and further segregation will still occur if admissions criteria and registration windows are left up to the discretion of schools. But if a central authority controls school choice admission policies and student enrolment procedures, schools have fewer opportunities to select students. Therefore, school choice policy that makes traditionally underserved populations more attractive to schools would lead schools to work harder to serve these populations. In addition, the monitoring of student demographics relative to the community they are in and the other school options surrounding them could help identify schools that might have inequitable policies and practices.

School choice is not something that has grown solely in the St. Louis educational landscape, but it has been expanding all over the country and with it, issues of equity have also emerged. While each city has unique dynamics, some cities have begun to

come up with effective solutions to make school choice more equitable. One way Denver has done this is by having one central authority in which all school choice options are housed, Denver Public Schools. The level at which schools are controlled or are autonomous varies based on the school type, but all public schools, including magnets, charters, and others are part of one district. This has actually allowed the district and schools to increase the options and types of schools they have. Denver has one common application for all the public schools, regardless of type of school. The result is a simple, clear, consistent process for parents to enroll their student. If a school wishes to seek out more information from a parent they do so after the child is enrolled. The city of Denver holds large school fairs to give the community an opportunity to learn about all schools. While Denver has not made school choice a completely equitable process, they have taken important steps to help make it a more equitable process. Denver, along with other cities and states are taking steps to improve school choice. Policy makers should look for places that are making steps toward equity and learn from their ideas and practices.

Finally, part of the strategy around increased school choice is to offer families options and to improve student achievement. To ensure this, it is imperative that schools are provided the effective supports they need to serve their students, particularly schools that might be performing at non-satisfactory levels, schools that are losing students with choice arrangements, and schools with more vulnerable populations. Only when schools are properly supported will all students get a quality education.

Implications for individuals.

In the St. Louis metropolitan area, there is a constant discussion around equitable access to quality schools that usually revolves around the inequities between city school

and county schools. But this research reveals that inequities exist within this larger regional system of inequity, illustrating how educational equity is a mindset rather than a zip code or city boundary. Until individual mindsets are changed within the educational system, inequities will find a way to persist. Each individual stakeholder in the broad educational community of St. Louis must work to understand the history of educational inequity in our region, the ways in which it persists, and the role they play in that narrative. Next individuals must continuously take bold steps to change the narrative through their own housing, educational, and political decisions. Only when individual mindsets and actions change will educational equity become a reality.

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Collective Impact Statement

The goal of this research was to inform schools and school systems about ways to make access to quality educational opportunities more equitable for all students by informing them on how to:

- Offer joyful, meaningful curriculum in every school so that we assume the responsibility of raising children, not students, into happy, healthy adults.
- Build strong neighborhood schools that are supported by the community so that all children have the option to attend a good school in their neighborhood.
- Implement fair and equitable practices for enrolling students so that all students have access to their desired choice in school.

The results indicated that very direct steps can be taken to make a quality education more accessible for all students.

Hollenkamp's research looked at access to quality education on the classroom level by examining the impact of joyful learning. The results indicated that an increase in joyful learning leads to consistent academic growth along with increased social emotional growth without any loss of academic achievement. Therefore, students at traditional, academically rigorous schools could benefit from accessing more joyful learning experiences. This would lead to happier, healthier, and well-educated students. Therefore, educators should work to make school more fun for all students.

Sanders' research looked at access to quality education on the school level by examining how to make a neighborhood school more desirable in an education system of choice. His results indicated that it is essential for neighborhood schools to have a plan to attract and retain families in the community, rather than relying on or expecting families

to enroll. The school must take an active role to market itself and engage with stakeholders as part of this plan. Access to strong neighborhood schools is important for all students and a strong public school is important for each neighborhood. Therefore, neighborhood schools should be working to provide a quality education and engage with families and community stakeholders to make themselves the number one option in a system of choice.

Schuessler's research looked at access to quality education on the regional level by examining the enrollment practices of various choice options. The results indicated that enrollment practices vary across school types and schools, creating a complex system for parents to navigate. The results also indicated that certain enrollment practices are affiliated with lower populations of traditionally underserved students, including special education students, poor students, and African American students. Therefore, access to some school choice options is not equitable for all students. Eliminating these enrollment practices and creating a simplified or more streamlined enrollment process for all schools would make school choice access more equitable, at least when it comes to enrollment.

This research represented just a few steps that can be taken to increase access to quality educational opportunities for all families. Education in our country is a large complex system with numerous intersecting factors and there is still much to be explored.