

Parents' and Teachers' Perceptions of Effective Communication in Two Schools in
One Division in Virginia

Kecia O. Lipscomb

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Carol S. Cash, Chair
Paula Johnson
Ted Price
Travis W. Twiford

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Abstract

Parents often perceive schools as the sole educator of their child when in actuality the school prefers parents to be involved as partners in the learning process (Comer & Haynes, 1991). Likewise, schools make the assumption that parents realize their role in the learning process, but do not effectively communicate the partnership to parents, and misconceptions about the parents' and teachers' roles and behaviors arise. Research has shown that both schools and parents have a major influence on children as they develop and that they learn best when schools and parents work together (Comer & Haynes, 1991). The purpose of this study was to examine parent and teacher perceptions of effective communication. This was a non-experimental quantitative study that compared the differences between parents' and teachers' perceptions of effective communication. The study consisted of a survey for parents and teachers on a Likert scale. The survey data were compared through the use of the *t*-test statistic and a One-Way Analysis of Variance. The information discovered in this study will allow the researcher to bridge the learning gap regarding how parents and teachers can actively participate in the effective communication process to enable both parties to send and receive messages and limit the amount of misunderstanding on educational topics relating to students. This information will be provided to principals and school leaders in order to better manage the communication process between parents and teachers to include the information, attitudes, and perspectives that exist, thus, impacting student achievement and school success.

Acknowledgement

I dedicate this work to my daughter. My goal is to leave her a legacy of accomplishments in which she can strive for. Special thanks to the V. Tech crew which has provided me with support. Thank you to my family and close friends for their continued love and belief in me. Thanks be to God that this journey has been such a blessing.

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Chapter One: Introduction

“Federal policies require every school, district, and state department of education to communicate effectively with all parents and the public about students' achievement test scores and the quality of teachers and schools” (Epstein & Sanders, 2006, p. 82; No Child Left Behind Act, 2002). The same legislation directs schools to prepare and implement programs and practices to involve families in their children's education to help students make adequate yearly academic progress. As a result of parental involvement practices, it is becoming evident that educators need to know more about how to communicate effectively, discuss ideas, resolve problems, and collaborate with other educators, parents, and community members (Achinstein, 2002; Bryk & Schneider, 2002; Jones, 2003; Lawson, 2003; Murphy, 2002; Pounder, Reitzug, & Young, 2002; Sanders, Jones, & Abel, 2002).

Parental involvement is defined across studies as representing many different behaviors and practices at home or at school, including parental aspirations, expectations, attitudes, and beliefs regarding their child's education (Henderson & Mapp, 2002). Educators have agreed that there is an intense need for the improvement in family and community involvement with schools (Epstein, 2010). Educators have also agreed to evaluate the role of parental involvement on all levels of education to determine its effectiveness and additional ways to incorporate parental involvement activities within the school culture (Epstein, 2010). Joyce Epstein, a pioneer in the study of parental involvement developed the framework of six types of involvement. Epstein (2001) explains the roles in her partnership model, which describes parents in need of help, while the teacher is supposed to help. The framework contains three main ideas: partnership of school, family, and community that are meant to provide for students' success (Epstein et al., 2002).

Parental involvement in children's learning makes a difference in education and remains one of the most powerful school improvement tools available (Epstein, 2010). Effective parental involvement will not occur without dedicated commitment from both parents and schools. Effective parental involvement will also not happen unless parents realize the difference they make, and unless schools actively reinforce that all parents matter (Harris & Goodall, 2008). Researchers Harris and Goodall (2008) explored qualitatively the views of parents, students, and teachers as well as the barriers to parental involvement and its impact on learning. Harris and Goodall collected case study data from 20 schools and 314 participants. Their findings determined a number of barriers to parental involvement: social and economic factors that schools rather than parents are often hard to reach, differing views on the purpose of parental involvement and between involving parents in schooling and engaging parents in learning. "While involving parents in school activities has an important social and community function, it is only the engagement of parents in learning in the home that is most likely to result in a positive difference to learning outcomes" (Harris & Goodall, 2008, p. 277).

Crozier and Davies (2007) found that not many parents from ethnic groups know enough about the education system. These parents are often classified as indifferent or difficult and are considered by schools to be hard to reach. Crozier and Davies (2007) suggest that many parental involvement policies and practices are impaired because they fail to recognize the ethnic diversity among parents. Thus, these policies may eventually contribute to widening the gap between the involved and the uninvolved parents, as well as the achievers and the underachievers among their children.

Parental involvement within schools has become a national priority. "Urban school reform efforts coupled with major federal legislation such as the Goals 2000: Educate America

Act (1994) and the Elementary and Secondary Education Act (2001) have elevated parental involvement in schools to a national priority” (Abdul-Adil & Farmer, 2006, p. 2). Surveys of inner city African American parents led researchers to believe that these were disinterested parents who had an adverse belief regarding their child’s educational success. Consequently, the origin of the urban legend of apathy, that inner city African American parental involvement is an extremely difficult or even impossible task is difficult to dispel (Abdul-Adil & Farmer, 2006).

Researchers Lee and Bowen (2006) reviewed urban school data in which African American and other minority students dominated the student population, and their research indicated that low student achievement in many cases was associated with varying levels of parental involvement. While educators seek to resolve the achievement gap issue, a review of Bourdieu’s cultural capital theory provides insight on why such a difference exists between parents of different social backgrounds (Lee & Bowen, 2006). Lareau and Horvat (1999) recognize that cultural and social factors contribute to educational inequality, but no advancement has occurred for a process that allows for social and cultural resources to be transformed into educational advantages. Therefore, communicative measures between parents and teachers of various backgrounds continue to be a challenge (Lareau & Horvat, 1999).

Parents and teachers must collaborate to build common expectations and to promote student achievement; teachers must also establish good relationships as well as maintain open communication with parents (Bronfenbrenner, 1979; Epstein, 2001; Henderson & Berla, 1994). Structuring firm, honest, and mutually respectful partnerships between parents and teachers who share common cultural backgrounds is challenging in and of themselves. However, accomplishing this partnership between parents and teachers who come from dissimilar backgrounds is even more challenging (Joshi, Eberly, & Konzal, 2005). Tejera (1986) echoed

Habermas' (1972) belief that language "is the ground of intersubjectivity" (p. 157). Mainstream language is not common among the societies of individuals that come together for the partnership between parents and teachers. Parents' and teachers' views are based on the cultures, traditions, and practices that make up their individual worlds; therefore, parents and teachers must work to find similarities in their values and views in order to communicate (Tejera, 1986). "Differences in expectations and misunderstandings about each other's goals can lead to uncertain and tenuous, even contentious, relationships" (Risko & Walker-Dalhouse, 2009, p. 442).

Statement of the Problem

Fishel and Ramirez (2005) asserted, "Parental involvement can be defined as 'parents' participation in their children's education with the purpose of promoting their academic and social success" (p. 375). These researchers also indicated that there are several challenges within an elementary school regarding parental involvement, which include family make-up, socioeconomic status, family rules, how to effectively engage parents, communicating with parents on how to get involved, educational levels of parents, behaviors of parents, retention of those involved, and parental involvement activities (Fishel & Ramirez, 2005). Controlling for the confounding variables that impact parental involvement is difficult for schools. "The promotion of parental involvement is however imperative as it remains a valuable resource to student achievement according to research" (Fan & Williams, 2009, p. 63).

