

Kennesaw State University
DigitalCommons@Kennesaw State University

Doctor of Education in Educational Leadership for
Learning Dissertations

Educational Leadership

Fall 12-13-2016

A New Approach to Parental Involvement: The Role of Virtual Parent-Teacher Conferences

Daphne M. Winkler

Murray County Schools - Bagley Middle, daphne.winkler@murray.k12.ga.us

Follow this and additional works at: http://digitalcommons.kennesaw.edu/educleaddoc_etd

 Part of the [Educational Leadership Commons](#)

Recommended Citation

Winkler, Daphne M., "A New Approach to Parental Involvement: The Role of Virtual Parent-Teacher Conferences" (2016). *Doctor of Education in Educational Leadership for Learning Dissertations*. Paper 3.

This Dissertation is brought to you for free and open access by the Educational Leadership at DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Doctor of Education in Educational Leadership for Learning Dissertations by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.

A New Approach to Parental Involvement:

The Role of Virtual Parent-Teacher Conferences

Daphne Winkler

Kennesaw State University

Acknowledgements

The task of completing this research would not have been accomplished without the help of my wonderful family. First, I would like to thank God for allowing me the opportunity to complete this daunting task. Next, I would like to thank husband for supporting me. Finally, I would like to thank my wonderful sons, Case and Gage. You have both been my rock since day one. You kept me going when I wanted to quit. You are both the love of my life and I thank God every day for putting the both of you in my life. You sacrificed time with me to allow me to accomplish my educational goals. You make me so proud each and every day. It was through your love and encouragement that gave me the strength to achieve my goals.

To Dr. Yanghee Kim, my dissertation chair, thank you for your dedication and guidance throughout this process. To my dissertation committee, Dr. Melin Chang and Dr. Sheryl Croft, thank you for your feedback and encouragement in developing my skills as a scholar.

Abstract**A NEW APPROACH TO PARENTAL INVOLVEMENT: THE ROLE OF THE
VIRTUAL PARENT-TEACHER CONFERENCE**

by

Daphne M. Winkler

Kennesaw State University, 2016

The purpose of this study was to investigate the feasibility of virtual parent-teacher conferences in facilitating parental involvement in the middle school setting. The research was used as a tool to establish whether or not parent involvement could be facilitated by removing barriers to participation, specifically those related to the traditional face-to-face conferences. Ninety-four parents from two middle schools in one county agreed to participate in the study. Of the 94 parents, 54 participated in the face-to-face setting and 40 participated in the virtual setting. Quantitative analysis was used to determine if there were any statically significant perceptual differences evident among conferencing in the traditional face-to-face model versus the virtual model. The findings of this study indicated that time could be saved by using virtual conferencing with parents as a tool for facilitating parental involvement. Satisfaction in the virtual conferences was noted in the surveys completed by parents and teachers. On the other hand, most teachers responded that using virtual conferencing did not save them time. Compared to teachers from the virtual group, teachers from the face-to-face conference showed significantly higher satisfaction toward the parent-teacher conferences. Overall, the findings of this study can support a tool to help bridge the communication gap between parents and teachers by allowing opportunities for parents and teachers to develop strategies that improve communication between home and school.

Table of Contents

List of Tables	7
Chapter I: Introduction.....	8
Research Questions.....	13
Purpose of the Study.....	14
Conceptual Framework.....	15
Review/Definition of Relevant Terms.....	16
Summary.....	17
Chapter II: Literature Review	19
Theoretical Framework.....	20
Definition of Parental Involvement	21
The Importance of Parental Involvement	22
The Importance of Communicating with Parents	23
Barriers to Parental Involvement	25
Parent Involvement in Middle School	25
Parent Partnership	26
Parent Socio-Economic Status.....	26
School Factors.....	28
Teacher Factors.....	29
Removing Barriers	31
History of Parent-Teacher Conferences.....	32
Necessity of Creating Innovative Parent-Teacher Conferences	37
Effects of Using Technology for Parent Teacher Conferences	39

Summary	40
Chapter III: Methodology	41
Research Questions	41
Research Design	42
Demographics	44
Teacher Population	45
Access to the School Site	47
Protection of Human Subjects	47
Instrumentation	49
Survey of Teacher Perception of Parental Involvement in the Classroom	50
Survey of Parent Perception of Parental Involvement in the Classroom	50
Parent Satisfaction Survey	51
Teacher Satisfaction Survey	52
Telephone Recall of Information Survey	52
Data Collection Procedure	53
Data Analysis	54
Limitations	56
Ethical Considerations	56
Summary	57
Chapter IV: Findings	58
Data Findings	58
Teacher Perception Survey	59
Teacher Efficacy Survey	60

Parent Perception Survey	61
Parent Satisfaction Survey	62
Teacher Satisfaction Survey.....	65
Telephone Survey	68
Data Analysis	69
Research Question 1	69
Research Question 2	70
Research Question 3	72
Research Question 4	73
Research Question 5	75
Summary	76
Chapter V: Conclusions, Implications, and Recommendations.....	77
Findings	77
Limitations of Findings.....	83
Implication from the Study.....	83
Recommendations for Future Research.....	85
Conclusion	86
References.....	89

List of Tables

Table	Page
1 Total Population of Students.....	44
2 Ethnic Demographics.....	44
3 Gender Demographics.....	45
4 Students Qualifying for Services.....	45
5 Years of Teaching Experience.....	46
6 Educational Level.....	46
7 Professional Organizations.....	46
8 Teacher Perception Survey.....	60
9 Teacher Efficacy Survey.....	61
10 Parent Perception Survey.....	61
11 Participation Rates.....	63
12 Parent Satisfaction Survey.....	64
13 Teachers Satisfaction Survey.....	67
14 Participation in Follow-Up Survey.....	69
15 Recall of Goals.....	69
16 Participation.....	70
17 Parent Satisfaction.....	71
18 Teacher Satisfaction.....	72
19 Parent Recall of Goal(s).....	73
20 Ethnic Demographics.....	74
21 Parents Taking Action on Goal(s).....	76

Chapter I: Introduction

Parents and teachers have been communicating for as long as schools have been in existence. Parent-teacher conferences provide great opportunities for parents to get a sense of how their child is doing in school. Unfortunately, not all parents can make it to these meetings, especially when they are scheduled only once or twice a year. Trying to prioritize parent-teacher conferences can be stressful and frustrating for parents as they juggle work schedules, conflicting meetings, and other obligations.

A typical parent-teacher conference usually requires taking time away from work to travel to the school, park, sign in, potentially wait one's turn, have the conference, and then repeat the process in reverse to get back to work. Working parents, especially those in hourly-wage and service industry jobs, do not always have the time or opportunity to make this happen (Finders & Lewis, 1994). However, a 15-minute break from work might well be enough time to talk with a child's teacher about how best to support the child's schooling. If all the other obstacles are removed, by not attending a face-to-face conference, more parents may indeed be able to be more involved in the child's education. This study aimed to establish whether parent involvement can be increased by removing barriers to participation, specifically the traditional face-to-face conference. Could conducting such conferences virtually, using smartphones and computers to connect parents with teachers, increase the percentage of parents who participate in conferences with teachers?

In the spring of 2015 I was approached by my curriculum director. She stated that my superintendent had been to a conference and heard O'Malley (personal communication, April 16, 2015) from Pearson presenting on the importance of parental

involvement at middle and high school level. O'Malley (2015) stated there was a huge drop in parental attendance as students moved from elementary to middle school and then on to the high school. She talked about a new topic of virtual parent-teacher conferencing. Chen and Gregory (2009) stated that it is important for parents to be involved in the education of their child, especially during the middle years. My superintendent was then informed of a study that Pearson wanted to conduct in a school system. She agreed to be involved in the study and then came back to the district and asked for volunteers. I immediately volunteered to conduct the study for our system, since I was looking for a research topic and had a huge interest in parental involvement.

Statement of the Problem

This study assesses changes in parent participation in parent-teacher conferences when the conferences are offered in an online environment. In an effort to make conferences more convenient and less of a time burden, administrators from two middle schools in the same district asked school teachers to learn certain videoconferencing tools. In order to ensure that participating parents' perceptions toward the parental involvement practices of their child's teacher were consistent across the twenty classrooms, a short survey was given to all participating teachers. This survey questioned the teachers' perception toward parental involvement and the strategies they currently used to involve parents. Hoover-Dempsey, Bassler and Brissie (1987) conducted a similar survey where they asked teachers to estimate the following: number of students in their class whose parents volunteer at school, number of parents who consistently assist with homework, and number of parents who communicate with the teacher via telephone

conversations. A similar study was completed but the following question was also asked: number of parents in the class who communicate with the teacher via email.

Next, a short survey was given to parents to determine their perceptions toward their child's teacher. These questions discussed current parental involvement practices implemented by the teachers. Walker, Wilkins, Dallaire, Sandler, and Hoover-Dempsey (2005) developed a similar scale for parental involvement. Their study discussed the perception of parents regarding general invitations for parental involvement within the school. The survey asked parents the following: teachers at this school are interested when they discuss my child, I feel welcome at this school, parent activities at this school are scheduled so I can attend, the school informs me about meetings and events, the school staff contacts me about problems involving my child, and teachers keep me informed about the academic progress of my child in school. I surveyed parents and asked them these same questions.

After the surveys were completed, the perception of the teacher was compared to the perception of the parent, regarding parental involvement, to determine whether there was a relationship between the two. From these surveys twenty classroom teachers whose perceptions were correlated were selected to participate in the study. Through completing these two surveys, one with teachers and one with parents; it was proven that the teachers' approaches toward parental involvement across the classrooms and the parent perceptions were not different from one another.

After teacher selection had been completed, students' parents were randomly assigned to participate in either a virtual conference or a face-to-face conference. During the conferences parents received a document detailing their student's fall academic

performance and the teacher's academic goal(s) for the student. Web surveys of parents and teachers measured their satisfaction with the conference, comparing virtual to face-to-face. Parents were also surveyed by telephone one month after the conference to measure their recall of the teachers' recommendations.

This study focused particularly on two middle schools in one school district. The two middle schools, consisting of seventh and eighth grade students, randomly selected parents to participate in this study either virtually or in the traditional face-to-face setting. The two schools were located in a rural county. The total population for the M County School District was 7138 students. Of the 7138 students, School A had a population of 551 students and School B had a population of 576 students.

School A was set up as a traditional middle school where students were placed on teams with four specific teachers: a science, social studies, math, and language arts teacher. Students left their respective teams only to go to connection classes which consisted of band, technology, physical education, agriculture, and music. School A had three academic teams in each grade level for a total of six teams and a total of 21 certified academic teachers, eight certified special education teachers, six connection teachers, an academic coach, a principal, and an assistant principal.

School B was set up in a junior high model. Students traveled to different academic classes according to their individual needs. Advanced classes and remedial classes were available for students who needed to be challenged, as well as students who needed more individualized instruction. School B had a total of 22 certified academic teachers, six certified special education teachers, six connection teachers, an academic coach, a principal and an assistant principal.

Ten teachers from each school were selected to participate in the study after completion of the teacher and parent perception surveys. Of the twenty teachers, ten were seventh grade teachers and ten were eighth grade teachers. Each of the 20 teachers selected had anywhere from 15 to 28 students in their classroom. There was an opportunity for approximately 500 parents to participate in the study.

A county-wide parent survey was given to parents at the end of the 2015 school year. The survey asked parents if internet was available at home. Ninety percent of the parents checked “yes” to having internet access at home. Even though M County is a rural county where seventy-eight percent of the students were on free and/or reduced lunch, students and parents still have access to some sort of technology that would allow them to participate in this study.

All teachers participating in the study received training from the schools technology specialist. This training consisted of an overview of Skype and Facetime. The schools turned off filters so the conferences could take place on these two devices. Teachers were also provided with a trouble shooting checklist to use during the conferences if problems arose. Teachers conducted the conferences over a one week period. They documented their minutes from the conferences on a specific form provided by the school. The form broke down the conference steps in three areas. First, teachers had to introduce themselves to the parents and discuss the content area in which they saw the particular student. Second, teachers had to discuss the strengths and weaknesses of the students. The strengths and weaknesses included academic, social, or behavioral topics. Finally, teachers discussed future actions and developed a goal for the student that was attainable and would require assistance from parents in order to master the goal.

Research Questions

This study was designed to investigate the role of virtual parent-teacher communication to increase parent involvement in the middle school settings. There were five research questions examined throughout the study. Each research question was designed to investigate the effectiveness of virtual parent conferencing in the school setting.

Is there a statistically significant difference in the participation rate of parent-teacher conferences between being offered only face-to-face and being offered both face-to-face and virtually?

Is there a statistically significant difference in the parent and teacher satisfaction between the virtual parent-teacher conference and face-to-face parent-teacher conference?

Is there a statistically significant difference for parents to recall information of key teacher recommendations after one month of the conference between the parents who attended virtual parent-teacher conferences and those who attended face-to-face parent-teacher conferences?

Is there a statistically significant difference with the demographic factors of students whose parents participated in virtual conferences compared to the ones of students who participated in face-to-face conferences?

Is there a statistically significant difference between the virtual and face-to-face group with parents taking action on goals presented at the conference.

Purpose of the Study

Teachers and parents both play a critical role in the academic success of students. Research spanning several decades highlights the importance of parent involvement in the educational success of children (Henderson, Mapp, Johnson, and Davies, 2007; Swap, 1987; Reitz, 1990). Students whose parents are involved in their education have fewer behavior concerns, better academic performance, and are more likely to attend a secondary school (Child Trends, 2010). When parents are involved in the learning of their children and frequently communicate with teachers, they are more likely to monitor the students work and daily activities.

According to Finders and Lewis (1994), one of the greatest obstacles to parental involvement that is reported by parents is the lack of time. Educational systems must look for ways to meet parents in the setting that is most convenient for them if they want to increase parental involvement in their schools. Technology solutions may provide parents more flexibility to participate in conference without leaving the workplace. Sixty-four percent of American adults now own a smartphone, and among all adults in the United States, 10% have Internet access only through their smartphones (Pew Research Center, 2015). With such a large number of parents having access to technology, it only makes sense that we should be catering to the parents preferences by allowing them to attend meeting without leaving home or work. The increase of technology could lead to an increase in parental involvement within the school.