For many schools, parental involvement seems to be the worst problem and the best solution. "It is the worst problem because it can be difficult to secure and it is the best solution in terms of raising student performance" (Harris & Goodall, 2008, p. 286). Researchers believe it is evident that parents play a key role in producing positive student outcomes, but some parents

remain reluctant or unable to work with schools (Harris & Goodall, 2008; Epstein, 2001; Jeynes, 2005). Harris and Goodall (2008) reported that the objective of raising achievement can only be accomplished if parents are involved in learning and if differential strategies are in place to secure the involvement of a diverse range of parents.

Parents provide the resources from which their children develop and set expectations. Middle-class families tend to provide a strong foundation for children because they have culturally supportive social networks, knowledge of relative course content language, and access to adequate childcare; all of these facilitate parental involvement in school (Harris & Goodall, 2008). This social capital motivates them to build their relationships with the school with comfort and trust (Bourdieu, 1987). Research shows that educational odds are higher for children and parents from low-income families and those from certain ethnic groups because some parents and students perceive schools as closed system and many parents reported that they felt a sense of powerlessness in their interactions with the school; thus, impairing communication (Harris & Goodall, 2008).

Wang and Fahey (2011) stated, “Since 2001, when President George W. Bush signed the No Child Left Behind (NCLB) legislation, educators have endeavored to expand parental involvement in their children’s education” (p. 1122). Wang and Fahey (2011) noted in a quantitative study examining parent volunteerism that since the implementation of the No Child Left Behind Act the rate of parent volunteering has actually decreased since 2002. Volunteerism in educational organizations decreased to 12.8% in 2008, down from 14% in 2002. This research indicated that if parents reside in a metropolitan area, are minority, and live in the Northeast or South region, then they are highly unlikely to volunteer at the school (Wang & Fahey, 2011).

However, in contrast, it was also discovered that “educational attainment, family income, being married and mothers in metropolitan areas positively influence parent volunteering” (Wang & Fahey, 2011, p. 1124). The research did not determine why parents have volunteered less since the No Child Left Behind Act when this mandate has created more opportunities for volunteerism (Wang & Fahey, 2011). NCLB requires schools to involve parents in decision making and volunteer opportunities as it relates to student success. Professionals in the educational field and the government recognize that parental involvement is important; therefore, policies have been created to have schools implement procedures that actively involve parents in the educational process (Fan & Williams, 2009).

In a comparison of schools that perform well and those schools that do not, the quantity and quality of parental involvement programs of schools working to improve school success of children, particularly of low income and more diverse ethnicities, are slightly lower than in schools who have already attained a desired level of academic success (Henderson & Mapp, 2002). Research over the past decades has increased on parental involvement; however, the challenge with much of the research is that it has varied in its definition of parental involvement and how that involvement is measured on academic outcomes (Reynolds, 1992). Schaps (2003) noted that an extensive body of research confirmed the positive impact of parental involvement in schools, but a limited number of studies examined the parental perceptions about the teachers. A study conducted by Williams and Chavkin (1989) revealed that improved parent and teacher communication would result in parents having positive attitudes toward school. Results from the study led them to believe that willing and positive attitudes from parents would also lead to the same attitudes in their children. Research has supported the idea that positive attitudes lead to high results in student achievement (Epstein, 2001).

Research Questions

This study identified the perceptions of effective communication between parents and teachers and ways to support that communication. Accordingly, the research questions to be studied are below.

- R1. What are the teachers' perceptions of effective communication?
- R2. What are the parents' perceptions of effective communication?
- R3. What are the differences between parents' and teachers' perceptions of effective communication in School A?
- R4. What are the differences between parents' and teachers' perceptions of effective communication in School B?
- R5. What is the difference between teacher perceptions of communication in School A and School B?
- R6. What is the difference between parent perceptions of communication in School A and School B?

Hypotheses

Following the research question, a null and alternative hypothesis will be presented in order to assess the objective of this study using a quantitative approach. The hypotheses for this study are as follows:

H₀: There is no difference between parents' and teachers' perceptions of effective communication.

H₁: There is a difference between parents' and teachers' perception of effective communication.

Significance

Research has indicated that parental involvement is important because parental involvement activities lessen behavioral problems, motivate students, build strong cultures, and promote high levels of academic achievement (Fan & Williams, 2009). Parental involvement appears to be a key motivator on student academic outcomes. The idea that parental involvement has a positive influence on students' academic achievement is so intuitively interesting that stakeholders, particularly educators, have considered parental involvement an important ingredient for the remedy to many problems in education (Fan & Chen, 2001).

Many attempts have been made to understand the phenomenon of parent involvement, and more specifically, the lack of parent involvement in elementary schools. Concerns from parents and teachers arise where there are gaps in parent input and relationships at school. The purpose of this study was to identify the perceptions of elementary teachers and parents regarding effective communication with each other, including issues that impede communication.

The findings from this study may provide school administrators with data that could help them develop strategies to enhance effective communication between parents and teachers. Studying the impact of the communication is considered important because it employs a social ecological approach, which allows researchers and practitioners to think about parent involvement in a more holistic manner, including consideration of external factors that impact communication. This study will add to the research on parent involvement as a means to improve schools.

Purpose

The purpose of this study was to identify parents' and teachers' perceptions of effective communication in two schools with different levels of communication based on a previous survey. The previous district level survey provided background information in which 26% of parents reported receiving information from teachers for School A and 31% of parents reported receiving information from teachers at School B. Eighty-four percent of the teachers at School A report frequent communication with most parents of their students in comparison to 91% of the teachers at School B.

Conceptual Framework

The NCLB (2004) definition of parent involvement puts a major emphasis on communication: "The participation of parents in regular, two-way, meaningful communication involving students' academic learning and other school activities". . .(Part A, Section 9101[32]). When parents come from a different socioeconomic stratum or ethnic background than their child's teacher, these dissimilarities may lead to misunderstanding, stereotypes, and varied expectations, which in turn may affect the trust-relationship negatively or amplify distrust (Sheldon, 2002).

This quantitative study is based on the theory that parent communication aids student achievement (Barge & Loges, 2003; Freytag, 2001; Longfellow 2004; Strom & Strom, 2002). Ninety-eight percent of educators say effective communication is necessary to work well with parents (Sheldon, 2002). Improving communication between parents and teachers and fostering a relationship in which they work together will decrease the blame from one another for lack of student motivation, poor performance, or misconduct. Improved communication will allow

teachers to establish partnerships with parents and keep them informed of their child’s progress or lack of progress (Sheldon, 2002).

Strom and Strom (2002) argue that goals are more likely to be attained if methods of school communication are modernized and collaborative efforts become more common. In many instances, involvement with parents is initiated by the individual teacher rather than by the whole school. “Research connecting school leadership to family and community involvement is important because more schools are seeking to strengthen these connections as a means to improve student outcomes” (Sheldon & Van Voorhis, 2004, p. 56). An effective communication pathway for teachers and parents in schools is displayed in Figure 1.

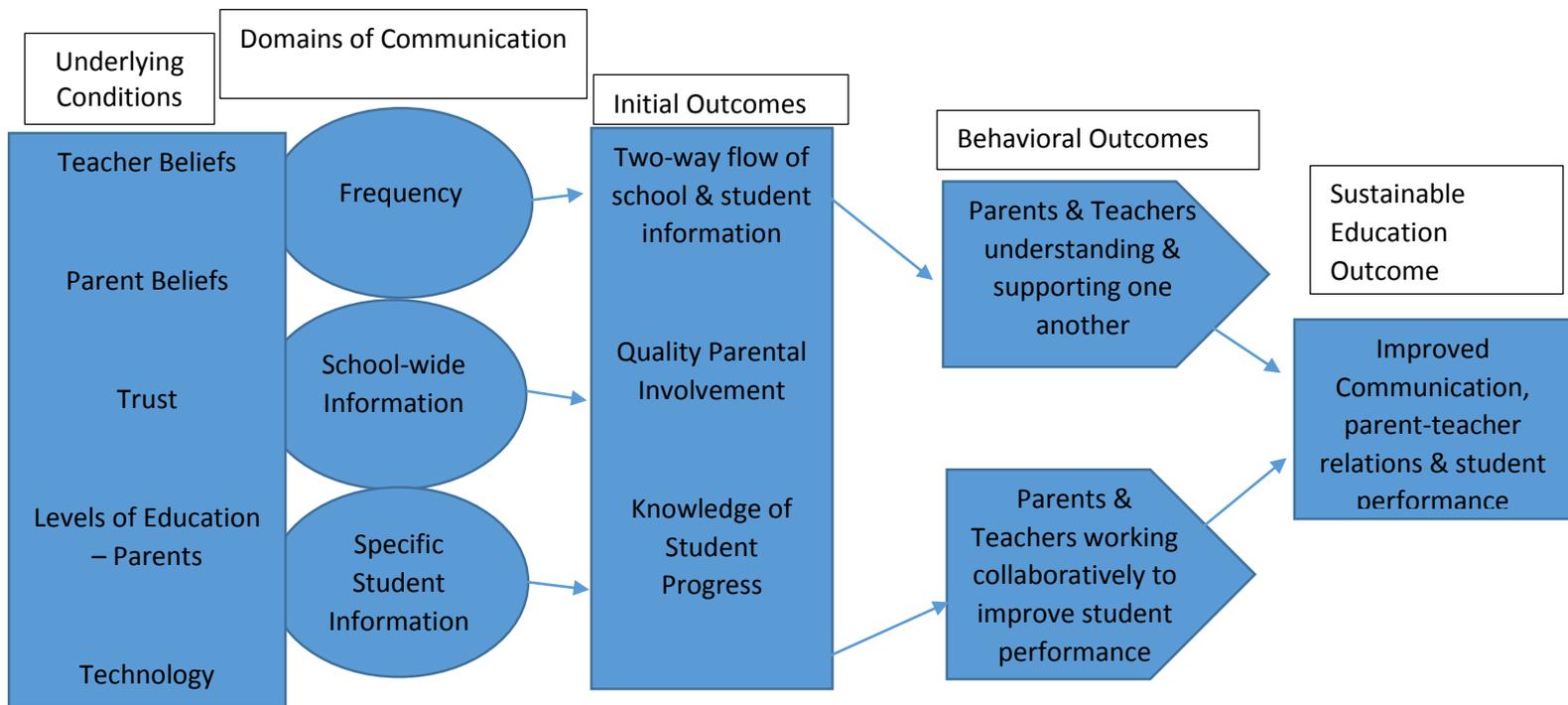


Figure 1. Effective communication pathway for teachers and parents in schools.

Definitions of Key Terms

Effective communication. Two-way, meaningful, clear, and ongoing communication between school (teachers, administrators, counselors, district personnel) and home (parents/guardians) including verbal and written communication (Epstein, 1995).

Parent. In addition to the natural parent, a legal guardian or other person (such as a grandparent or step-parent with whom a child lives) or a person who is legally responsible for a child's welfare (No Child Left Behind Act, 2004).

Teacher. A person, classroom manager and organizer, organizing for instruction implementing instruction, and monitoring student progress and potential (Stronge & Hindman 2003).

Trust. "Trust is an individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest and open" (Tschannen-Moran & Hoy 2000).

Limitations and Delimitations

The following are limitations of this study.

1. The study sample was limited by the willingness of the respondents to complete the surveys; hence, a low response rate.
2. There was a chance that responses may not be honest.

The following are delimitations of this study.

3. The sample was taken from only two elementary schools and therefore may not represent all elementary schools.
4. Data were collected in the form of survey responses from teachers and parents, but not from administrators and students.

5. Teachers and parents may have been challenged by the online format.

Summary

A number of studies have shown that parental involvement predicts children's school performance in different domains (Epstein & Dauber 1991; Grolnick & Slowiaczek 1994; Henderson & Mapp 2002; Zellman & Waterman 1998). Researchers have long believed that children from lower socioeconomic status groups and children from ethnic minority backgrounds have a much harder time successfully participating in mainstream education (Janssen, Bakker, Bosman, Rosenberg, & Leseman, 2012).

Clark (2002) claimed that when teachers take actions to cultivate instructional partnerships with parents, those parents are more likely to support their children's learning at home. Also, the students of these parents are more likely to be perceived by the teachers as positively involved in classroom learning activities. When home, school, and community accomplish a strong relationship and cooperate with one another, that relationship will foster parental involvement, irrespective of social economic class or ethnic background, and as a consequence may improve children's development (Clark, 2002). Parents and teachers must be willing to trust each other, because "partnership is based on mutual trust" (Deslandes, 2001, p. 2), allowing for effective communication.

Organization of Study

The study is presented in five chapters. Chapter 1 contains an introduction, the problem, research questions and hypotheses, purpose, significance of the study, conceptual framework, research definitions, and research limitations, and a summary. Chapter 2 presents a review of the related literature, the definition of effective communication, the modes of communication, impact of communication, the background of parental involvement, teacher and parent

perception. Chapter 3 presents the research design and methodology, research questions and hypotheses, population, sample size, instrument design, site selection, data collection and design, data analysis, validity, reliability and summary. Chapter 4 presents the results of the study. Chapter 5 presents the summary, findings, implications for practice, recommendation for future studies and reflections.

Chapter Two: Literature Review

Introduction

The purpose of this review of relevant literature is to investigate the parents' and teachers' perceptions of effective communication. This collection of literature is designed to provide historical background on parental involvement, define communication, parent and teacher perceptions of effective communication, and the impact of communication on parent and teacher relationships. The ultimate goal is to identify perceptions of effective communication and effective forms of communication to improve the relationships between teachers and parents as well as improve parental involvement.

Search Process

The search process for scholarly material as it pertains to parental involvement and parent and teacher perceptions of effective communication was conducted through the online database of Virginia Polytechnic Institute and State University Library. The library summons search engine yielded 445,492 journal articles and books as well as other related sources when using the terms parental involvement. A refined search with terms, such as parental involvement in elementary with parameters of English and sources published on or after the year 2009, yielded 176,843 results. The term communication was added to the above phrase during the search for peer-reviewed articles from scholarly publications, which produced approximately 5,386 results to identify specific strategies that can be applied to a minority group. In addition, works cited by other researchers were carefully examined for inclusion in this literature review. This search process began with a review of a number of dissertations and other scholarly research pertaining to parental involvement. Specifically 127 articles and two books were reviewed because they contained a comprehensive amount of information related to parental involvement and

communication over a span of time that provided the researcher with historical information as well as research-based knowledge to support the impact of perceptions of effective communication on parental involvement.