The question that arises is: can schools leverage this technology to increase the numbers of parents participating in parent-teacher conferences? Using technology, parents and teachers can conduct virtual parent teacher conferences that, compared with

face-to-face parent-teacher conferences, can potentially: require less time, improve parent attendance, and allow more flexibility. These conferences can be implemented to close the communication gap between parents and teachers, which will in turn make the students more accountable when it comes to their education.

Significance of the Study

This study aimed to establish whether parent involvement could be increased by removing barriers to participation, specifically those related to the traditional face-to-face conference. Could conducting such conferences virtually, using smartphones and computers to connect parents with teachers, increase the percentage of parents who participate in conferences with teachers? The results of this study could assist school leaders in finding alternative ways to conduct parent conferences that include more convenient methods for parents to use. By creating a bridge with technology, communication between home and schools may make for a more productive and satisfying experience. The results of this study could also be implemented by school leaders to address the strengths and weaknesses in their school improvement plans as it pertains to parental involvement at the middle school level.

Conceptual Framework

The conceptual framework of this study was based on two lines of research that shows the importance of parent and teacher communication and needs of the communication, especially during the middle school years. Both students and parents undergo a transitional period when transitioning into the middle school. Parents and students are both apprehensive about leaving the elementary setting, where they have been six or seven years, to enter the doors of a school they know very little about. As they

enter the doors of this new social environment, students and parents are often concerned and have many questions for teachers and other school staff (Meyer, 2011).

Epstein (2002) developed six types of school practices that can support various types of parental involvement. These school practices include: parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community. By developing activities for all six types of involvement, schools can obtain parental involvement at home and at school. This type of parental involvement can be used in various ways that meets the needs of the students and their family. Epstein suggests that it is extremely important for families to be productive partners in their children's school success.

Communication with families about school programs and student progress creates a two way discussion between parents and teachers (Epstein, 2002). Effective communication includes conferences, memos, phone calls, newsletters and many other sources of communication. Parents and teachers are the two main educators in a child's life. Parental involvement is a crucial factor during the school life of children, especially in primary and middle school (Chen & Gregory, 2009). Multiple methods of communication are needed to ensure that parents have every opportunity to be involved in the education of his/her child. There is a basic obligation for schools to communicate with the home about school programs and the progress of the child (Epstein, 2001). This communication can be completed in multiple ways, but it is extremely important that the communication between parents and teachers takes place.

Review/Definition of Relevant Terms

The following is a list of terms and definitions relevant to this study:

- Parental involvement. The participation of parents or guardians in their children's education by making contribution to various activities at home and at school.
- Parent-Teacher Association (PTA). Consists of parents and teachers working together to determine needs of students both academically and socially.
- Parent-teacher conferences. Includes a designed time set aside for parents and teachers to meet and discuss a child's progress in school.
- Parent-teacher relationship. A student focused relationship wherein the teacher and parent cooperates and collaborates to enhance student learning.
- Middle school transition. This term refers to when a student moves from elementary school to middle school.
- Socioeconomic status (SES). A term used to measure an individual or family's economic and social position in relation to others, based on income, education and occupation.
 - Lower class. The social group that has the lowest status; unemployed and/or minimal wage jobs.
 - Middle class. The social group between the upper and lower class; professionals and business workers and their families.
 - Upper class. The social group that has the highest status in society.
- Virtual conferencing. A live connection between people in two separate locations.

Summary

Parent-teacher conferences provide great opportunities for parents to get a sense of how their child is doing in school. Unfortunately, not all parents can make it to these meetings, especially when they are scheduled only once or twice a year. Trying to

prioritize parent-teacher conferences can be stressful and frustrating for parents as they juggle work schedules, conflicting meetings, and other obligations. This study was designed to compare participation in virtual parent-teacher conferences and traditional face-to-face conferences. Technology solutions may provide parents more flexibility to participate in conferences without leaving the workplace.

Chapter II: Literature Review

In a perfect world we would not need schools, but we will always need education. So the question is, if there were no schools, where would the young receive their education? Would education come from parents and/or guardians? Would there be no education? These questions help to understand why it is so important for parents and teachers to build relationships when it comes to giving students all the tools they need in order to be successful in the educational setting.

Parental involvement refers to the participation of parents in every facet of education to ensure their student is equipped to participate in various activities at home and at school. In order for schools to be successful, parents and teachers must build a relationship of communication. Key to this relationship is that parents and teachers establish a partnership (Henderson et al., 2007; Lareau, 2000). This partnership must be built on trust. There are many barriers with parental involvement. Teachers often have up to 30 students in a classroom, and it can sometimes be hard to find time to meet with the teachers, but time must be found. Communication is important in building a positive relationship. A positive parent-teacher relationship can help a child to feel good about school, which in turn helps them to be successful. When schools build partnerships with families, respond to parent concerns, honor parent contribution, and share decision-making responsibilities, they are able to build trust with families which will improve student achievement.

The history of parent-teacher conferences has changed over the years. The Parent-Teacher Association (PTA) began in the mid 1800's when only mothers were involved and had little voice in educational matters. Throughout the years conferences have

changed to look for ways to accommodate parents and make it easier for them to be a valued partner in the education of their student. Conferences can now be student-led or whole group discussions about individual students. This literature review will discuss the importance of parental involvement, the barriers of parental involvement, the importance of communicating with parents, and the history of parent-teacher conferences. Even though it is important to build trust with families, there are many barriers reported that hinder these collaborative relationships.

Theoretical Framework

The theoretical framework of this study was adopted from the research done by Epstein. Her research on school and teacher leadership in supporting parental involvement has guided numerous studies (Chen and Gregory, 2009; Henderson and Mapp, 2002; Hill and Tyson, 2009; Robbins and Searby, 2013) that investigated similar topics. According to Epstein (2001), the attributes of parental involvement that are directly experienced by students include having positive attitudes toward school, much higher levels of achievement, completion of more homework in a shorter time, and observing a closer relationship between family and school in general. Epstein suggests that when parents are involved, more students maintain a positive attitude and display more appropriate behaviors at home and at school.

So why is parental involvement so important? Parental involvement helps the student to see that education is not only a goal the teacher has for the student but also a goal that the parent has for the student. According to Epstein (2001), there is a basic obligation for schools to communicate with the home about school programs and the progress of the child. It is important that all information communicated can be easily

understood by all parents. When schools engage families in ways that improve learning and support parent involvement at home and at school, students make greater gains.

Definition of Parental Involvement

According to Henderson and Mapp (2002), parental involvement encompasses parenting, communicating with others, volunteering in school, supporting student learning, participating in school decision making, collaborating with school employees, and taking an active role in the education of the child. Epstein (2001) defines parental involvement as the participation of parents in every facet of the education and development of children from birth to adulthood, recognizing that parents are the primary influence in their children's lives. Parental involvement refers to the participation of parents or guardians in their children's education by making contribution to various activities for children at home and at school. These activities can include supporting, motivating, monitoring, and paying attention to their children.

Recent studies have been conducted to look at the influence parents have on their child's education. According to Hill and Tyson (2009), the majority of studies on parental involvement reference the work of Epstein, which categorizes parent involvement in two separate categories: school-based parental involvement and home-based parental involvement. Epstein (2001) stated that home and school partnerships have always been the important piece in the education process. School-based parental involvement encompasses volunteering at the school, communicating with the school, and taking part in decisions made throughout the school (Sad, 2012). This includes any activity going on in the school where the parent chooses to be involved. Home-based parental involvement involves supplementary educational activities, homework assistance and parenting skills

and techniques (Hill & Tyson, 2009). In addition, this type of parental involvement takes place while the student is at home, where parents work on strategies and techniques to help the student become successful at school.

The Importance of Parental Involvement

With increased class sizes, loss of teaching jobs, and a reduction in school staff over the past few years, schools have been forced to look for ways to get parents involved in the education of their children (Lam & Ducreux, 2013). Consequently, many students are falling behind academically and need more supports from parents and teacher than ever before. Many parents who are actively involved in the education of their children at the elementary school level become less involved when their children reach middle school. However, parent involvement in a child's education during the middle school years is just as important in a child's success at school as it is in earlier grades.

When students enter the middle school setting they tend to be more independent and may not always want the presence of their parents in the school. However, the need for parental involvement still remains high for student's education outcomes (Coleman & McNeese, 2009). Therefore, it is important for schools to support parents in school-related activities as well as home-based activities. According to Gordon and Cui (2012), this support has a powerful effect on students' academic achievement in their current educational state, as well as their future. Therefore, schools must communicate with parents the specific strategies to follow to help their child while they are in school and at home.

Even though there are many strategies parents can practice, according to Karibayeva and Bogar (2014), students whose parents support and motivate them tend to

have a great sense of coping with academic challenges. This is true for all grade levels. Hill and Taylor (2004) noted that if parents are actively engaged in their children's studies, students will realize their parent's value education and they will try to complete homework and other assignments more carefully. To be actively engaged, parents have to show an interest in how their child is performing at school and at home. They must also look for ways they can assist their student when problems arise.

Parents can assist students in many different ways, though just being involved, by showing interest, and by motivating may be the most beneficial to students. This kind of involvement may allow parents to monitor school and classroom activities, and to coordinate their efforts with teachers to encourage acceptable classroom behavior and ensure that the child completes schoolwork. The support and involvement of parents can directly influence the personal and social growth of the student, as well as their academic performance (Lam & Ducreuz, 2013). Therefore, it is imperative to identify the extent to which parental involvement in education is positively related to achievement and which types of involvement are most effective.

The Importance of Communicating with Parents

As parents establish good relationship with the school, they are more likely to get information from the school that could be used at home. It is important that all information communicated can be easily understood by all parents. Research has linked parental involvement to improved student attendance, promotion, graduation, positive behaviors, and postsecondary education (Henderson & Berla, 1994; Henderson & Mapp, 2002). Although it is generally known that parental involvement leads to positive

educational outcomes for students, the type of parental involvement necessary for academic achievement varies by grade level (Sad, 2013).

Parental involvement can either be proactive or reactive (Chen & Gregory, 2009). Proactive involvement includes helping with homework, being involved in school events, and keeping a check on the students learning progress. In order to be proactive, it is necessary for parents to be in contact with the teachers. Parent involvement during the middle school years, particularly in the form of helping activities, increases the educational success of students (Alschul, 2011).

According to Olmstead (2013), reactive involvement includes attending meetings with teachers and volunteering in the school. This is also an important type of parent involvement and calls for parents to be visible at the school. When parents participate in school activities, events and conferences, they are able to meet other parents and exchange information and experiences that can be beneficial for others. According to Lam and Ducreux (2013), the involvement of parents in school related activities has a positive impact on developing a relationship between teachers and parents. Through this kind of parental involvement, teachers are able to improve the relationship with parents, increase the morale, and contribute to creating a more positive school climate. Parents are able to increase their confidence, become satisfied with their child's education, and value their own education (Lam & Ducreuz, 2013).

Parents can assist students in many different ways, though just being involved by showing interest and motivating them may be the most beneficial to students. This kind of involvement may allow parents to monitor school and classroom activities, and to coordinate their efforts with teachers to encourage acceptable classroom behavior and

ensure that the child completes schoolwork. The support and involvement of parents can directly influence the personal and social growth of the student, as well as their academic performance (Lam & Ducreux, 2013).

As parents establish good relationships with the school, they are more likely to get information from the school that could be used at home. It is important that all information communicated can be easily understood by all parents. Karibayeva and Bogar (2014) found in the National Child Development Study that when parents are interested in the education of their student, their students receive better scores on classroom assignment and tests, as compared to peers who have parents who seem uninterested. According to Olmstead (2013), students are more likely to graduate college when their parents monitor the daily academic activities of students. Olmstead also found that by being in communication with parents, students are more likely to pursue post-secondary education programs.

Barriers to Parental Involvement

Parent Involvement in Middle School

Parent engagement drops as students move from elementary to middle to high school. Parent participation in conferences with teachers falls from 90% to 70% to 60% from elementary to middle to high school, respectively (NCES, 2007). During the middle school years, parents sometimes withdraw from being involved in their child's academic life because they believe their child needs to learn to be more independent (Robbins & Searby, 2013). Even though students may roll their eyes about moms and dads helping at school events, parents can be reassured that their involvement has long-lasting positive effects on their children's academic motivation and performance.

According to Hill and Tyson (2009), middle schools are large and complex, often making it difficult for parents to figure out how to become effectively involved. With the transition from elementary school to middle school, parents must learn to communicate with multiple teachers instead of just one. Parents often find this to be a difficult task due to the fact that this is a new paradigm for the parents. This is an issue they have never had to deal with before.

Parent Partnership

The parent-teacher relationship, built on trust and honesty, is a crucial component of parental involvement. Many parents do not become involved with their children's education until there is misbehavior at the school and the parent has to be called in for a meeting (Lam & Ducreux, 2013). If this is the first time the teacher has interacted with the parent, it makes it difficult to develop a positive relationship built on honesty and trust.

A relationship of honesty and trust does not happen overnight, it must develop over time. Chen and Gregory (2010) argue that if parents have good attitudes toward teachers, it may beneficially affect the student-teacher relationships, as well as academic excellence. Many parents believe that the school is the only responsible party in educating children (Lareau, 2000). Lareau further asserts that many parents do not have the resources necessary to communicate with parents and may feel they do not have enough of an education to state their own opinions.

Parent Socio-Economic Status

Although parent involvement has been linked to school success, many parents are not as involved at school and at home as teachers would like for them to be. Working-

class and lower income parents may be less likely to establish such a partnership with the school. Hill and Taylor (2004) highlighted the fact that families with low income are less likely to engage in the education of their children than wealthier families. Lower income parents tend to find it difficult to discuss their own negative school experiences and are not as likely to seek guidance for the education of their own children (Karibayeva & Bogar, 2014). Their educational levels are typically lower than the teachers with whom they are interacting and they tend to feel disconnected due to the mismatch between their own culture and the culture of the school (Lareau, 2000). According to Lareau, working-class parents may not be able to join the partnership with teachers because they have jobs and cannot get away during the workday, as many teachers and working parents share the same work hours.

Research shows that there is a difference in the parent-school relationship between the differing social-economic classes of parents (Lareau, 2000). There is a separation between the working-class families and the school. According to Lareau (2000), working-class families believe that teachers are responsible for giving their child a good education, and the parents typically do not have time to obtain information from the school. These parents may not intervene in their child's school and therefore their child receives a basic education.