Parental Involvement Background

Research indicates that parental involvement has proven to impact student achievement (Bartel, 2010; Haung & Mason, 2008; Lee & Bowen, 2006). The empirical research-based model of Joyce Epstein has a positive influence on schools as it encourages the relationship between the home and school environments and improves the perception of parental involvement in schools. Epstein (1992, 1994) suggested that schools can work to increase support of parental involvement through the use of the Epstein model. This model describes six types of family involvement behaviors:

- positive home conditions,
- communications,
- involvement at school,
- home learning activities,
- shared decision making within the school,
- community partnerships (Epstein, 2001, p. 43-44).

Even though use of the Epstein model has reportedly increased student achievement, it does have some limitations. While the model provides parents with a voice within the school structure it still expects the school to

inform parents of effective strategies within the home, role of the parent in the decision-making process is defined by and created within the existing framework of the school,

and ensuring that parental involvement is defined and evaluated in the school's terms rather than the families' terms. (Bower & Griffin, 2011, p. 80)

This model is also limited because it does not address the types of support needed within minority communities. The model also does not address differences in race, ethnicity and socio-cultural factors. There are many ethnic cultures for schools to consider, as well as how those cultures impact the school's culture when defining a parent involvement model to implement (Bower & Griffin, 2011).

Bower and Griffin (2011) conducted a case study observing the impact of the Epstein model as a strategy to improve achievement among a high poverty population that consisted of African American and Latino families with low performing students of a small elementary school in a large urban district in the southeastern United States. The purpose of the study was to understand why parent involvement continues to be a challenge even when employing an evidenced-based model such as the Epstein model. The researcher in this study defined parental involvement in both traditional (parent-teacher conferences) and nontraditional (home learning participation) strategies (Bower & Griffin, 2011).

A micro-ethnography structure was used for the Bower and Griffin (2011) case study to examine parental involvement at the elementary school. The core of this study took place in one semester; extended work continued over 3 years allowing the researchers to work with the school and deeply understand the participants. The researchers conducted observations, interviews, and document analysis for triangulation of data as well as keeping field notes and reflexive notes. The researchers gained reciprocity from the participants by working at the school on special projects to provide assistance and build relationships. Informal discussions with participants helped the researchers understand the school culture. Two members of the administrative team

and five teachers participated in the study; they were chosen because they worked directly with standardized testing that drives many of the school's instructional decisions. As a result of the interviews of the participants, observations, and data analysis, it was discovered that the practices being employed by the elementary school were traditional strategies, and there was a lack of impact of strategies and levels of engagement for minority parents and families of low socioeconomic status (Bower & Griffin, 2011).

Hoover-Dempsey and Sandler (1997) also developed a comprehensive theoretical framework for parental involvement, which focused on three main issues: (a) why parents become involved, (b) how parents choose their type of involvement, and (c) why parental involvement has a positive impact on students. Bloom (1980) defined the meaning of parental involvement in practice, as various parental behaviors and parenting practices. Examples of parental involvement include:

parental aspirations for their children's academic achievement and their conveyance of such aspirations to their children, parents' communication with children about school, parents' participation in school activities, parents' communication with teachers about their children, and parental rules imposed at home that are considered to be education-related. (Fan & Chen, 2001, p. 3)

The meta-analysis conducted by Fan and Chen (2001) informed educators that parental involvement is important and has a positive impact on students. The meta-analysis also observed a strong relationship between parental involvement and student achievement as represented by school grade point average; the parental home supervision has a low relationship with student's achievement while parental aspirations has the strongest relationship with student achievement (Fan & Chen, 2001).

In urban settings, the population includes a high percentage of minority parents. A review of literature related to parental involvement among minority families is essential. “However, 50 years after the Brown v. Board of Education Supreme Court decision, the discourse on parental involvement tends to favor the perspectives of White, middle-class families, whereas views regarding African American parental involvement tend to be negative” (Fields-Smith, 2005, p. 129). Historically, African American parents engaged in their children’s education during the era of segregated schooling. African American parents intensely believed in the pursuit of education. The belief that was instilled within the heritage stemmed from the events during slavery when slaves risked severe punishment and even their lives to learn to read because they equated freedom with literacy. After Emancipation, African American parents continued to pursue education, often during turbulent climates in which White leaders did not value educational equality for African Americans (Fields-Smith, 2005).

James Comer described his parents’ involvement in the 1940s as indirect but meaningful and consistent as they visited the school when requested as well as on special occasions. Comer also described the deep sense of community, which included the school within the Black community. Parents trusted Black principals and teachers to educate their children (Comer, 1986). During segregation and within the Black community, an environment of “trust and mutual respect between home and school actually existed” (Comer, 1986, p.443). It seems that African American parents were once motivated to do what was necessary to help their children advance in school. African Americans at that time had a strong sense of community and believed deeply in the West African proverb “It takes a village to raise a child” (Fields-Smith, 2005, p. 132).

While segregation no longer exists, it is imperative that schools uncover ways to support successful parental involvement. Schools must develop systems that allow parents to acquire the knowledge of the types of participation in school affairs, and these systems must have a sophisticated network within and outside of the school (Fields-Smith, 2005). These factors may not be available to many low-income or single parents because they face barriers that often limit their access to building working relationships with the school. Fields-Smith (2005) believes that educators should consider the cultural perspective from which they define parental involvement, as well as the systems to support the program. Educators must also remain attentive to alternative, less visible ways by which parents are able to become involved in their child's schooling (Fields-Smith, 2005).

Communication

Current literature indicates parent involvement is linked to parent-teacher relationships and communication. These relationships and communication vary across cultures (Christianakis, 2011). Ramirez (2001) noted in his research that working class Latino parents believe it is the teachers' responsibility to initiate communication, whereas many teachers believe that parents should initiate communication. Also, teachers often unintentionally construct barriers that deter minority parents' participation by not communicating regularly with parents, not explaining homework policies, as well as not valuing the home languages and cultures of the children (Quiocho & Daoud; 2006; Valdés, 1996).

In order to increase active parental participation, teachers should maintain an open mind to the availability of minority parents and also actively solicit their involvement. When teachers actively recruit inner-city parental involvement at home, minority parents become more informed about and involved in the instructional programs for their children and have a more positive

review about the schools (Epstein & Dauber, 1991). When parents perceive that they are receiving more communication and invitations from teachers, they become more involved in helping their children not only at home (Reed, Jones, Walker, Hoover-Dempsey, 2000) but also in school (Deslandes & Bertrand, 2005; Kerbow & Bernhardt, 1993).

Communicating is establishing effective two-way communication about school programs and children's progress. Parent-teacher conferences, clear information on school policies and programs, and phone calls are some practices of this kind of communication. Many benefits for children stem from awareness of individual progress, understanding school policies, and improving communication skills (Epstein et al., 2002). It is important that a communication process that reaches out to family and community through various means be established and implemented both informally and formally (Young, Austin, & Growe, 2013).

Communication is a human phenomenon that improves general relationship between people. In schools, communication is the main source to foster a good relationship and the effectiveness of the school. Parents are a main factor for school effectiveness; therefore, the school leader must be a positive communicator and innovative person to inspire parents to communicate with school staff regarding school issues (Barnyak & McNelly, 2009; Reppa, Botsari, Kounenou, & Psycharis, 2010).

Teachers and parents are able to recognize and realize that principals who are experts in collaborating, as well as communicating sincerely and with clear messages to resolve common problems, are able to successfully build relationships and trust among all stakeholders (Reppa et al., 2010). These methods personally encourage parents and the teachers in the highest levels of significances of motivators of Maslow's hierarchy of needs and facilitate the growth of strong relations between the school and parents. This level of communication contains a high degree of

emotional intelligence because of two basic factors: (a) promotion of effective collaboration from the school side, and (b) from the side of parent (Reppa et al., 2010).