On the other end of the spectrum, upper-middle-class parents believe that the responsibility between them and the school should be shared. Lareau (2000) states that upper-middle-class parents are often critical of the school and the professional performance of individual teachers. It is easy for these parents point their fingers at teachers when their son/daughter is not performing at the level of mastery. "There are

much tighter linkages between upper-middle-class parents and the school than between working-class parents and the school because upper-middle-class parents closely supervise and frequently intervene in their children's schooling (Lareau, 2000, p.9).” High socioeconomic students tend to be higher academic achievers than are low socioeconomic students. So the question is how can schools ensure that teachers are motivated to teach all students, regardless of socioeconomic status? According to Warren (2002), teachers must be trained to have high expectations for all students and be willing to think outside the box when looking for ways to teach students from different backgrounds.

School Factors

According Henderson, Mapp, Johnson, and Davies (2007), welcoming school environments provide parents with a reciprocal relationship where not only do they feel that they belong to the school, but the school belongs to them. Therefore, this sense of belonging motivates parents to be more active in their children's education, which in turn ultimately has a positive impact on student achievement. The school perception must lead parents to believe that their thoughts are valid and their assistance is needed. As was mentioned in the section above, parents must feel honesty and trust when going into a school. There should be a positive school climate that is evident when parents walk through the door. The hardest question to answer is how does a school get this welcoming environment?

Evidence accumulated during the past decade has shown that the quality of students' relationships with their teachers is associated with current and future adjustment to schools (Epstein, 2001). Children who experience supportive, positive relationships

with their teachers have more positive attitudes toward school. If school want plan to be welcoming to parents, they must first look at their current practice to see if it reflects this welcoming practice.

According to Finders and Lewis (1994), teachers and administrators must get a true understanding of their school before they can determine if it is one that welcomes outsiders. Schools must look at current practices and determine if these practices are effective. Educators could begin by asking how they help parents to become familiar with the school and the staff who work in it. Epstein (2001) suggests that people feel as if they belong when they positively contribute to the good of the organization. Finding ways for parents to positively contribute is one way to welcome them into the school community.

There is a basic obligation for schools to communicate with the home about school programs and the progress of the child (Epstein, 2001). This communication can be completed in multiple ways, but it is extremely important that the communication between parents and teachers takes place. It is important that all information communicated can be easily understood by all parents. When schools engage families in ways that improve learning and support parent involvement at home and at school, students make greater gains.

Teacher Factors

According to Lam and Ducreux (2013), parents and students benefit when teachers are available and listen to the needs and the wants that parents have for their children. By listening to parents, teachers are able to develop a relationship of honesty and trust. This relationship is best if built at the beginning of the school year.

Social class has an influence on the lack of parental involvement in schools. Research has indicated that students' academic outcomes are related to their socioeconomic status (Warren, 2002). Exposure to underachievement of lower socioeconomic students may cause teachers to develop initial expectations of student potential on the basis of children's socioeconomic status (SES). According to Warren, these expectancies could affect teachers' sense of responsibility and efficacy. If teachers believe that student outcome is predetermined, or determined by factors beyond their control, they may have little motivation to investigate ways to reach these students (Diamond & Spillane, 2004).

To ensure that teachers are motivated to teach all students, regardless of socioeconomic status, schools must train teachers to address needs of individual students, regardless of background. Teachers must have adequate tools to assist in preparing all students to achieve academically. According to Warren (2002), teachers must be trained to have high expectations for all students and be willing to think outside the box when looking for ways to teach students from different backgrounds.

Teacher efficacy is an important contributor to parent involvement. If schools are looking to increase parental involvement they must encourage teachers to build a sense of efficacy. A study conducted by Hoover-Dempsey, Bassler and Brissie (1987) reported that when efforts are increased to share the responsibility between low-income homes and the school there is a focus on parent-child involvement at home. This focus on specific tasks helps the student to be prepared for school and the parents feel involved in the education of their child.

Hoover-Dempsey, Walker, Jones and Reed (2002) conducted another parental involvement study concerning the preparation of new teachers. The study looked at a teacher education program for improving parent involvement with in-service teachers. The teachers involving parents (TIP) program was successful in increasing teaching efficacy with participants, but failed to change teacher beliefs' about the importance of specific parental involvement practices.

Removing Barriers

Studies have shown there is a relationship between teacher efficacy and family involvement (Garcia, 2004). In order to remove school and teacher barriers, there is a need to provide teachers with opportunities to increase their self-efficacy beliefs as they relate to promoting effective practices for family involvement. The study conducted by Garcia (2004) showed there are many implications in implementing these practices. For teachers to be successful in involving parents they must be provided with the opportunity to collaborate with other teachers and staff who have been successful in implementing parental involvement strategies. Schools and teachers must examine the specific needs of the parents in their school and look for ways to build upon these deficits and provide trainings that the parents find to be beneficial.

It is crucial that teachers are persistent in their attempts to involve parents. They cannot give up after a few attempts that do not reach their desired goals. There must be district practices that demonstrate a commitment to building parental involvement. According to Garcia (2004), teachers who believe their schools put an emphasis on parental involvement are more apt to engage in these practices, and they feel their efforts are valued.

This study will contribute in removing some parental involvement barriers by assisting school leaders and teachers in finding alternative ways to conduct parent conferences that include more convenient methods for parents to use. By creating a bridge with technology, communication between home and schools will make for a more productive and satisfying experience. The results of this study could also be implemented by school leaders to address the strengths and weaknesses in their school improvement plans as it pertains to parental involvement at the middle school level.

History of Parent-Teacher Conferences

According to Butterworth (1929), the Parent-Teacher Association (PTA) originates back to 1855. The PTA arose from a thought that teachers and mothers could work together to provide support to the educational success of students. There were two basic components to the parent-teacher movement in education. One was the focus on identifying ways to extend mothering into public schools, and the second was the focus on allowing anyone, regardless of race, to participate in the PTA (Holbeck, 1934). This inclusiveness was unique due to the fact that segregation was happening during this time period. One of the most influential leaders of the PTA, Alice McLellan Birney, was outspoken about her beliefs that Whites were superior, but she still accepted the inclusiveness of multiple races (Woyshner, 2003).

Woyshner (2003) states that for a long period of time, black women did not feel the PTA addressed their concerns. Parallel organizations were formed to address concerns these women had about their children's educations. With most schools being segregated, black mothers had to begin to evaluate the quality of the schools that their children were attending. This was not always easy due to the fact that mothers often

lacked appropriate educational experiences of their own. It was the 1920's before black mothers felt they were needed in the PTA (Woyshner, 2003).

School administrators were initially receptive to the PTA in schools. It was not long until tension developed between the predominantly male administrators and the predominantly female members of the PTA (Butterworth, 1929). The PTA began to get so involved that they were not only concerned about school lunches, but they also wanted to give their input on reading supplies and textbooks to be purchased. The administrators did not agree that the PTA should have this much influence in the school, and therefore tried to limit the concerns of the mothers during this time (Woyshner, 2003).

Over the next few decades, the PTA changed to include parent-teacher conferences to determine concerns that teachers were having with individual students. The Parent-teacher conferences provide a time for teachers and parents to discuss the current educational successes and needs of the student. These needs and successes can be in regards to academics, social interactions and emotional well-being. According to Loeser (2015), the parent-teacher conference is used to address specific issues and determine goals for the individual student to obtain mastery of the standards. Parent-teacher conferences are usually short, approximately 15-30 minutes, and happen multiple times throughout the school year. Normally, parent-teacher conferences are held without the student in attendance. These conferences are usually facilitated by the teacher and parents just sit back and listen to the suggestions of the teacher. Lareau (2000) found through polls of teachers that parent involvement, or the lack of, is the biggest problem facing public schools today. Though teachers typically take control of the meetings, they want parents to speak up and discuss their own concerns for their children.

Hanhan (1998) indicated that the most commonly used means of communication with parents are the use of the parent-teacher conference. These conferences are implemented to bridge the gap between the parents, teachers and students. They are most beneficial when all three parties discuss strengths and weaknesses and set goals for achievement. Open houses and other nights are used to communicate with parents, but according to Loeser (2015), there is only one meeting set aside each year for parents to meet with teachers to discuss the individual strengths and weaknesses of their child. Loeser also stated that in order to hold a successful parent-teacher conference, teachers must be willing to collaborate with parents. The goal of this collaboration is to share the responsibility for academic success. Teachers should be active listeners and create a welcoming atmosphere during these face-to-face meetings.

During these conferences, teachers usually have an agenda for the information they want the parents to obtain from the meeting. These conferences encourage teachers to be prepared and often allow little time for parental comments. According to Loeser (2015), although these conferences are designed to create a teacher-parent partnership, they often discourage parents from participating in the process. Parents have very little opportunity for input during parent-teacher conferences. They tend to leave the conference frustrated, feeling like they did not have an opportunity to express their thoughts and concerns.

Collaborative models for parent-teacher conferences have also been used in education. These conferences call for honest communication and a partnership between parents and teachers. Both the teacher and the parent are given an opportunity to discuss the current needs of the student during these collaborative conferences. Hanhan (1998)

stated that such collaborative approaches are characterized by mutually agreed upon goals, trusting relationships, two-way communication and shared decision making. This model is becoming more popular in schools as a means to bridge the gap between parents and teachers.

Student-led conferences have been a recent initiative for involving parents in education. According to Loeser (2015), student-led conferences encourage students to be active in decision making and motivated to improve their academic experience. Portfolios are used during the student-led conference to showcase student performance. The portfolios illustrate work and help students to communicate their learning to parents and teachers. The portfolios contain the work the students have completed throughout the grading period.

Loeser (2015) highlights three key reasons why many school districts are using student-led conferencing. The first reason is to allow the student to be a part of the conference as students tend to see traditional parent-teacher conferences as a means for parents and teachers to talk about them behind their backs. The student needs to see the conference as a tool to help them succeed academically. The second reason for student-led conferences is to create conditions for student communication. The traditional model denies students the opportunity to self-assess and set goals for improvement. Students can achieve academic goals by being required to discuss the learning process with parents and teachers. This technique helps students to explain the importance of their education. The final reason for student-led conferencing is to provide student work that contributes to the learning process. Loeser (2015) suggests that portfolios can be used to provide a more detailed overview of the student's strengths and weaknesses, which will provide for

a more meaningful discussion between teachers, parents, and students. The students take ownership in these portfolios and want to share their achievement with their parents.

According to Loeser (2015), studies have shown positive results by having students involved in the parent-teacher conference. The students tend to benefit from discussing their own progress toward meeting goals, though some parents may not want to share information when the student is present. Parents may have concerns that they do not want their child to know they are discussing with teachers. Many parents are comfortable with the traditional conferencing and may find it difficult to be open-minded when following a new format. Loeser states that some schools have decided to go to a mixed methods approach that includes a combination of traditional conferencing and student-led conferencing. This mixed approach can be beneficial according to the particular parent and student.

According to the United States Department of Education (DoED, 2014), a new model for parent engagement has been attracting national attention. The model for parent-teacher conferences is called Academic Parent Teacher Team (APTT). This conference model replaces traditional parent-teacher conferences by allowing time for group meeting each year, where teachers meet with all parents at one time to discuss individual student performance. This meeting consists of a coaching session where parents learn to interpret data of their individual student. According to the DoED, parent attendance for APTT meetings average 92 percent. “Parents were excited about the opportunity to meet with teachers and are grateful when assessment data arrives (DoED, 2014, p.3).”

The data showed students participating in APTT to be at a higher academic level than other students in the same grade level. Teachers discussed how they had a decrease in workload since the students were coming to school prepared and ready to learn. With APTT teachers are able to share responsibility with parents and create an environment of trust between teachers, students and parents. This trust is built throughout the school year as parents and teachers meet to discuss individual student growth.

The Georgia Department of Education (GADOE) has partnered with WestEd to implement the innovative approach of Academic Parent-Teacher Teams. According to the GADOE, APTT is grounded in the notion that schools can thrive when families and teachers work together to maximize student learning inside and outside the school. The APTT model is designed to supplement traditional conferences. These whole class meetings allow parents to learn where their child is in comparison to academic standards. They also see where their child needs to be by the end of the year and are provided with supports to help their child receive mastery of the standards (GADOE, 2014). This strategic family-teacher collaboration is the newest approach for parent-teacher conferences.

Necessity of Creating Innovative Parent-Teacher Conferences

Parent involvement is a key factor in student success, especially when it takes the form of a partnership between parents and schools. One area in which this partnership is particularly salient is in parent-teacher conferences. A 2007 article noted that 90% of elementary parents reported attending a parent-teacher conference. For middle and high schools, the percentages dropped to 76% and 60% (NCES, 2007). Meanwhile, a 2014 poll of parents and teachers on this subject found that 43% of parents who state that they

want to be more involved in their child's education are "too busy" to increase their involvement (Parent Toolkit, 2014).

According to Karibayeva and Bogar (2014), more parents are becoming less engaged in the education of their children. Many barriers cause parents to not be involved in their child's education as much as they would like. Parental education, lack of time, and work commitments are just a few of the barriers for parental involvement. In 2007 the Department of Children, Schools and Families surveyed parents of 6-14 year old children. Research found that most parents want to be more involved in the education of their children, but have barrier that keep them from doing so. Karibayeva and Bogar suggest that the barriers include educational background, job responsibilities, family life, childcare, as well as many others.

Research shows that 44% of parents suggest that career obligations are the biggest barrier for becoming involved in the education of their child (Karibayeva and Bogar, 2014). One of the primary reasons many parents do not participate in school activities like parent-teacher conferences, is that their employer does not allow them the flexibility to take time away from work to participate (Finders & Lewis, 1994).

In the educational setting today, technology allows "parents to pull information and communicate with the school when needed" (Olmstead, 2013, p. 3). Parents view teacher websites, emails, and online grade books as proactive ways to be involved in their child's academic progress (Olmstead). Newer technologies, such as blogs and wikis, also allow for means to share information from the school with parents (Zieger & Tan, 2012).

It is important that teachers provide parents with resources that support what goes on in the classroom (Zieger & Tan, 2012). Technology is a resource that parents have

access to and can be beneficial to use. Teachers and administrators must look for ways to incorporate this use of technology to stay current with the education times. According to Olmstead (2013), parent involvement is just as much of a responsibility to the school as it is to the parents of the students in the school.

Effects of Using Technology for Parent Teacher Conferences

Even though research has been implemented to show the effects of using technology to increase parent involvement in schools, research has not been conducted in the area of virtual parent-teacher conferences. According to Olmstead (2013), website and emails have been used for communication with parents. Bouffard (2008) found that only 36 percent of families state that teachers use the Internet to communicate with them. In the same poll, principals stated that 60 percent of teachers use means of the Internet to communicate with parents. This discrepancy in percentages says one of two things: either parents are not using the Internet to obtain information or teachers are not using the Internet as much for parent communication as the administration thinks. Olmstead (2013) suggests that school websites can be used as a means of communication with parents when used correctly. The problem with websites is that teachers do not always use them to their fullest potential. They must be checked and updated regularly and must provide timely feedback to parents.

The Pew Internet and American Life Project (2010) found that 77 percent of adult Americans have access to the Internet while at home or at work. The National Center for Education Statistics (2007) found that 100 percent of U.S. schools are connected to the Internet. Olmstead (2013) stated that schools should be looking for ways to increase the technology as a means to communicate with parents.

Summary

The research discussed throughout this literature review supported the thought that parental involvement, both in school and out of school, plays an important role in the education of students. Though both areas are equally important, this study sought to determine how parent participation in the school setting will increase when parents are offered a mean of support through the use of technology. By bringing in 21st Century tools, parents were able to connect with teachers in a way that consumes less time and burden for the parents. Creating positive parent-teacher relationships helped to foster a positive school climate which in turn helped students to be academically successful. When schools build partnerships with families, respond to parent concerns, honor parent contribution, and share decision-making responsibilities, they are able to build trust with families which can improve student overall academic performance of the student.

Chapter III: Methodology

Through this study of the virtual parent-teacher conferences, I looked for an alternative way to communicate with parents, using technology as the primary focus. The virtual parent-teacher conference was one opportunity to better establish this partner relationship. This study looked to answer the research questions, all stemming around a central focus of increasing parental involvement in the middle school setting. Twenty teachers were asked to participate in the study. Teachers and parents were surveyed to determine perceptions on current practices involving parental involvement being implemented by teachers in the classroom. A copy of the teacher perception of parental involvement in the classroom survey can be found in Appendix A. A copy of the parent perception of parental involvement in the classroom survey can be found in Appendix B. I also examined demographic variables including years of teaching experience, educational level, gender, affiliation with professional organizations, and teaching experience at the middle school level.

Quantitative data analysis was used to answer each of the five research questions. Data was collected for all participants in each school confidentially by using only each student's district identification number, which was found on Infinite Campus. Data was gathered regarding demographic variables including sex, ethnicity, eligibility for free and/or reduced lunch, and participation in other programs (special education services, 504 services, English learner services, and gifted student services).

Research Questions

There were five research questions that addressed the issue of involving parents through the use of virtual parent-teacher conferencing.

Is there a statistically significant difference in the participation rate of parent-teacher conferences between being offered only face-to-face and being offered both face-to-face and virtually?

Is there a statistically significant difference in the parent and teacher satisfaction between the virtual parent-teacher conference and face-to-face parent-teacher conference?

Is there a statistically significant difference for parents to recall information of key teacher recommendations after one month of the conference between the parents who attended virtual parent-teacher conferences and those who attended face-to-face parent-teacher conferences?

Is there a statistically significant difference with the demographic factors of students whose parents participated in virtual conferences compared to the ones of students who participated in face-to-face conferences?

Is there a statistically significant difference between the virtual and face-to-face group with parents taking action on goals presented at the conference.

Research Design

The purpose of this study was to investigate the use of virtual parent-teacher conferences in increasing parental involvement in the middle school setting. An approach of positivism was used throughout the study. Positivism, founded by Auguste Comte, stated that only observations gained from personal experiences can be attributed to knowledge (Creswell, 2013). According to Creswell, Comte's beliefs led to an emergence of positivism, a doctrine based on the notion that genuine knowledge is gained through experience and can only be fully gained through experimental approaches. According to

the positivist paradigm the scientist is “an observer of an objective reality (Gray, 2014).” Positivists take a more linear path to examining human behavior, and focuses on cause and effect.

Positivist research emphasized the use of statistical data analysis, the use of scientific methods, and the generalizability of the collected data. Any research employing a positivist approach usually employs control and experimental groups and pre-and-post-test approach (Given, 2008). The primary focus of positivism is to analyze behaviors and make considerations according to the observation. Human experiences are important when looking actions. “This is precisely the case with scientism in education as we, as academics and researchers, clearly have placed ourselves in an epistemological and methodological straightjacket from which we struggle to escape in order to consider more effective approaches to the study and development of education strategies (Hyslop-Margison & Naseem, 2007, p.23).” According to Burbules and Phillips (2000), it is meaningless to make suggestions about things that cannot be verified by experiences.

Settings and Participants

M County Schools was a rural school district in the mountains of Northwest Georgia. There were approximately 7200 students in the school district, with a little over 1100 of the students disbursed in the two middle schools.

The two middle schools, consisting of 7th and 8th grade students, in the district were chosen to address the research questions of this study. Five teachers were recruited from each grade level at each school for a total of 20 middle school teachers. The research planned to collect detailed demographic data from both middle schools. These two middle schools were selected on three criterions. The first criterion was that both

schools were located within the same district. The second criterion was that the schools were under the same academic guidelines and both schools were Title-I schools. The third criterion was the availability to obtain the required data for the study. Both principals were in approval to share the school and student data for analysis in this study.

Demographics

A Middle School and B Middle School both served 7th and 8th grade students in the M County School District. The total population for the district was 7138 students. A Middle School had a population of 551 students and B Middle had a population of 576 students. A Middle School had a greater number of eighth graders and a small amount of seventh graders. Table 1 shows the population breakdown of both schools.

Table 1

Total Population of A and B Middle by Grade Level for the 2015-2016 School Year

Grade Level / School	7 th A	8 th A	7 th B	8 th B
Number of Students	259	292	306	270

The majority of the students at the two schools included in the study were of a White decent. Table 2 displays the ethnic demographics for both schools.

Table 2

Ethnic Demographic of A Middle and B Middle for the 2015-2016 School Year

	A Demographics	B Demographics
White	410 (74.4%)	420 (72.9%)
Hispanic	130 (23.6%)	144 (25%)
Black	3 (.1%)	4 (1%)
Indian	2 (.1%)	1 (.1%)
Asian	0 (0%)	2 (.1%)
Multi-Racial	6 (1.1%)	5 (.1%)

The gender demographics of A and B Middle Schools were similar. Table 3 displays the gender demographic data of the two schools.

Table 3

Gender Demographic Data of A and B for the 2015-2016 School Year

Grade	A Middle School		B Middle School	
	Female	Male	Female	Male
7 th	129 (49.8%)	130 (50.2%)	150 (49.1%)	156 (50.9%)
8 th	151 (51.7%)	141 (48.3%)	134 (49.6%)	136 (50.4%)

A and B Middle Schools both had a high percentage of students qualifying for free and/or reduced lunch. The schools were also represented by targeted groups of students who required more services than regular education students. Table 4 displays the percentage of students qualifying for free and/or reduced lunch, the percentage of special education students, and the percentage of English Language learners in the schools.

Table 4

Students Qualifying for Free or Reduced Lunch, Special Education Services and English-Language Learners at A and B for the 2015-2016 School Year

	A Middle School	B Middle School
Free/Reduced Lunch	430 (78%)	455 (79%)
Special Education	72 (14%)	104 (18%)
English Learners	15 (2.7%)	32 (5.6%)

Teacher Population

School A had a total of 21 certified academic teachers, eight certified special education teachers, six connection teachers, an academic coach, a principal, and an assistant principal. School B had a total of 22 certified academic teachers, six certified special education teachers, six connection teachers, an academic coach, a principal and an

assistant principal. Teacher volunteers were recruited to participate in the study. After completion of an efficacy survey, ten teachers from each school were asked to participate in the study. Of the twenty total teachers, ten were seventh grade teachers and ten were eighth grade teachers. The following tables (Table 5, Table 6, and Table 7) display teacher demographic variables including years of teaching experience, educational level, gender, affiliation with professional organizations, and teaching experience at the middle school level.

Table 5

School A and School B Years of Teaching Experience

Years Teaching	School A		School B	
	Female	Male	Female	Male
0-3	1	1	1	1
4-7	2	0	2	3
8-11	1	2	1	1
12+	3	0	1	0

Table 6

School A and School B Educational Level

Education Level	School A	School B
Bachelors	3	2
Masters	4	5
Specialist	2	2
Doctoral	1	1

Table 7

School A and School B Professional Organizations

Educational Affiliation	School A	School B
Georgia Association of Educators	5	4
Professional Association of Georgia Educators	5	5
National Education Association	0	1

Access to the School Site

The access to the site for this study was possible because the researcher was an employee of the district where the two schools being studied reside. The researcher was employed in one of the two middle schools, School A, and served as the assistant principal. By being an employee in this school district, the researcher had the opportunity to understand how both schools operated within the context of this study. Both principals, as well as the superintendent of schools, provided their approval and support for the research proposal.

Protection of Human Subjects

Teacher volunteers were accepted for the study of virtual parent-teacher conferencing. An email was sent to teachers from the M County School Superintendent. This email was sent to both middle schools asking teachers if they would like to participate in the study. The email explained the process to teachers and asked for volunteers from each grade level, from each school. Teachers who volunteered to participate in the study were asked to complete a perception survey on their current practices in parental involvement. Parents of the classroom teacher were given a similar survey to complete on the classroom teacher. An analysis of both surveys was then completed and ten teachers from each school were selected to participate in the study. These teachers were chosen according to their matching perceptions, parent and teacher perceptions, on the parental involvement survey. Teachers were told in an email from M County Superintendent that all information would remain confidential and specific teacher names would not be used throughout the study.

After teachers were selected, they submitted their homeroom rosters so the students could be randomly assigned to the virtual communication group or the face-to-face group. After students were assigned to either the virtual or face-to-face group, teachers sent out one of the two consent letters to all parents, depending on whether the students were in the virtual or face-to-face group.

The consent letters for the virtual and face-to-face groups informed parents that the researcher was seeking to better understand how teachers could engage with parents through online virtual parent-teacher conferences. The researcher was attempting to gauge whether parents who participated in virtual parent-teacher conferences had as satisfactory experience with the conference as parents who worked with teachers in a face-to-face setting. The researcher then sought to determine whether parents who participated in virtual parent-teacher conferences had the same recall of teachers' main recommendations for student improvement as parents who worked with teachers in a face-to-face setting.

Parents were then told the groups they had been randomly selected to participate in, either virtual or face-to-face. Parents had the option to switch groups if they felt they would be better suited for a different group than assigned. Parents were also informed about the short questionnaire that was conducted following the conferences through the telephone survey. The telephone conference occurred approximately one month after the scheduled conferences. The parental consent letter asked parents for their permission to use any information about the parent-teacher conferences, written comments, statements, feedback, quotes, or any other non-personally identifiable information that is provided to the teacher during the study. It is to be noted that no student names were used throughout

the study. Students were identified by their five digit number located on Infinite Campus, the online data system used by M County School District.

Instrumentation

This study was conducted using data gathered from the conferences. The first web-based resource was called Infinite Campus. This school website was used to locate demographic information on each student, as well as their unique identification number that would protect their identity. This website was also used to identify students qualifying for free or reduced lunch, special education services, and English-language learners. Microsoft excel was used to randomly assign students to the virtual or face-to-face group. It is to be noted again that parents had the opportunity to switch groups if necessary.

In total, five surveys were developed for this study. These were as follows: a teacher perception survey, a parent perception survey, a parent satisfaction survey, a teacher satisfaction survey, and a verbal telephone survey. The surveys for this study were all created by the researcher, except for the survey of Teacher Perception of Parental Involvement in the Classroom. The survey items for the Teacher Perception of Parental Involvement in the Classroom were adopted from Hoover-Dempsey and colleagues study (1987). Hoover-Dempsey and colleagues (1987) conducted a similar survey where they asked teachers to estimate the following: number of students in their class whose parents volunteer at school, number of parents who consistently assist with homework, and number of parents who communicate with the teacher via telephone conversations.

Survey of Teacher Perception of Parental Involvement in the Classroom

To determine the variances to the research questions, this study used a five-point Likert scales to measure each research question. Teacher perceptions surveys were developed in order to ensure that participating parents' perceptions toward the parental involvement practices of their child's teacher were consistent across the twenty classrooms. Teachers were asked to estimate the number of students in their class whose parents participate in the following: volunteering at school, assisting with homework, and communicating through email or phone calls. The five point Likert scale was coded as (1) None, (2) Less than half, (3) Half, (4) More than half, and (5) All students. Teachers were also asked to answer four questions concerning teacher efficacy using a 5 point Likert scale coded as (1) Never, (2) Hardly Never, (3) Sometimes, (4) Most of the Time, and (5) Always. A copy of this survey can be found in Appendix A.

Survey of Parent Perception of Parental Involvement in the Classroom

Parents were surveyed to determine perceptions on current practices of parental involvement being offered at home by the parent and in the classroom by the teacher. Five questions were asked using a 5 point Likert scale coded as (1) Disagree, (2) Somewhat Disagree, (3) Neutral, (4) Somewhat Agree, and (5) Agree. The questions are as follows: I feel welcome at this school, the teachers at this school keep me informed about the academic performance of my child, the teachers at this school are interested and cooperative when they discuss my child, I have an influence on my child's academic performance, and the school lets me know about meetings and other special events. A copy of this survey can be found in Appendix B.

Parent Satisfaction Survey

At the conclusion of the parent-teacher conferences, parents were asked to complete a 13 question parent satisfaction survey. The parents had the option to take the survey electronically or in paper/pencil version. It was explained to the parents that the brief survey would help the school district to improve parent-teacher conferences. Parents were asked to select the responses that most accurately described their feelings and perceptions of the virtual parent-teacher conference or the face to face conference. A URL was given to parents who wished to take the survey online.