What is communication. Communication includes verbal and nonverbal messages. Communication is conscious but also unconscious. Ninety percent of interpersonal communication is carried out nonverbally (Verderber & Verderber 1998). Communication is a continuous and inevitable process as it circulates emotions and meanings. When an individual is in a communication transaction, and through interaction with another, an individual conceives the other by way of senses and realizes that the mental situation for both parties is influenced. The individuals communicate from each other, responding nonverbally, because the individuals use background knowledge to make decisions without speaking based on prior experiences (Verderber & Verderber 1998). Individuals use verbal communication to exchange information and nonverbal communication to express emotions and feelings.

The interpretation of Papadki-Michailidi's 1998 conceptual framework on relationships by Reppa et al. (2010) led them to believe that nonverbal messages can be either (a) completely unconscious, (b) partially conscious, (c) partially unconscious, and (d) completely checked. Pathways of nonverbal communication are: (a) the appearance, (b) the clothing, (c) the expressions of person, (d) the look, the movements, (e) the attitude of body, (f) the smell, (g) the vital space, (h) the degree of bodily, (i) the "scenic thing" (setting) in which the individual is activated, and (j) the communication is developed (Reppa et al. 2010, p. 2208).

School communication often has its own codes, which at many times deter parents from communicating openly (Carlisle, Stanley, & Kemple, 2005). As a result of this, school leaders, innovatively use a combination of forms of communication (e.g., informal, interpersonal, nonverbal and verbal) in order to improve the communication between parents and the school.

Effective communication is based on how much of the encoding-decoding aspect is clear between both parties and they use signals accurately in order to encode their ideas in words or non-words signals, and listeners decode these signals in order to uncover the messages (Reppa et al., 2010).

Research from Joshi et al. (2005) showed that the use of innovative methods of communication and high degrees of emotional intelligence used by school leaders encourage parents to collaborate and become involved in school activities. School leaders, therefore, need a range of communicational and innovative skills to manage the engagement of different viewpoints of parents in groups, different attitudes, different personal agendas, different levels of knowledge, different expectations, and different approaches to life (Joshi et al., 2005).

Conceivably, it is important that the school leader empowers parents to create and participate in a communication process as well as ensuring that all parents feel welcome to school and that they will be willing to collaborate in school activities (Carlisle et al., 2005; Graham-Clay, 2005). In a study conducted by Wiseman (2010), observations and conversations identified that families need to feel support and encouragement in order for relationships to develop. Culture and power relationships also have a profound influence on the relationships between families and school and many minority families feel alienated from schools as a result of their own negative experiences while they were students (Wiseman, 2010).

Misztal (2001) found that trusting relationships, which are secured through communication and dialogue, were conducive to cooperative and productive behavior in groups. Parent relationships such as these are valuable as they improve communication and foster improvement in students' academic achievement through a willingness to act together (Carbonaro, 1998; Hoover Dempsey & Sandler, 1997; Ring & Van de Ven, 1992). Developing

these relationships with a focus on sharing school knowledge among parents also fosters mutual support, which Lareau and Weininger (2003) found lacking in low-income parents.

According to parents across focus groups from the Bolivar and Chrispeel (2011) study, the foundation for their participation as a collective group was built by understanding the power that a committed group of people has within the school system. Parents in the focus group frequently stated that communication had improved thanks to increased respect for each other's opinions and learning, "how to interact together, knowing how to listen, and also how to present problems to other people" (Bolivar & Chrispeels, 2011, p. 19). Parents also stated that they now understood how to address issues affecting the school community (e.g., security, the quality of food in the cafeteria) and the need to solve these problems collectively. As one mother commented, "We need to work together because together we are strong" (Bolivar & Chrispeels, 2011, p. 19).

Modes of communication. The study by Whitaker and Hoover-Dempsey (2013) demonstrated that general communications from schools to families integrated with the concept of school climate for parent and family involvement, defined school expectations of involvement as including varied school-wide efforts to communicate with parents through such modes as automated phone calls, school marquees, school newsletters and mailings or e-mails; that is, broad, informative involvement initiatives that are often separate from the personal and social interactions most often reflective of school climate. School expectations also included explicit invitations to involvement, which stem from requests for parents' support and participation in school-wide activities and community service projects (Whitaker & Hoover-Dempsey, 2013). Theoretical work by Vygotsky (1978) and Rogoff, Paradise, Aruaz, Correa-Chávez, and Angelillo (2003) illustrates the significance of social environment in the creation and

preservation of individuals' ideas and beliefs about their roles in varied contexts. Critical in this social process are interpersonal communications and collaborations, explicit expectations and goals for the new role for parents (Whitaker & Hoover Dempsey, 2013). "Thus, parents' interactions with students, teachers, and other school members combine to create a social context in which parental roles are constructed" (Whitaker & Hoover Dempsey, 2013, p. 90).

Strong communication between parents and school personnel is fundamental to a partnership with parents and in building a sense of community between home and school; therefore, school personnel must continue to be innovative and improve their skills to maximize effective communication with parents (Williams & Sanchez, 2011). Kosaretsk and Chernyshova (2013) believe that a major condition needed to involve parents in the education of their children is communication between the school and families, and with parents taking part in the school life of the children a favorable environment for teaching and learning is created. Schools can involve parents via official and nonofficial practices of communication. Official practices stem from issues of importance to most parents such as their children's academic progress and school-wide programs while nonofficial practices individualized. Advances in technology have provided websites that give a more formal and general form of communication to deliver various kinds of information, whereas e-mail sends more private communication (Kosaretsk & Chernyshova 2013). "The frequency of communication has a tangible influence on parents' involvement" (Kosaretsk & Chernyshova, 2013, p. 84). Thus, communication should be sufficiently frequent in order to make parents feel informed as partners with the school.

When parents and teachers have rich and frequent communication, they can build partnerships that are beneficial for children (Merkley, Schmidt, Dirksen, & Fulher, 2006). Furthermore, as conversations between homes and schools increases understanding improves,

suggestions are shared, and positive attitudes are more easily maintained (Ames, Khoju, & Watkins, 1993). The Epstein model shifts some of the responsibility from parents to the school by acknowledging communication as a two-way process and encouraging schools to develop pathways for parent ownership and collaboration with teachers to increase student achievement (Barnard, 2004; Ingram, Wolfe, & Lieberman, 2007; Lopez & Donovan, 2009).

Teacher Perceptions

Effective communication has benefits for teachers and parents (Hoover-Dempsey & Sandler, 1997; & Hoover-Dempsey et al., 2001), there is also evidence that greater parental involvement increases teacher efficacy (Garcia, 2004). Parent involvement has also been credited in empowering minority parents (Abdul-Adil & Farmer, 2006; Carreón, Drake, & Barton, 2005) by encouraging them to collaborate and express collective opinions. Benefits of parent involvement, however, rely on the relationships and shared understandings of what parent involvement means in the local context of the school and for the parties involved (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey et al., 2005).

Christianakis (2011) conducted a qualitative study that examined teachers' perceptions of parent involvement. Interviews were conducted with 15 racially and linguistically diverse teachers from an inner-city school in Northern Carolina, which was composed mostly of African American, Latino, and Asian students. The teachers in the study stated that on-site availability and proactive communication helped prevent student failure and that proactive parents took the initiative to ask about school tests and prepare their children at home (Christianakis, 2011). From the teachers' perspective, in this study it was the parents' responsibility to ensure that the child was performing well, assist with instructional preparation and academic success (Christianakis, 2011).