The first two questions asked demographic information about the student including the student identification number and the school of attendance for the child. Question three had parents select whether they participated in the virtual or face-to-face conference. If parents participated in the face-to-face conference, they were asked to skip down to question 10 in the survey. Questions four and five of the survey asked which conferencing system was used for the virtual conference and what device was used by the parent for this conference. Questions six and seven asked about the ease of use during the conference. Questions eight and nine used a five point Likert scale to measure the feelings parents had toward the online experience. The scale was coded as (1) Definitely not, (2) Probably not, (3) Maybe, (4) Probably so, and (5) Definitely. Question 10 asked parents to compare this conference to conferences they had participated in in the past. A five point Likert scale was used to measure this comparison. Question 11 used a five point Likert scale to gauge the overall satisfaction of the conference, either virtual or face-to-face. Questions 12 and 13 were open ended questions that allowed parents to respond to how many times they had communicated with teachers this school year and to

make comments about the experience if they wanted to do so. A copy of the survey can be found in Appendix C.

Teacher Satisfaction Survey

Teachers were asked to complete a question survey when the conferences concluded. It was explained to the teachers that the survey would be used to gather information and feedback from teachers on their experiences with virtual and face-to face conferences. They were asked to select the responses that most accurately described their feelings and perceptions of the conferences. Question one, two and three asked teachers to identify the school in which they work, conferencing systems used during the conferences, and devices used for the conferences. Question four used a five point Likert scale to determine the ease of use with the two programs implemented throughout the study: Apple FaceTime and Microsoft Skype. If neither program was used, teachers were asked to leave the items blank.

Questions five and six were yes or no questions that allowed teachers to make comments in a drop box. Question seven asked teachers to use a five point Likert scale to determine how satisfied they were with the virtual conferences. The final question allowed teachers to make any suggestions for improving the process of virtual communication. A copy of the survey can be found in Appendix D.

Telephone Recall of Information Survey

To gauge parent's recall of information from the conference held in the spring of 2016, a telephone call was made by school secretaries to all participants in the study three weeks following the meetings. Secretaries asked parents the following three questions:

- (1) Can you recall one or both of the goals set forth by the teacher during the virtual or

face-to-face conference, (2) To what extent have you taken action on either or both of the goals presented at the conference, (3) To what extent has the teacher taken action on either or both of the goals presented at the conference. Question one required an open ended answer, were questions two and three were measured on the five point Likert scale coded as: (1) No action, (2)Very little action, (3) Enough action, (4) Some action, or (5) A lot of action.”

Data Collection Procedure

Because this study presented a slight burden for teachers, teacher volunteers were asked to take part in the study. It was important to have those who were willing and able to participate, rather than assigning teachers at random. The surveys were conducted during the spring of 2016 by the researcher. The researcher first sought and gained approval from the Kennesaw State University Institutional Review Board (IRB). Next, the researcher received written permission from the M District Superintendent. Finally, the researcher obtained an email confirmation from the principal at each middle school.

Conferencing tools included FaceTime and Skype. Parents were provided with directions on how to set up the account of their choice, if they did not already have one. By offering a range of options, teachers used the virtual method parents preferred. Each teacher scheduled his or her own conferences. In order to encourage consistency across the conferences, teachers provided a standardized form of key information to parents in both conditions prior to the conference. The key information provided to parents in both conditions included: fall pretest results, two student strengths, two student goals, and two student work habits. This information was then used to recall the main recommendations, part of the follow-up survey described below.

After completion of the conferences, teachers and parents completed a short survey about their satisfaction with the conferences, their work situation, family composition, willingness to participate in virtual conferencing in the future, recall of goals set by the teacher, and demographic information. The survey was administered to all parents in the virtual and face-to-face groups by hard copy or electronically (via SurveyMonkey), depending on the preference of the parent.

Similarly, teacher satisfaction with the virtual parent-teacher conference and face-to-face conference process were measured using an electronic survey administered after conferences concluded. Teachers were also asked about the ease of set up, the use of the different conferencing tools, and their future plans to use the same method for parental involvement. Teachers in both schools tracked parent attendance at the conferences in order to determine whether participation was different in either the virtual or face-to-face group.

Approximately one month after the conferences, school secretaries conducted a telephone survey with the parents in both the virtual and face-to-face groups and asked them to recall any recommendations presented at the conference. The school number was highlighted on all forms and a reminder text was sent to all parents a couple of days before the calls were made. The results of the survey were then compared to the teachers' notes taken during the actual conference.

Data Analysis

To test the first research question about participation rates in virtual and face-to-face conferencing, I used chi-square analysis to examine if there were significant differences between the two schools for the participation format. Descriptive statistics

were used to measure the percentage participation rates in the two groups. I then looked at the data to see whether a relationship existed between the virtual and face-to-face participation rates.

To test the second research question about satisfaction, I used data from the parent satisfaction survey. I examined satisfaction scores by conference type (virtual or face-to-face) and verified the statistical significance. Through t-tests I was able to find the mean and standard deviation of the two groups to help determine statistical significance.

Additionally, to test the third research question about teacher satisfaction with the virtual conferences, I used descriptive statistics to compare mean satisfaction scores between teachers' satisfaction with the face-to-face conferences they conducted and the virtual conferences they conducted. I also used chi-square analysis to find $p\text{-value} < 0.05$.

To test the fourth research question about the accuracy of parents' recall of the main recommendations made by the teacher, I used descriptive statistics to measure the recall of information between the teachers' stated goals and the parents' responses to the telephone survey (see, e.g., Gomma & Fahmy, 2013). Chi-square analysis was used to determine the $p\text{-value} < 0.05$. Finally, parents in the virtual and face-to-face groups were compared on how much action they took to implement the goals discussed during the conference.

To test the fifth question about demographic factors in regards to parent satisfaction in both the virtual and face-to-face conference, I used descriptive statistics to determine whether the two groups are statically different from one another. This analysis was beneficial in comparing the means in the two groups to determine whether demographic factors play a role in parent satisfaction in the virtual and/or face-to-face

conferences. Standard deviation between the groups was also noted. Chi-square analysis was conducted to determine the p-value <0.05 of the data as well.

Limitations

One study limitation was parent access to devices that had video conference capability. A 2014 Pew Research report noted that 58% of adults carry a smart phone and 75% of surveyed adults own a laptop. Even though most adults have devices, some will not and will limit generalizability of study findings to parents without devices. A second study limitation was the difficulty in contacting all participating parents one month after the conference. To offset this limitation, the researcher informed parents ahead of time about the telephone survey. The school number was highlighted on all forms and a text message was sent to all parents a couple days before the call to remind them of the survey. Parents were asked to provide multiple contact methods throughout the study. A third study limitation was the teacher's willingness to use technology. This limitation was offset by providing teachers with training on using specific devices and networks to complete the virtual conferences. A handout was provided to all teachers with specific steps for trouble shooting. Teachers were also asked to bring a laptop, iPad, or cell phone to the training so the researcher could help set the device up to make conduct the virtual conferences.

Ethical Considerations

IRB rules and regulations were followed and were granted by the Kennesaw State University Institutional Review Board. The researcher also completed the paperwork requesting authorization from the school district to conduct the study and obtain the data.

This study was in compliance with the researcher's IRB and the school district's requirements for conducting research.

Summary

Chapter three described the procedures for conducting the study. This chapter described the methodology and processes for conducting this study on the role of increasing parental involvement through the use of virtual parent-teacher conferencing. Tables were included to give detailed information about the two schools being studied. The research questions were developed to direct the researcher. Procedures on the research design were discussed in this chapter. The construct of the study, data analysis and ethical considerations were also examined at in depth throughout the chapter. Limitations were noted including a list ways to offset any limitation that may be offered.

Chapter IV: Findings

The purpose of this research was to establish whether parent involvement, as measured by participation in virtual and face-to-face parent-teacher conferences, could be increased by removing barriers to participation, specifically those related to the traditional face-to-face conference. This study was implemented to determine whether there were any statically significant parental perception differences evident with regards to conferencing in the traditional face-to-face model versus the virtual model. The five research questions focused on the following: participation rates in each group, parent and teacher satisfaction between groups, parent's recall of information from the conference, demographic factors between the groups, and taking action on the goals presented at the conference.

The present study focused on responses from multiple surveys administered during the spring of 2016 pertaining to the perception of parent-teacher conferences and the satisfaction of the parent-teacher conferences implemented with different formats. The two formats being studied were virtual and face-to-face conferences. Parents and teachers who participated in the conference completed the following surveys: teacher perception survey, teacher efficacy survey, parent perception survey, parent satisfaction survey, teacher satisfaction survey, and a parental telephone survey.

Data Findings

Forty teachers initially volunteered to participate in this research study. Teacher and parent perceptions surveys were developed to determine whether the participating parents' perceptions toward the parental involvement practices of their child's teacher were consistent. After analyzing these survey results, 20 classroom teachers were

selected to participate in the study. With the 20 selected classroom teachers, parents of 476 students had the opportunity to participate in this study. Of the 476 opportunities, 94 (20%) agreed to participate.

Teacher Perception Survey

Twenty teachers from School A and 20 teachers from School B were surveyed to determine perceptions on current practices involving parental involvement used in the classroom. This information was used to determine whether teacher and parent perceptions matched in terms of parental involvement. In this survey teachers were asked to estimate the number of students in their class whose parents participate in the following: volunteering at school, assisting with homework, and communicating through email or phone calls. The first section of the survey used a 5 point Likert-type scale coded as (1) None, (2) Less than half, (3) Half, (4) More than half, and (5) All students. The second section of the survey asked to answer four items about teacher efficacy using a five point Likert-type scale coded as (1) Never, (2) Hardly Never, (3) Sometimes, (4) Most of the Time, and (5) Always.

The first question asked teachers to estimate the number of students in their class whose parents participated in volunteer opportunities at school, homework, and communication with teachers through emails or phone calls. Twenty-five teachers (63%) responded that none of their parents volunteer at school. Fifteen teachers (37%) responded that less than half of their parents volunteer at school. When surveyed about assistance with homework, seven teachers (17.5%) responded that less than half of the parents assist with homework, 25 teachers (62.5%) responded that about half of the parents assist with homework, and eight teachers (20%) responded that more than half of

the parents assist with homework. The teacher responses for the question regarding communication through emails or phone calls were as follows: one teacher (2.5%) responded that parents never communicate; 32 teachers (80%) responded that less than half communicate; and seven teachers (17.5%) responded that about half their parents communicate through emails and phone calls. Table eight displays the survey results broken down by school. A copy of this survey can be found in Appendix A.

Table 8

Teacher Perception Survey

	<u>None</u>	<u>Less than half</u>	<u>Half</u>	<u>More than half</u>	<u>All students</u>
Parents volunteer at school	25 (63%)	15 (37%)	0 (0%)	0 (0%)	0 (0%)
Parents assist with homework	0 (0%)	7 (18%)	25 (63%)	8 (20%)	0 (0%)
Parents communicate through emails or phone calls	1 (3%)	32 (80%)	7 (18%)	0 (0%)	0 (0%)

(N = 40)

Teacher Efficacy Survey

On the second part of the teacher perception survey, concerning teacher efficacy, teachers were asked to rate themselves in regards to the following statements using a five point Likert-type scale coded as: (1) Disagree, (2) Somewhat Disagree, (3) Neutral, (4) Somewhat Agree, and (5) Agree. Using the scale, teachers were asked to respond to the following: the teachers’ beliefs on their ability to successfully communicate with parents, the parents influence on their child’s academic performance, teachers getting students to believe in themselves, and the parent’s role in encouraging positive attitudes toward education. Table 9 displays the survey results. The survey can be found in Appendix A.

Table 9

Teacher Efficacy Survey

	Mean	Standard Deviation
Successful in communicating with parents	3.2	0.69
Parents have an influence on education	4.8	0.54
Teachers make students believe in themselves	3.1	0.71
Parents encourage positive attitudes toward education	4.3	0.59

(N = 40)

Parent Perception Survey

Parents completed a survey to determine perceptions on current practices of parental involvement in the classroom. Among 120 who completed the survey, 72 parents were from School A and 48 parents were from School B. Five questions were asked using a five point Likert-type scale coded as (1) Disagree, (2) Somewhat Disagree, (3) Neutral, (4) Somewhat Agree, and (5) Agree. Using the scale, parents were asked to respond to the following: I feel welcome, the teachers keep me informed about my child, the teachers are cooperative when they discuss my child, I have an influence on my child’s performance, and the school lets me know about meetings and other special events. A copy of this survey can be found in Appendix B. Table 10 displays the survey results.

Table 10

Parent Perception Survey

	Mean	Standard Deviation
I feel welcome at the school	4.82	0.55
Teachers keep me informed	4.33	1.20
Teachers are interested and cooperative	4.85	0.53
I have an influence on my child’s education	4.82	0.74
The school informs me about meetings	5.00	0.00

(N = 120)

Parent Satisfaction Survey

As a means of determining parent satisfaction with parent-teacher conferences, both virtual and face-to-face, parents completed a 13-question parent satisfaction survey. The parents had the option to take the survey electronically or in paper/pencil version. Parents selected responses that most accurately described their feelings and perceptions of the virtual parent-teacher conference or the face-to-face conference. A URL was given for parents who wished to take the survey online.

The first two questions on the parent satisfaction survey inquired about demographic information for the student including the student identification number and the school of attendance for the child. Question three asked parents to choose whether they participated in the virtual or face-to-face conference. If parents participated in the face-to-face conference, they were asked to skip down to question 10 in the survey, as questions four through nine dealt specifically with online experiences. For example, questions four and five of the survey asked which conferencing system was used for the virtual conference and what device was used by the parent for this conference. Questions six and seven asked about the ease of use during the conference. Questions eight and nine used a five point Likert-type scale to measure the reaction parents had toward the online experience. The scale was coded as (1) Definitely not, (2) Probably not, (3) Maybe, (4) Probably so, and (5) Definitely. Question 10 asked parents to compare this conference to conferences they had participated in in the past. A five point Likert-type scale was used to measure this comparison. Question 11 used a five point Likert-type scale to gauge the overall satisfaction of the conference, either virtual or face-to-face. Questions 12 and 13 were open ended questions that allowed parents to respond to how many times they had

communicated with teachers this school year and to make comments about the experience if they wanted to do so. A copy of the survey can be found in Appendix C.

Ninety-four parents participated in the study. Out of the 94 participants, 54 participated in the face-to-face conferences and 40 participated in the virtual conferences. Table 11 shows the participation by school.

Table 11

Participation in Conferences

	Virtual Participation	Face-to-face Participation
School A	24 (40.7%)	35 (59.3%)
School B	16 (45.7%)	19 (54.3%)
Total	40 (42.6%)	54 (57.4%)

(N = 94)

Parents then responded to whether the virtual conference had saved them time compared to the typical face-to-face conference. Out of the 40 parents participating virtually, 11 parents responded to the question. One parent (9%) responded definitely. The parent provided the following comment: “I thought this was a great and convenient way to communicate. You still have the advantage of face-to-face communication but with no travel issues. Great for working parents!” Nine parents (82%) responded that the virtual conference may have saved time, and one parent (9%) responded that the virtual conference definitely did not save time. The parent explained with the following comment:

I spent more time trying to reschedule my missed phone call than it would have taken me to drive to the school and see him face to face. A phone call would have been sufficient for me, because I could not Skype while at work or in my car.

Next, parents were asked whether they were willing to participate in future virtual conferences. Four parents (36%) responded they were likely to participate in future virtual conferences, six parents (55%) said maybe, and one parent (9%) said probably not.

Parents in both the virtual group and face-to-face group were asked to answer question ten. Out of 94 parents, 17 responded to the question. Compared to parent-teacher conferences held in the past, parents were asked to determine to what extent they received adequate information. Fifteen parents (71%) responded that they received about the right amount of adequate information; two parents (10%) said they did not receive much information at all; and four parents (19%) did not answer the question. Of the two parents (10%) who said they did not receive much information at all, 100% were from the virtual group.

Question 11 of the survey required parents to respond about the overall satisfaction with the spring 2016 parent-teacher conferences. Only 17 parents answered this question. Of the 17 parents, 10 parents (59%) participated virtually and seven parents (41%) participated face-to-face. Table 12 displays the mean scores and standard deviation between the two groups.

Table 12

Parent Satisfaction Survey

	Mean	Standard Deviation
Virtual (<i>n</i> = 10)	4.40	1.26
Face-to-face (<i>n</i> = 7)	4.86	0.38

All 21 parents answered question 12 on the parent satisfaction survey: How many times have you contacted teachers during the current school year. Ten parents (48%)

responded they have not talked to the teacher all year, prior to this conference; nine parents (43%) responded they had spoken with a teacher one time; one parent (5%) responded he/she had spoken with a teacher two times; and one parent (5%) responded that he/she had contacted teachers five times throughout the year. This was the largest response reported for the question. The final question on the survey allowed parents to make any additional comments to help improve parent-teacher conferences. The following responses were given for face-to-face conferences:

- “Please make sure that when you schedule a conference that all teachers are available.”
- “I think Mrs. B was really helpful in the areas L needed the most help. I think the conference was very helpful.”

The following responses were given in regards to the virtual conferences:

- “Much more convenient for parents who are teachers themselves.”
- “I prefer face to face.”
- “Keep it up!”
- “It is not necessary for me to see the teacher, a phone call would have been very informative and easier to reschedule than a Skype call.”

Teacher Satisfaction Survey

In addition to parents completing a survey at the end of the conference, teachers were also asked to complete a satisfaction survey when the conference concluded. It was explained to the teachers that the survey would be used to gather feedback on their experiences with virtual and face-to-face conferences. They were asked to select the

responses that most accurately described their experiences and perceptions of the conferences. All 20 participating teachers completed the survey.

Question one, two and three asked teachers to identify the school in which they work, conferencing systems used during the conferences (virtual, face-to-face, both, or neither), and devices used for the conferences (iPad, iPhone, computer, tablet). Teachers responded that a variety of conferencing systems and devices were used throughout the conferences. Question four on the teacher satisfaction survey used a five point Likert-type scale to determine the ease of use with the two programs used throughout the study: Apple FaceTime and Microsoft Skype. If neither program was used, teachers were asked to leave the items blank. Of the twenty teachers who completed the survey, six teachers (30%) left the question blank. Three teachers (14%) responded that the setup of the device on Facetime, Skype, and/or both was extremely easy; seven teachers (36%) responded it was easy; seven teachers (36%) were neutral; and three teachers (14%) said the setup of the device on Facetime, Skype, and/or both was not easy.

Questions five and six were yes or no questions that allowed teachers to make comments below their responses. Question five asked about technical difficulties. Nineteen of the twenty teachers surveyed responded to this question. Eleven teachers (58%) responded that there were no technical difficulties and eight teachers (42%) said there were technical difficulties. The following comments were given by two out of the 11 teachers who responded that there were no technical difficulties: parents, in general wanted a face to face meeting; and although parents responded that they would participate in a conference, none actually took advantage of the opportunity.

The following comments were given by seven of the eight teachers who responded that there were technical difficulties: several dropped calls; camera wouldn't work on Skype; schools Wi-Fi blocking calls; compatibility and not wanting parents to have personal contact information; tablet would not connect and my cell phone had to be used; would not connect at school; and the entire system was out and meeting had to be rescheduled.

Question six asked whether teachers felt time was saved by using virtual conferencing. Seven teachers (35%) responded yes that time was saved and 13 teachers (65%) responded time was not saved. The following comments were given by five out of the 13 teachers who responded no: A phone call would be just as good if not better than a FaceTime meeting; the actual conference itself was fine, but I was a little apprehensive about making the call because I didn't want to interfere with their time schedule; I did better business using google voice to text and communicate with parents which is something I used on my own, not as part of this study; very few parents chose to use the virtual option; and my parents all chose to either talk face-to-face or via the telephone.

Question seven on the teacher satisfaction survey requested that teachers use a five point Likert-type scale to determine how satisfied they were with the virtual conferences. Table 13 displays the mean scores and standard deviation between the two groups.

Table 13

Teacher Satisfaction Survey

	Mean	Standard Deviation
Virtual (<i>n</i> = 20)	2.95	1.36
Face-to-face (<i>n</i> = 20)	3.60	1.14

The final question on the teacher satisfaction survey allowed teachers to make any suggestions for improving the process of virtual communication. The following comments were given by five of the 20 teachers: All of my parents opted out of virtual conferences; the virtual conference works well for parent's time if the teacher has prior information about the parent's schedule. Another idea would be to put the call in the hands of the parents; many homeroom students needed a Spanish speaking interpreter so we had to change those to face to face conferences; I put neutral on number seven because we didn't have virtual conferences as an option in 2015, officially; and many parents that take the time for a virtual conference would rather come to the school for a face to face. Some referred to it as odd like it was meant for teens and not adults.

Telephone Survey

To gauge the recall of information from parents from the conference held in the spring of 2016, school secretaries telephoned all participants in the study three weeks following the meetings. Secretaries asked parents the following three questions: (1) Can you recall one or both of the goals set forth by the teacher during the virtual or face-to-face conference, (2) To what extent have you taken action on either or both of the goals presented at the conference, (3) To what extent has the teacher taken action on either or both of the goals presented at the conference. Question one required an open ended response, whereas responses to questions two and three were measured on the five point Likert-type scale coded as: (1) No action, (2) Very little action, (3) Enough action, (4) Some action, or (5) A lot of action.

Of the 94 parents who participated in the conferences, 38 parents (40%) participated in the follow-up telephone survey. Table 14 displays the results of the follow-up telephone survey.

Table 14

Participation in Follow-up Survey

	Did not participate	Participated in Follow-up Call
Face-to-face (<i>n</i> = 54)	35 (64%)	19 (36%)
Virtual (<i>n</i> = 40)	21 (51%)	19 (49%)

Table 15 displays the percentage of parents who recalled the goals presented at the conference.

Table 15

Recall of Goals

	Recalled goals
Face-to-face	12 (63%)
Virtual	14 (74%)

(*N* = 19)

Data Analysis

Research Question 1

Research question one sought to determine if there was a statistically significant difference in the participation rate of parent-teacher conferences between being offered only face-to-face and being offered both face-to-face and virtually.

RQ1. Is there a statistically significant difference in the participation rate of parent-teacher conferences between being offered face-to-face and being offered virtually?

H1o: There are no statistically significant differences among the participation rates in parent-teacher conferences being offered virtually and face-to-face.

Table 16 displays descriptive statistics for the participation rates between the two schools.

Table 16

Participation

	Face-to-face	Virtual
School A (<i>n</i> = 54)	35 (59%)	19 (41%)
School B (<i>n</i> = 40)	24 (54%)	16 (46%)
Total (<i>N</i> = 94)	54 (57%)	40 (43%)

The participation rates from each school are listed above. Fifty-four parents (57%) participated in face-to-face conferences, and 40 parents (43%) participated in virtual conferences. Chi-Square statistics was conducted to examine if there was significant differences between the two schools for the participation format ($X^2 = .228, df = 1, p = 0.06$). The p-value is greater than 0.05, therefore, it was approaching statistically significant differences among the participation rates in parent-teacher conferences being offered virtually and face-to-face.

Research Question 2

Research question two sought to determine if there was a statistically significant difference in the satisfaction rates among teachers and parents between the face-to-face and virtual conferences.

RQ2. Is there a statistically significant difference in the parent and teacher satisfaction between the virtual parent-teacher conference and face-to-face parent-teacher conference?

H1o: There are no statistically significant differences among the teacher and parent satisfaction rates in parent-teacher conferences being offered virtually and face-to-face.

Tables 17 and 18 summarize the statistical analysis obtained from the parent and teacher satisfaction surveys. Satisfaction scores by conference type (virtual or face-to-face) were examined to verify the statistical significance. Only 17 (81%) of the 21 parents answered the satisfaction question. Of the 17 parents, 10 parents (59%) participated virtually and seven parents (41%) participated face-to-face. Thirteen parents (76%) responded they were extremely satisfied with the experience, either in the virtual or face-to-face setting. The independent sample t-test was approaching statistical significance for a one-tailed null hypothesis ($t = -0.92, df = 15, p = 0.05$). With a p-value less than 0.05, it was determined that there was a statistically significant difference between the two groups. Table 17 displays the result of the survey on parent satisfaction.

Table 17

Parent Satisfaction

	Mean	Standard Deviation
Virtual ($n = 10$)	4.40	1.26
Face-to-face ($n = 7$)	4.86	0.38

All 20 teachers (100%) answered the questions on the teacher satisfaction survey. Teachers who participated in the survey held both types of conferences, virtual and face-to-face. For the virtual conferences, three teachers (15%) were extremely satisfied, three teachers (15%) were somewhat satisfied, nine teachers (45%) were neutral, and five teachers (25%) were not at all satisfied. For the face-to-face conferences, one teacher (5%) was extremely satisfied, sixteen teachers (80%) were somewhat satisfied, and three

teachers (15%) were not at all satisfied. The descriptive statistics of the teacher satisfaction survey are displayed in Table 18.

Table 18

Teacher Satisfaction

	Mean	Standard Deviation
Virtual (<i>n</i> = 20)	2.95	1.36
Face-to-face (<i>n</i> = 20)	3.60	1.14

The independent sample t-test was approaching statistical significance for a one-tailed null hypothesis ($t = -1.64, df = 38, p = 0.46$). There were statistically significant differences among the parent and teacher satisfaction in the two types of conferences. Compared to teachers from the virtual group, teachers from the face-to-face conference showed significantly higher satisfaction toward the parent-teacher conference.

Research Question 3

Research question three sought to determine if there was a statistically significant difference in the recall of information one month after the conferences.

RQ3. Is there a statistically significant difference for parents to recall information of key teacher recommendations after one month of the conference between the parents who attended virtual parent-teacher conferences and those who attended face-to-face parent-teacher conferences?

H1o: There are no statistically significant differences in the recall of information one month after the conferences between the virtual and face-to-face groups.

Tables 19 summarizes the statistical analysis obtained from the parent survey completed by school secretaries one month after the conferences and determines the accuracy of parents' recall of the main recommendations made by the teacher.

Table 19

Parent Recall of Goal(s)

	Recalled Goal	Did Not Recall Goal
Virtual ($n = 19$)	14 (74%)	5 (26%)
Face-to-face ($n = 19$)	12 (63%)	7 (37%)

($N = 38$)

Of the 94 parents who participated in the conferences, 38 parents (40%) participated in the follow-up phone survey. Of the 38 participating parents, 19 parents (50%) participated virtually and 19 parents (50%) participated face-to-face. In the virtual setting 14 out of 19 parents (74%) recalled the goal(s) and in the face-to-face setting 12 of 19 parents (63%) recalled the goal(s). Chi-square statistics was conducted to examine whether there were significant differences in the parents ability to recall goal(s) between the virtual and face-to-face groups ($X^2 = .324$, $df = 1$, $p = 0.052$). With a p-value less than 0.05 it was concluded that there were statistically significant differences among the parents taking action on goals presented in the virtual or face-to-face conferences. Parents participating in the virtual setting had a higher percentage of recall information than parents participating in the face-to face setting.

Research Question 4

Research question four sought to determine if there was a statistically significant difference with the demographic factors of students whose parents showed satisfaction toward virtual conferences compared to the ones who did not show satisfaction toward virtual conferences.

RQ4. Is there a statistically significant difference with the demographic factors of students whose parents who participate in virtual conferences compared to the ones of students whose parents participated in face-to-face conferences?

H1o: There are no statistically significant differences in the demographic factors of students whose parents participated in virtual conferences.

Of the 94 parents who participated in the study, 54 parents (59%) participated face-to-face and 40 parents (41%) participated virtually. In the face-to-face setting 40 students (73%) were White, 14 students (25%) were Hispanic, and one student (2%) was of a race labeled as “other.” In the virtual setting 35 students (90%) were White and four students (10%) were Hispanic.

It is to be noted that the groups were evenly distributed through random selection in the beginning of the study, but parents were allowed to request a different setting. Four of the eight Hispanic parents assigned to the virtual group requested to be transitioned to the face-to-face setting. When asked about their reason for the switch, the parents responded that they had inadequate English speaking abilities and would feel more comfortable in a face-to-face setting. Table 20 summarizes the statistical analysis of the participation rates regarding demographic factors.