Communication between home and school is a key component of parental involvement. In Epstein's model of parental involvement there are six main categories, of which Type 2 is communicating (Epstein, 1995). Epstein advocates that schools should design effective forms of school-to-home and home-to-school communications about school programs and children's progress (Epstein, 1995). Despite the focus on two-way communication in schools, in practice most communication between home and school is one-way (Jeynes, 2012). While it is relatively routine for schools to provide parents with information about school activities and events, it is not customary for schools to seek out parents' perspectives or knowledge (Jeynes, 2012). As delineated by the United States Code of Law (USCS 7801 (32)), parental involvement is defined as "the participation of parents in regular, two-way, and meaningful communication, involving student learning and other school activities." Generally, parental involvement initiatives are school-sponsored programs that are created to encourage parental participation in their children's education (Jeynes, 2012). Eccles and Harold (1993) determined that informing parents of their children's education and of school programs was a strategy for improved parental involvement. These findings lead to speculation that increased communication between the school and parents and increased empowerment of parents should lead to increased parent participation or involvement in school activities and satisfaction with schools (Barnard, 2004).

Bartel's (2010) study revealed that teachers appeared to have gained an increased understanding of some factors that affect parents' involvement. The teachers in the study had an opportunity for structured parental involvement with the home-based instructional activities. The survey results identified increased teacher behaviors, according to self-reports (Bartel, 2010). The behaviors helped to establish home environments to be more supportive of children, more regular communication with parents, increased involvement of parents in decision making,

and more involvement in the community (Bartel, 2010). Behavioral improvements also noted were the increase in those who provided information to parents on child development; training volunteers; maintaining regular communication, such as a newsletter; and involving parents regularly in decision making (Bartel, 2010).

In order to improve parental involvement, teachers may need to have an open mind to the availability of minority parents and actively recruit their involvement (Epstein, 2001; Joshi et al., 2005). When teachers actively seek inner-city parental involvement at home, urban minority parents become knowledgeable about and involved in the instructional programs for their children and develop a positive attitude toward schools (Epstein, 2001). Likewise, when teachers offer suggestions to parents about helping their children with particular subjects, the parents come to understand that their involvement in these areas is needed (Daniel-White, 2002; Drummond & Stipek, 2004). When parents believe they are receiving more communication and invitations from teachers, they respond by getting involved in helping their children not only at home but also school (Reed et al., 2000).

In a quantitative study by Radzi, Razak, and Sukor (2010), a survey methodology was used to gather data and information on parental involvement in primary schools. The samples consist of 60 participants from a high achieving school in Malaysia. The school was selected for its productive effort in encouraging parents to participate in school activities. A nonrandom convenient sampling was used in selecting the participants. The instrument used in this study was created on the premise of Epstein's parental involvement model (1992, 1995). The independent variables used were the six parental involvements listed by Epstein (1992, 1995) in the parental involvement model.

The findings in the study by Radzi et al. (2010) indicated that teachers agree that communication goals are one of the elements emphasized by parents. The results show that communication occurs between teachers and school administrators. It also suggests that parents want frequent feedback from teachers about their children's performance while teachers have realized the importance of developing a positive relationship with the school. The lowest perception on parental involvement that parents would prefer, according to teachers, is school governance. This perception occurs because teachers believe that having parents to share in the decision making could be more problematic than beneficial (Radzi et al., 2010).

Thompson's (2009) qualitative findings reported that parents and teachers tend to prefer face-to-face communication for more negative messages; whereas, they are able to utilize body language, verbal and nonverbal cues to better assess the receiver's response to the messages. Parents reported that using a combination of ways to communicate with teachers such as e-mail or face-to-face prove to be beneficial. The qualitative findings also determined that parents believed that teachers who are proactive in communicating about potential issues and readily available to communicate via alternative methods are embracing important supportive behaviors that assist students during their elementary through secondary education (Thompson & Mazer, 2012).

Research on parent involvement and teacher communication in middle school is limited but generally suggests that both activities decline significantly from elementary school, creating greater social distance between families and schools (Patel & Stevens, 2010). There is a greater likelihood for elementary school teachers to have strong communication practices in place and to demonstrate more effective collaboration with parents at school and at home with homework (Dauber & Epstein, 1993). In comparison, middle school teachers use limited communication

practices and communicate less often and with fewer families (Epstein & Dauber, 1991, Vaden-Kiernan, McManus, & Chapman, 2005). Middle school teachers also provide limited information regarding student expectations and how parents can help with homework (Van Voorhis, 2003), leading to a lack of parent involvement (Epstein, 2001). Because of the infrequency of teacher communication with parents on the middle school level, the parents' perceptions of the lack of communication adversely affects their decisions to become involved (Hoover-Dempsey, Bassler, Burrow, 1995; Hoover-Dempsey, Sandler, 1997). Invitations for participation received by the parent directly from the teacher or student encouraged families to engage in homework activities more than families who did not receive invitations (Patel & Stevens, 2010). Van Voorhis (2003) similarly reported significantly increased parent involvement from parents who received invitations to interact with their children on their homework.

Parent Perceptions

Numerous parental involvement interventions have provided support for when teachers reach out to parents and improve communication with them, parents become more involved in school in a variety of ways (Comer, 1986; Epstein, 1991). Conversely, the parent's level of involvement may influence the teacher's perception of the parent and, consequently, influence the quality of the parent-teacher relationship. Parents' perception of the school, as measured by their endorsement of it, may influence their willingness to be involved (Kohl, Lengua, & McMahon, 2000).

Examining the combined effect of classroom emotional support and parent involvement on students' behaviors may be particularly significant in low-income urban communities where parents generally experience less than ideal collaboration with schools (McCormick, O'Connor,

Cappella, & McClowry, 2013). In an interview study of urban parents and teachers, McDermott and Rothenberg (2000) noted that teachers reported frustration with a lack of parental involvement in literacy and math activities. In turn, parents expressed distrust toward schools because of perceived teacher bias against Black and Hispanic families. Given these findings, it may be particularly important to examine teacher emotional support when considering the role of parent involvement on children's behaviors in urban schools (McCormick et al., 2013).

Schools have the ability to impact parent-involvement levels. Evidence shows that many parents desire to become involved but do not feel encouraged nor do they have the open communication or support from the school to do so (DePlanty, Coulter-Kern, & Duchane, 2007). A study by DePlanty et al. (2007) consisted of 22 teachers and staff (counselor, librarian, paraprofessionals; 15 women and 7 men) from a junior high school in a rural county of a Midwestern state. The qualitative study consisted of focus group meetings, in which they completed a survey. This study also had 234 junior high students (130 girls, 104 boys) who completed a survey, and 301 parents (165 women and 136 men) from a predominantly Caucasian community. The results of this study reveal that parents, teachers, and students believe in the importance of parent involvement in education. Researchers of this study found that communication between the two groups was not as open as we expected; thus, if mutual communication between school and home had occurred, then the results from the teachers, parents, and students on the second portion of the survey would have been the same (DePlanty et al., 2007). Epstein (1986) and Sheldon and Epstein (2002) agree that open communication between parents and teachers can benefit the academic success of school students.