Table 20

Demographic Participation Rates

	Face-to-Face	Virtual
White ($n = 75$)	40 (53%)	35 (47%)
Hispanic ($n = 18$)	14 (78%)	4 (22%)
Other ($n = 1$)	1 (100%)	0 (0%)

Chi-square statistics was conducted to examine whether there were significant differences between the demographic factors of students who participated virtually as compared to those who participated in the face-to-face setting ($X^2 = 4.661$, $df = 1$, $p = .031$). With a p-value less than 0.05 it was concluded that there were statistically significant differences between the demographic factors of students participating virtually and those participating in a face-to-face setting.

Research Question 5

Research question five sought to determine if there was a statistically significant difference between the virtual and face-to-face group with parents taking action on goals presented at the conference.

RQ5. Is there a statistically significant difference between the virtual and face-to-face group with parents taking action on goals presented at the conference.

H1o: There are no statistically significant differences between the virtual and face-to-face group with parents taking action on goals presented at the conference.

Of the 38 parents who participated in the follow-up telephone survey, 26 parents (68%) responded that they have taken action on the goals presented at the conference.

Fifteen of the 26 parents (58%) who stated they had taken action on the goals were from the virtual student and 11 of the 26 parents (42%) were from the face-to-face study.

Twelve parents stated that they had not taken action on the goals presented at the conference. Of the 12 parents, five (42%) were from the virtual setting and seven (58%) were from the face-to-face setting. Table 21 summarizes the statistical analysis obtained from the results to determine whether the two groups were statically different from one another.

Table 21

Parents Taking Action / Not Taking Action on Goal(s)

	Virtual	Face-to-face
Parents took action ($n = 26$)	15 (58%)	11 (42%)
Parents did not take action ($n = 12$)	5 (42%)	7 (58%)

Chi-square statistics was conducted to examine whether there were significant differences between the virtual and face-to-face group with parents taking action on goals presented at the conference ($X^2 = 4.443$, $df = 1$, $p = 0.03$). Due to the p-value being less than 0.05, it was concluded that there were statistically significant differences among the parents taking action on goals presented in the virtual or face-to-face conferences.

Summary

This chapter described the descriptive results and statistical analysis of the study. Teacher and parent perceptions were analyzed to determine the participants for the study. The research questions and hypotheses were presented and analyzed to determine the effectiveness of virtual parent-teacher conferencing as compared to traditional face-to-face conferencing. All research questions were answered by using t-test and chi-square analysis.

Chapter V: Conclusions, Implications, and Recommendations

The purpose of this study was to determine whether there were any statically significant perceptual differences evident among conferencing as results of attending the traditional face-to-face conferences versus the virtual model. The five research questions throughout the study focused on the following: participation rates in each group, parent satisfaction between groups, teacher satisfaction between groups, parent's recall of information from the conference, demographic factors between the groups, and taking action on the goals presented at the conference.

Findings

The major findings of this study suggest that teacher perceptions play a role in academic achievement. Survey results concluded that teachers feel that less than half of their parents volunteer at school and communicate with teachers through email or phone calls. Almost all teachers agreed that parents should encourage positive attitudes toward education. These results reveal that even though teachers expected parental contribution, teachers perceived that less than half of parents were not actively involved in their child's education, and that they were not successful in communicating with parents. This is a concern because the literature review provided evidence that in order for schools to be successful with involving parents, parents and teachers must build a relationship of communication. Key to this relationship is that parents and teachers establish a partnership (Henderson et al., 2007; Lareau, 2000). According to Epstein (2001), when schools build partnerships with families they are able to build trust with families which will improve student achievement. This study suggests that schools need to find ways to

improve communication with parents to successfully deliver teachers' high level of expectations toward parental involvement.

According to Olmstead (2013), parent involvement is just as much of a responsibility to the school as it is to the parents of the students in the school. When comparing participation between the virtual and face-to-face conferences in this study, ninety-one percent of parents who participated in the virtual conference format believed that the virtual conferences saved them time as compared to typical face-to-face conferences. It is important that teachers provide parents with resources that support what goes on in the classroom (Zieger & Tan, 2012). Based on this study, when parents have access to technology it can be a beneficial tool to use in communication with teachers. Teachers and administrators need to look for ways to incorporate this use of technology to stay current with the education times because of the forty parents who participated in the virtual conferences, 36 parents stated they would likely (36%) or maybe (55%) participate in virtual conferences if offered again.

One of the key assertions in the literature is that in the educational setting today, technology allows "parents to pull information and communicate with the school when needed" (Olmstead, 2013, p. 3). Even though parents view teacher websites, emails, and online grade books as proactive ways to be involved in their child's academic progress (Olmstead), this study reveals that still more teachers do not feel comfortable using virtual tools for parent-teacher conferencing.

I speculate that another challenging factor in the virtual parent conferences is the degree to which participating teachers experience logistic difficulties, in addition to the technical difficulties. When examining the virtual conferences specifically, 58% of

teachers who participated in virtual conferencing reported that they did not experience technical difficulties while conducting the virtual conferences. However, only 35% of the teachers participating in the virtual setting responded that the virtual conferences saved them time as compared to typical face-to-face conferences.

Research question one sought to determine whether there were statistically significant differences in the participation rates of parent-teacher conferences being offered virtually and face-to-face. For the virtual setting there was a 43% participation rate and for the face-to-face setting there was a 57% participation rate. It was determined that there were no statistically significant differences in participation rates between the two formats, but there were statistically significant differences in participation rates between the two middle schools.

It is to be noted that school A had a higher participation rate in the face-to-face setting, while school B had a higher participation rate in the virtual setting. Overall participation rates of this study may support the research that career obligations are the biggest barrier for becoming involved in the education of their child (Karibayeva & Bogar, 2014). One of the primary reasons many parents do not participate in school activities like parent-teacher conferences, is that their employer does not allow them the flexibility to take time away from work to participate (Finders & Lewis, 1994).

Research question two examined the statistically significant differences in the parent and teacher satisfaction between the virtual and face-to-face parent-teacher conferences. In the virtual setting the parents' mean satisfaction was 4.40, and the teachers' mean satisfaction was 2.95. This mean satisfaction was measured on a five-point scale. In the face-to-face setting the parents' mean satisfaction was 4.86, and the

teacher's mean satisfaction was 3.60. While parent satisfaction was not significantly different in terms of the format of the conference, teachers showed significantly higher satisfaction toward the face-to-face parent-teacher conference. I suspect that teachers' low satisfaction toward the virtual conference may be related to the results that 65% of teachers did not believe the virtual conferences saved them time and that 14% of teachers experienced technical difficulties in setting up the conferencing device.

Research question three studied the statistically significant differences for parents to recall key teacher recommendations between parents who attended virtually and parents who attended face-to-face conferences. Of the 38 parents who participated in the follow-up phone call, 14 of the 19 parents (74%) who participated virtually recalled the goals and 12 of the 19 parents (63%) who participated in the face-to-face setting recalled the goals. It is interesting to note that even though parental satisfaction was not different according to the conferencing formats, more parents in the virtual format statistically significantly recalled the goals. Because a phone call, rather than a paper survey, was made more parents in the virtual group, who already felt comfortable to use technology for participating in conferences, might have felt comfortable in responding to the phone call and thus more parents recalled the goals. However, delivery methods of information did not make differences in accurately recalling the given information (DeWine, 1986), there might be other factors that contributed to the higher rate of recalling goals by parents in the virtual group.

Research question four examined the demographic factors of parents who participated in virtual conferences compared to the ones of students whose parents participated in the virtual conferences. Of the 94 parents who participated in the study, 75

were White (80%), 18 were Hispanic (19%), and one (1%) was other. It is to be noted that these percentages are representative of the school population. Students were evenly distributed between the virtual and face-to-face conferences in the beginning of the study, though two White students chose to switch from the virtual to the face-to-face group and four Hispanic students chose to switch from the virtual to the face-to-face group. The two White students were special education students whose parents felt it would be more beneficial to meet with the teacher in a face-to-face setting. The parents of the four Hispanic students explained they would be more comfortable in the face-to-face setting due to their limited English speaking abilities. After switching groups, 47% of White students participated virtually and 53% participated in the face-to-face setting. Hispanic students had a participation rate of 22% virtually and 78% in the traditional face-to-face setting. Through conducting chi-square analysis it was concluded that more parents of Hispanic students opted in for the face-to-face format. As it is indicated above and the provided qualitative data shows, this might be related to the parents who speak English as their second language may feel more comfortable in attending the face to face conferences without assistance from Spanish speaking interpreters. Once again, this study reveals that, in addition to ease the technical problems, to increase participation from minority parents, logistical arrangements need to be established before planning virtual conferences.

Research question five sought to determine whether there were statistically significant differences between the virtual and face-to-face group with parents taking action on goals presented at the conference. Of the 38 parents who participated in the follow-up call, 26 parents (36%) responded that they had taken action on the goals

presented at the conference. Of these 26 parents, 15 (58%) participated virtually and 11 (42%) participated in the face-to-face setting. More parents who participated virtually took action on the goals presented at the conference. It does make sense that, because more parents who participated in the virtual format remember the goals stated by the teachers at the conference, more parents in this group took action on the goals.

The school plays an important role in determining the levels of parental involvement in school (Henderson, Mapp, Johnson, and Davies, 2007; Swap, 1987; Reitz, 1990). Specifically, schools should outline their expectations of parents and regularly communicate with parents about what children are learning. Also, schools should provide opportunities for parents to talk with school personnel about parents' role in their children's education through well-planned parent-teacher conferences. By bringing in 21st Century tools, most parents are able to connect with teaches in a way that consumes less time and burden for the parents.

This study reveals that there are parents who are willing to participate in virtual parent-teacher conferences if opportunities for the participation could be created. When parents have opportunities to participate in virtual formats their satisfaction toward the parent-teacher conferences is high, and their recall of and taking action on goals from parent-teacher conferences are better compared to ones from the traditional face-to-face conferences. However, it should also be noted that almost the same percentage of the parents who participated in the face-to-face conference format were equally satisfied with the parent-teacher conferences as the parents who participated in the virtual format. This study suggests that school administrators need to keep the traditional face-to-face conferences and consider adding the virtual conference format as an option for parents.

Limitations of Findings

The researcher acknowledges limitations of the study. The scope of the study was limited to one school district during the course of one year. The school district was a rural county with a small amount of diversity in the student population. With 78% of the students being identified as White, 22% of the students with a Hispanic background, and 78% of the students qualifying for free and/or reduced lunch, the study presented demographic factors that may have not been applicable to other school districts.

Many students and parents in this study did not have access to the latest technology and devices, according to the responses and comments given on the parental satisfaction survey. The school district had particular fire walls set up that made the usage of FaceTime and Skype difficult while using the school internet. This made it difficult for teachers to feel confident in the conferencing system. Many teachers responded on the teacher satisfaction survey that there were too many dropped calls and technical issues.

Another limitation of the study was that the researcher was an administrator in one of the schools in the study. Personal bias may have been evident throughout the study. Though the researcher used research questions that were posed and delivered in a way that allowed respondents to reveal their true feelings without distortions, the researcher was an evaluator of teachers in one of the schools and was in the school throughout the entire study, and thus this might have had induced artificial responses from teachers in the school.

Implication from the Study

The findings from this study imply that school districts need to implement additional resources for parents and teachers that allow them the opportunity to increase

parental involvement. According to Epstein (2001), when schools engage families in ways that improve learning and support parent involvement at home and school, students make greater gains. This study revealed that parents who participated in the virtual conference agreed that the virtual conference saved them time. Parents in the virtual setting also had a higher recall of information than parents in the face-to-face setting. With this information of saved time through virtual conferences and recall of information higher in virtual conferencing, it can be concluded that that virtual conferencing might be a way to increase parental involvement for some parents.

Teachers reported technical difficulties while using the technology therefore, professional development may be needed for teachers on ways to use the virtual tools before implementing this new type of conference method in order to increase parental participation rates in virtual conferences. School internet connections would also need to be updated to allow access to the tools that are needed for virtual conferencing without being blocked from the network. Particular firewalls would need to be set up in advance.

Students with a Hispanic background reported difficulties communicating through the virtual setting due to their limited English speaking abilities. To include more minority parents who speak English as a second language in the virtual format for parent and teacher conferences, schools need to recruit more Spanish speaking interpreters and thus more Spanish speaking parents will feel comfortable in participating in this virtual format. Therefore, this study implies that the traditional face-to-face conferences should still be available for parents who prefer this method, and virtual conferences could be used to supplement when parents need more flexibility.

Recommendations for Future Research

Few studies have investigated the possible influences that virtual parent-teacher communication could have on education. Even fewer studies have been conducted on virtual parent-teacher conferences. As supported by this study, the premise of the research was that statistically significant differences exist among teachers and parents regarding their perceptions and satisfaction with virtual parent-teacher conferences.

This research revealed that there were statistically significant differences among the parent and teacher satisfaction in the face-to-face and virtual conferences. Compared to teachers from the virtual group, teachers from the face-to-face conference showed significantly higher satisfaction toward the parent-teacher conference. Even though this study speculates that teachers experienced difficulties in arranging the meeting formats, as more parents moved from the virtual format to the face-to-face format, future studies need to investigate this issue by adopting qualitative study methods to gather teacher perceptions on parental involvement. Future studies could also include implementing virtual conferences as an extra tool for parents who would like to attend conferences, though time does not permit them to meet in a face-to-face format.

The research also revealed statistically significant differences among the parents taking action on goals presented in the virtual or face-to-face conferences. Parents participating in the virtual setting had a higher percentage of recall information than parents participating in the face-to-face setting. Because this study cannot provide answers on the reasons for the higher recall and carrying out of the goals from the virtual group, even though the connection between the possibility of recalling the goals and the possibility of taking action on the goals might be feasible, this difference between the

virtual group and the face-to-face group in recalling and carrying out the goals after the conferences needs to be investigated in future studies.

Another finding from the study involved parents' request to switch from the virtual format to the face-to-face format and from the face-to-face format to the virtual format. Even though groups were evenly distributed through random selection in the beginning of the study, parents were allowed to request a different setting. As a result, four of the eight Hispanic parents assigned to the virtual group requested to be transitioned to the face-to-face setting. When asked about their reason for the switch, the parents responded that they had inadequate English speaking abilities and would feel more comfortable in a face-to-face setting. Future studies need to investigate whether the availability of Spanish speaking interpreters may result in similar differences between the demographic factors of students participating virtually and those participating in a face-to-face setting.

Many opportunities exist for further research in this area. Suggestions for future research include expanding the research to include elementary and high schools and conducting the research in a county with a higher student population and more access to the internet. A mixed methods study including survey instruments and interviews with teachers, students and parents could also be expanded to develop effective parental involvement practices.

Conclusion

The findings of this study may provide additional tools to help bridge the communication gap between parents and teachers. The findings of this study have added to the knowledge and skills for the professional development of increasing parental

involvement and allowing opportunities for parents and teachers to develop strategies that improved communication between home and school. The findings have also revealed the importance of schools providing Hispanic parents with access to interpreters, even if the school district only has a small percentage of Hispanic students.

Having an understanding of the effectiveness of the virtual parent-teacher conference is significant in both academic and practical terms. This research contributes to the literature on effective interventions to increase parent involvement. Henderson (2007) guide to parent involvement, *Beyond the Bake Sale*, provides guidelines for improving parents' roles in each child's learning. It emphasizes the importance of parent-teacher conferences in order to build stronger partnerships between school and home. But in its publication year, virtual conferencing tools were not widely available to the public. As research grows in online and hybrid education at the k-12 level, the research community needs to include parents as part of the digital shift. In practice, these conferences demonstrate the growing demand for online technologies to enhance schooling. When parents are able to connect with teachers synchronously but over distance, the experience is more convenient for both parties.

Any school's goal is to increase participation in parent-teacher conferences to 100%, but prior research reveals that traditional face-to-face conferences are often inconvenient and a burden to busy working parents. In offering a virtual option, with adequate technical support for parents and teachers, schools have a better chance of reaching most parents, of establishing important partnerships for learning, and hopefully the support that students need to be successful.

Though research has not been conducted in virtual conferencing, I have had the opportunity to work in a middle school setting for the past 15 years as an administrator and Title-I coordinator. Parental involvement has been an issue for our school. We have three parent-teacher nights each year. Out of approximately 500 students, we have an average of 40 parents (8%) who attend the parent-teacher conferences. In this study 94 (20%) parents out of 476 students participated in the parent-teacher conferences, regardless of the format. I speculated that the addition of the virtual conference format might bring more parents to the school.

The findings of this study indicate that more schools should investigate the usage of virtual conferencing as an additional tool to increase parental involvement at the middle school level. Parents and teachers are seeking for ways to save time and produce quality work. The use of virtual conferencing can provide a tool for parents and teachers in working smarter, not harder. Training is needed to better equip teachers with 21st century tools for communicating with parents.

References

- Bouffard, S. (2008). *Tapping into technology: The role of the Internet in family-school communication*. Cambridge, MA: Harvard Family Research Project.
- Butterworth, J. E. (1929). *The parent-teacher association and its work*. Macmillan: New York.
- Chen, W., & Gregory, A. (2009). Parental involvement as a protective factor during the transition to high school. *Journal of Educational Research, 103*, 53-62.
- Child Trends. (2010). Parent involvement in schools. Retrieved from www.chldtrendsdatbank.org/?q=node/186
- Coleman, B., & McNeese, M. (2009). From home to school: The relationship among Parental involvement, student motivation, and academic achievement. *International Journal of Learning, 459-470*.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage.
- Dewine, S. (1986). *Electronic and courier methods of information dissemination: A test of accuracy*. Chicago: International Communication Association. (Ed275331)
- Diamond, J. B. & Spillane, J. P. (2004). Teachers' expectations and sense of responsibility for student learning: The importance of race, class, and organizational habitus. *Anthropology and Education Quarterly, 35*, 75-989.
- Epstein, J. (1986). Parents' reactions to teacher practices of parent involvement. *The Elementary School Journal, 86*, 277-294.
- Epstein, J. (2001). *School, family and community partnerships: Your handbook for action*. Thousand Oaks, CA: Corwin Press.

- Epstein, J., & Sheldon, S. (2002). Present and accounted for: Improving student attendance through family and community involvement. *The Journal of Educational Research, 95*, 308-318.
- Finders, M., & Lewis, C. (1994). Why some parents don't come to school. *Educational Leadership, 51*(8), 50-54.
- Garcia, D. C. (2004). Exploring connections between the construct of teacher efficacy and family involvement practices: Implications for urban teacher preparation. *Urban Education, 39*, 290-315.
- Georgia Department of Education. (2015). Academic parent-teacher teams: what are academic parent-teacher teams (APTT). Retrieved from www.gadoe.org/School-Improvement/Federal-Programs/Pages/APTT.aspx
- Given, L. M. (2008). *The Sage encyclopedia of qualitative research*. Newsbury, California: Sage.
- Gomma, W. H., & Fahmy, A. A. (2013). A survey of text similarity approaches. *International Journal of Computer Applications, 68*(13), 13-18.
- Gordon, M., & Cui, M. (2012). The effect of school-specific parenting processes on academic achievement in adolescence and young adulthood. *Family Relations, 61*, 728-741.
- Gray, D. (2014). *Doing research in the real world* (3rd ed.). New York: Sage.
- Hanhan, S. (1998). Parent-teacher communication: Who's talking?. *Home-school Relations*. Boston: Allyn and Bacon.

- Henderson, A., & Berla, N. (1994). *A new generation of evidence: The family is critical to student achievement*. Washington, DC: Center for Law and Education.
ED375968.
- Henderson, A., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin, TX: Southwest Educational Development Laboratory.
- Henderson, A. T., Mapp, K. L., Johnson, V. R., & Davies, D. (2007). *Beyond the bake sale: The essential guide to family-school partnerships*. New York: News Press.
- Hill, N., & Tyson, D. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Development Psychology*, 45, 740-763.
- Holbeck, E. S. (1934). *An analysis of the activities and potentialities for achievement of the parent-teacher association with recommendations*. Teachers College, Columbia University: New York.
- Hoover-Dempsey, K. V., Bassler, O. C., & Brissie, J. S. (1987). Parent involvement: Contributions of teacher efficacy, school socioeconomic status, and other school characteristics. *American Educational Research Journal*, 24, 417-435.
- Hoover-Dempsey, K. V., Walker, J. M., Jones, K. P., & Reed, R. P. (2002). Teachers involving parents (TIP): Results of an in-service teacher education program for enhancing parental involvement. *Teaching and Teacher Education*, 18, 843-867.
- Karibayeva, A., & Bogar, Y. (2014). To what extent does parents' involvement in middle school influence children's education progress? *Procedia Social and Behavioral Sciences*, 152, 529-533.

Lam, B., & Ducreux, E. (2013). Parental influence and academic achievement among middle school students: Parent perspective. *Journal of Human Behavior in the Social Environment, 23*, 579-590.

Lareau, A. (2000). *Home advantage: Social class and parent involvement in elementary education*. New York: Rowman & Littlefield.

Loeser, J. (2015). Parent-teacher conferences. *Research Starter*. Retrieved from <http://connection.ebscohost.com/c/essays/27577780/parent-teacher-conferences>

Meyer, J. (2011, December). The middle school mess: If you love bungee jumping, you're the middle school type. *Education Next, 11*(1), 1-6.

National Center for Educational Statistics (NCES, 2007). Parent and family involvement in education, 2006-07 School year, National Household Education Surveys Program of 2007. U.S. Department of Education, Washington, D.C.

Olmstead, C. (2013). Using technology to increase parent involvement in schools. *Techtrends: Linking Research & Practice to Improve Learning, 57*(6), 28-37.

Parent Toolkit (2014). State of Parenting. Retrieved July 13, 2015 from http://www.parenttoolkit.com/index.cfm?objectid=B32DD6D0-ACA3-11E4B6B70050569A5318#Section_0.

Pew Internet & American Life Project. (2010). Social side of the Internet. Retrieved from www.pewinternet.org/Trenddata/Whos-Online.aspx

Pew Research Center. (2015). The smartphone difference. Retrieved from <http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/>.

Phillips, D. C., & Burbules, N. C. (2000). Postpositivism and educational research. NY: Rowman & Littlefield.

- Reitz, R. J. (1990). Parent involvement in the schools. Bloomington, IN: Center on Evaluation, Development, and Research.
- Robbins, C., & Searby, L. (2013). Exploring parental involvement strategies utilized by middle school interdisciplinary teams. *School Community Journal, 23*(2), 113-136.
- Sad, S. (2012). Investigation of parental involvement tasks as predictors of primary students' Turkish, math, and science & technology achievement. *Eurasian Journal of Educational Research, 49*, 173-196.
- Swap, S. M. (1987). Enhancing parent involvement in schools: A manual for parents and teachers. NY: Teachers College Press.
- United States Department of Education. (2014). An innovative model for parent-teacher partnerships. Retrieved from www.ed.gov/oese-news/innovative-model-parent-teacher-partnerships
- Warren, S. R. (2002). Stories from the classroom: How expectations and efficacy of diverse teachers affect the academic performance of children in poor urban schools. *Educational Horizons, 80*, 109-116.
- Woyshner, C. (2003). Race, gender, and the early PTA: Civic engagement and public education, 1897-1924. *Teachers College Record, 105*, 520-544.
- Zieger, L., & Tan, J. (2011). Improving parent involvement in secondary schools through communication technology. *Journal of Literacy & Technology, 12*(2), 30-54.

Appendix A

Teacher Perception of Parental Involvement in the Classroom

1. Estimate the number of students in your class whose parents participate in the following activities:

	None	Less than half	About half	More than half	All students
Volunteer at School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assist with homework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate through email or phone calls	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Answer the following questions using the rating scale below:

	Never	Hardly Never	Sometimes	Most of the time	Always
I am successful in communicating with parents for their children's academic success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My students' parents have an influence on their child's academic performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Answer the following questions using the rating scale below:

	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree
I have the ability to get students to believe they can do well in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents encourage positive attitudes toward education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix B

Parent Perception of Parental Involvement in the Classroom

1. Answer the following questions using the rating scale below:

	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree
I feel welcome at this school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The teachers at this school keep me informed about the academic performance of my child.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The teachers at this school are interested and cooperative when they discuss my child	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have an influence on my child's academic performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The school lets me know about meeting and other special events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix C

Parent-Teacher Conference Satisfaction Survey for Parents

This brief questionnaire will help our school district to improve parent-teacher conferences in a face to face or virtual setting. Please select the responses that most accurately describe your feelings and perceptions of the virtual parent-teacher conference. Want to complete this survey online? Simply go to

<https://www.surveymonkey.com/r/Murray-satisfaction>

1. Murray County Student ID Number _____
2. My child currently attends school at:
 - Bagley Middle School
 - Gladden Middle School
3. Please select the statement that applies to your spring 2016 parent-teacher conference.
 - I participated in a “virtual conference” (using FaceTime or Skype) with my child’s teacher.
 - I participated in a face-to-face conference with my child’s teacher. (**Skip to Question 10.**)
 - Neither of the above. (**Return this form to your child’s teacher.**)
4. Which conferencing system did you use with your child’s teacher?
 - Apple FaceTime
 - Microsoft Skype
 - I’m not sure
5. What type of device did you use to connect with your child’s teacher for this conference?
 - Smartphone
 - Tablet
 - Computer
6. On a scale of 1 to 5, where 1 means “not at all easy” and 5 means “extremely easy,” how easy was it to set-up your device for the conference with your teacher?
 - 1 – not at all easy

- 2
- 3 – neutral
- 4
- 5 – extremely easy

7. Did you experience any technical difficulties getting your conference started with your child’s teacher? (Dropped calls, camera/microphone not working, etc.)

- No
- Yes

○ If yes, please describe the problem(s) below:

8. Do you feel the virtual conference saved your time as compared to a typical face-to-face meeting?

- 1 – Definitely Not
- 2 – Probably Not
- 3 – Maybe
- 4 – Probably So
- 5 – Definitely

○ Please use this space for comments (optional):

9. In the future, are you willing to participate again in virtual conferences?

- 1 – Definitely Not
- 2 – Probably Not
- 3 – Maybe
- 4 – Probably So
- 5 – Definitely

10. Compared to parent-teacher conferences you have had in the past, to what extent do you feel you received adequate information from your child’s teacher in this conference?

- 1 – I did not receive much information at all
- 2
- 3 – I received just about the right amount of information
- 4
- 5 – I received too much information

11. Overall, how satisfied were you with the spring 2016 parent-teacher conference?

- 1 – not at all satisfied
- 2
- 3 – neutral
- 4
- 5 – extremely satisfied

12. How many times have you contacted teachers this school year?

13. Use this space to provide any additional comments that could help us improve parent-teacher conferences. (optional)

Appendix D

Teachers Satisfaction of the Virtual and/or Face-to-face Conferences

This brief questionnaire is your chance to provide feedback on your experiences with the virtual parent-teacher conference process piloted in the Spring of 2016. Please select the responses that most accurately describe your feelings and perceptions of virtual parent-teacher conferences.

1. In which school did you teach during the 2015-2016 school year?

- Bagley Middle
- Gladden Middle

2. Which conferencing system(s) did you use with your classroom parents? (Choose all that apply.)

- Apple FaceTime
- Microsoft Skype
- Neither

3. What type of device(s) did you use to connect with your classroom parents for conferences? (Choose all that apply.)

- Smartphone
- Tablet
- Computer

4. On a scale of 1 to 5, how easy was it to set-up your device for the conferences with your classroom parents? Please rate FaceTime and Skype separately. If you did not use one or the other of these conferencing systems, simply leave that row blank.

	1 - Not at all easy	2	3 - Neutral	4	5 - Extremely easy
Apple FaceTime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Microsoft Skype	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Did you experience any technical difficulties getting your conferences started with your classroom parents? (Dropped calls, camera/microphone not working, etc.)

- No
- Yes

If yes, please describe the problem(s) below:

6. Do you feel the virtual conferences saved you time as compared to a typical face-to-face meeting?

- No
- Yes

Please use this space for comments (optional):

7. Specifically related to virtual conferences, how satisfied were you with the Spring 2016 parent-teacher conference process?

1 - Not at all satisfied

2

3 - Neutral

4

5 - Extremely satisfied

8. To what extent do you feel you provided adequate information to your students' parents in this conference?

1 - None

2

3 - Neutral

4

5 - A Great Deal

9. Use this space to provide any additional comments that could help us improve virtual parent-teacher conferences. (optional)

4FoTYerhlapl9PS false