Anderson and Minke (2007) investigated the relationship between parents' role construction and sense of efficacy and their involvement behaviors that would be influenced by

their perceptions of time and energy demands and specific teacher invitations. Parents of students attending three elementary schools in a large, urban school district in the Southwest participated in the study. The schools in the district each reported similar parent-involvement practices caused in part by district mandates. Parent-involvement practices in the district included communication through the use of newsletters, agenda books, and other written correspondence. This quantitative study represents one of a few studies in which researchers explore a high percentage of an unrepresented population of minority parents' decision making as it relates to parent involvement. This quantitative study represents one of a few studies in which researchers explore a high percentage of an unrepresented population of minority parents' decision making as it relates to parent involvement. Anderson and Minke (2007), Fan and Chen (2001), and Jeynes (2005) report that limited participation of minority parents in school decision making can be managed by utilizing alternative measures such as school-specific invitations to parents to get them involved. The researchers, however, focused this study on understanding parents' decisions to become involved, but the emergence of specific invitations from teachers as the primary most influential item on parents' involvement choices is meaningful because schools have new knowledge to affect teacher practices and improve parent involvement (Anderson & Minke, 2007).

Impact of Communication

“Although trust and empowerment in the partnership require two-way communication across time, invitations offer an effective starting point for the creation of a partnership” (Hoover-Dempsey, et al., 2005, p. 110). Teacher invitations to involvement are effective in supporting parental involvement across all levels of schooling and with varied school populations (Hoover-Dempsey, et al., 2005). Parents' trust in teachers impacts their responses to

invitations and perceptions that schools are safe, supportive, and trustworthy have been consistently associated with improved parental involvement (Adams & Christenson, 2000; Lareau & Horvat, 1993).

Wanat (2010) believes that schools must be proactive in establishing regular communication with parents whose children struggle academically. Opening lines of communication would result in new, creative ways to make parents feel more welcome and to provide them an opportunity to contribute to their children's school experience (Wanat, 2010). Additionally, students' academic progress and achievement may bring about increased parental involvement in academic monitoring and parent-teacher communications (Pomerantz, Grolnick, & Price, 2005). Teacher invitations emerge from teachers' recognition and valuing of parents' contributions to student learning (Adams & Christenson, 2000) and from teachers' responsiveness to parents' requests on how to help their children learn (Hoover-Dempsey, et al., 1995).

Hoover-Dempsey and Sandler (1997) and Epstein and Dauber (1991) had similar findings that parent involvement is significantly impacted by teachers' efforts to create inviting climates. Epstein has found that parents were most involved when teachers actively encouraged involvement, which is positively related to higher reading achievement among children, and that parents who reported stronger beliefs in the school's efforts to involve them also believed strongly in supporting the school (Dauber & Epstein, 1993). Eccles and Harold (1993) reported in a related study that parents who had positive views of the school's concern, accountability, and desire for parents' involvement were more motivated to be involved in the school. Significant to note in the findings of these researchers is that the sample contained input from parents that had

children in grades ranging from elementary through middle school and represented varied socioeconomic populations (Hoover-Dempsey & Sandler, 1997).

Parent and teacher perceptions. Parents and teachers often report feeling unprepared for and uncomfortable with their interactions with one another. This discomfort often leads to miscommunication and increased difficulties in the relationship (Anderson & Minke, 2007). However, when these relationships are positive and pleasant, they seemingly provide a positive effect on students' academic success (Fan & Chen, 2001). Communication between parents and teachers about child progress occur through notes, phone calls, or meetings. "Thus, it appears that communication is an important element in the development of positive, congruent relationships" (Minke, Sheridan, Kim, Ryoo, & Koziol, 2014, p. 541). NCLB describes at least six ways in which parents can collaborate with schools on behalf of their children (Henderson & Mapp, 2002). The six ways typically provide parents with opportunities to make individual choices, such as transferring their children to different schools, requesting supplemental services, accessing school records, and increasing opportunities for direct communication with schools (Bolivar & Chrispeels, 2011).

The gap between the stated practices and the acted upon practices of parental involvement can be deemed as barriers to parental involvement (Hornby & Lafaele, 2011). The barriers to parental involvement can be identified by adapting Epstein's (2001) framework of overlapping spheres of influence which focused on three areas: family, school and community. Researchers uncovered other barriers that lead to miscommunication between parents and teachers.

- Parents' and teachers' beliefs, the way they view their roles as well as one another's roles in the child's education are often incongruent and act as barriers (Hoover-Dempsey & Sandler, 1997)
- Parents' perceptions of the level of explicit and implicit invitations for involvement (Eccles & Harold 1993; Epstein, 2001).
- Parent-teacher meetings where often the goals and agendas of parents and teachers are different (Hornby & Lafaele, 2011).

Many teachers make assumptions that some parents are not interested or do not really care about their children's education (Hornby 2000). Actually parents often feel incompetent on the topics of the curriculum as well as processes within the schools. Parents may also believe that teachers are not genuine in the relationship and are only concerned with resolving immediate problems rather than working toward long-term solutions. Because of this belief, it is not surprising that there is a lack of mutual understanding between parents and teachers that results in mistrust and an additional barrier to communication (Hornby & Lafaele, 2011).

Synthesis and Conclusion

Increasing parental involvement is a key priority in schools. In order to increase parental involvement, relationships must be cultivated between schools and families. Information must be communicated from schools to parents that are useful in ensuring the success of students. Parents must feel a part of the educational process in order to become more involved in schools. Researchers have identified many perceptions of parents and teachers regarding parental involvement and more specifically how they communicate with one another. It is evident that parental involvement impacts student achievement; however, it is imperative that schools and families work together to provide for and support the learning of all students. Research indicates

that effective communication builds relationships between parents and teachers; therefore, practices must be instituted to foster the communication process.

Research data presented in this literature review describes the perceptions of teachers and parents and reveal some similarities and some differences. In order to close the gap of the perceptions more work must be done to create pathways of collaboration, foster communication, and access to the school in order to cultivate a climate in which parents and teachers share in the decision-making process and communicate effective messages to one another to enable all students to succeed.

The review of literature presented above related to parent involvement and communication provides a basis and theoretical grounding for future research. The review identifies aspects of communication from the perspective of teachers and parents and specifically addresses the issue of invitations that encourage open communication. A synthesis and critical review of previous research methodologies and findings reveal the need for further research.

Chapter Three: Methodology

Research Design and Methodology

The purpose of this study was to identify parent and teacher perceptions of effective communication in two schools with different levels of communication based on a previous survey. This study identified where, when, and how communication occurs between parents and teachers as well as related plausible solutions to improve communication. This study sought to determine whether or not the key elements identified in the literature review were prevalent in effective communication channels in elementary schools. A quantitative research design was used to compare the differences between the parents' and teachers' perceptions of effective communication. For the purposes of this study, the independent variable was the school or the role of the participant and the dependent variable was their communication rating, as determined by their survey scores.

In order to identify if there was a difference between the parents' and teachers' perceptions two statistical test were run. A One-Way Analysis of Variance (ANOVA) was conducted to determine if significance existed within the domains of communication between the groups. An independent samples *t*-test was also used to determine the perceptions of communication between the groups on the dependent variable, perceptions of effective communication. This chapter presents a description of the design, site selection procedures, instrumentation, rationale for the study, research context, study participant selection, data collection procedures, and data analysis procedures used in the study. The study determined whether the key characteristics identified in the literature review—trust, cooperation, effective communication, interpersonal relationships, parental involvement, parent empowerment, social

and intellectual capital, student achievement, positive school climate, and policy—existed in the same degree in communication for parents and teachers.

Research detailed that parent involvement positively impacts student achievement but also displays inconsistencies between parents' and teachers' "expectations and misunderstandings about each other's goals which can lead to uncertain and tenuous, even contentious, relationships" (Risko & Walker-Dalhouse, 2009, p. 442). The literature review provided details regarding the deficiencies in communication among parents and teachers. While researchers provide information regarding many issues on parental involvement and program suggestions for schools to employ to combat the challenges and enhance student achievement, limited ideas exist that get to the core of the communication barrier that exists between parents and teachers. This study analyzed the issues surrounding effective communication.

Research Questions

This study evaluated the perceptions of parents, and teachers regarding effective communication. Accordingly, the research questions were the following.

R1: What are the teachers' perceptions of effective communication?

R2: What are the parents' perceptions of effective communication?

R3: What are the differences between parents' and teachers' perceptions of effective communication in School A?

R4: What are the differences between parents' and teachers' perceptions of effective communication in School B?

R5: What is the difference between teacher perceptions of communication in School A and School B?

R6: What is the difference between parent perceptions of communication in School A and School B?

Hypotheses

The null and alternative hypotheses presented below were to assess the objective of the study using a quantitative approach.

H₀: There is no difference between parents' and teachers' perception of effective communication.

H₁: There is a difference between parents' and teachers' perception of effective communication.

Population

The population included primary and upper elementary parents and teachers at School A and School B in a school division in Virginia. School A has approximately 368 students and School B has approximately 494 students. These schools were chosen to compare the differences that exists in what parents and teachers report regarding effective communication at the schools. When posed questions regarding communicating with their child's school, parents typically respond favorably whereas teachers do not regarding school to home communication. The advantage to using random sampling within the grade level populations of both schools was to obtain a reasonable number of respondents in a short period of time. All surveys completed and obtained were considered. School A and School B both have a high percentage of low socioeconomic and a majority minority student population.

Sample Size

In order to calculate the sample size required for this study, several factors were taken into consideration. These factors included the effect size, the power of the study and the level of

significance. The effect size of the study measured the relationship and how strong that relationship was between the independent and dependent variables (Howell, 2011). The power of the test evaluated the model's ability to reject a false null hypothesis (Keuhl, 2000). The level of significance was the critical value that allowed the researcher to evaluate the null hypothesis (.05). A minimum sample size for the study of a determined amount was used for the analysis of variance and the *t*-test that was conducted.

Participants

In order for the participants to be eligible for the study, they had to meet the following criteria: (a) be a current teacher at the school, or (b) be a parent of a student that is zoned for and enrolled in the identified school.

Instrument Design

The instrument used in this study to survey parents and teachers on communication was adapted from the Parent Communication Survey (PCS) and the Teacher Communication Survey (TCS) that was developed by Murphy (2009) to explore the relationships between parent and teacher communication, as well as trust. This current study used the survey to not only determine trust, but plausible solutions to improved communication. The surveys for parents and teachers consisted of 21 questions.

The PCS contained a quantitative section, which measured the level of trust between parents and teachers. The PCS also sought perceptions of teacher-provided communication, specifically, the rate of which teachers respond to parents and the level of satisfaction parents have with that teacher communication. The quantitative portion of the PCS measured six methods of communication: (a) planned/formal meetings, (b) written communication, (c) phone calls from the teacher, (d) phone calls to the teacher, (e) informal interactions, (f) technology,

and (g) overall rating. The criterion was rated on a 4-point Likert scale. Pilot studies were conducted to determine the validity of each section. Validation included an expert content validation pilot, a parent content validation pilot, and a school pilot (Murphy, 2009). Revisions to the survey were made for clarification purposes and included: (a) the addition of definitions for the 4-point Likert scale to the degrees of measure, and (b) descriptive words to eliminate assumptions and avoid misleading the participant.

In Murphy's study (2009) parents were provided with a letter that included the survey web link. The letter informed parents that the survey should only take about 10-15 minutes to complete online. Parents were sent three reminders to complete the survey. Parents could choose a score ranging from 0 to 3 for each item, with a higher rating indicating higher levels of use or effectiveness. The second portion of the PCS included four demographic variables. The variables are: (a) gender, (b) grade level of child(ren), (c) parents' relationship to the child, and (d) parents' ethnicity. These survey items were used for reporting purposes and were not analyzed.

The TCS also included a quantitative section that measured the level of trust between teachers and parents, and also perceptions of teacher-provided communication, specifically, the rate at which they communicate to parents. This survey was taken from the PCS as an analogous measure with identical items. However, modifications were made to the PCS to alter the perspective of the original survey document to match the teacher's perspective (Murphy, 2009). The statements on the TCS were rated on a 4-point Likert scale, with higher scores indicating higher levels of perceived use and effectiveness. The quantitative portion of the TCS measured six methods of communication: (a) planned meetings/formal, (b) written communication, (c) phone calls to parent, (d) phone calls from parent, (e) informal interactions, (f) technology, and

(g) overall rating. The criterion was rated on a 4-point Likert scale with descriptions varying depending on the part of the survey. Pilot studies were conducted to determine the validity of each section. Validation included an expert content validation pilot, a parent content validation pilot, and a school pilot (Murphy, 2009). Revisions to the survey were made for clarification purposes and included: (a) the addition of definitions for the 4-point Likert scale to the degrees of measure, and (b) descriptive words to eliminate assumptions and to avoid misleading the participant.

Teachers were provided the survey with an e-mail link to access and informed that the survey should only take about 10-15 minutes to complete. Teachers were provided with three e-mail reminders to complete the survey. Teachers could choose a score ranging from 0 to 3 for each item, with a higher rating indicating higher levels of use or effectiveness. Demographic variables were not allowable by the school division on the teacher survey for reporting purposes.

Site Selection

In order to maintain privacy, pseudonyms were used for the names of the state and schools. This researcher chose two elementary schools from the central Virginia. The school division's website revealed that the school division serves over 49,000 students in 72 schools and facilities. There are over 6,000 employees, which include over 3,000 teachers. The ethnic breakdown of students' division-wide is as follows: 43.3% White, 36.1% Black, 8.9% Asian, 7.6% Hispanic, and 4.2% other. Approximately 40.39% of the students are economically disadvantaged. The researcher chose this school division based on its location, the diversity of students serviced and the division administration of a recent communication survey.

The researcher was allowed to conduct research at two different elementary schools assigned by the division. School A and School B both had a student population of

predominantly low SES families, the difference is that one school had been identified as communicating more successfully with parents than the other, according to the baseline data provided by the school division from parent engagement climate surveys. Both schools were Title I schools with a high minority population.

Data Collection and Design

Approval for this research project was requested and obtained, as required, through the Virginia Polytechnic Institutes' Institutional Review Board. See Appendix A and B for the researcher's IRB Certificate and the IRB Approval. Prior to initiating the survey, approval and selection was obtained from the school division's central administration (Appendix C). The parent questionnaire and demographic survey were taken from a previous study and the teacher survey was modified from the parent survey to match the teacher's perspective. Approval for use of the survey is found in Appendix D.

Two measures were used for this study. One was used to assess parents' perceptions of effective communication and parent demographics (Appendix E). The other was used to assess teachers' perceptions of effective communication (Appendix F). The parent communication and demographics survey were used in a previous study and was modified for format and clarity purposes. The teacher survey was created from the same parent survey and modified to match the teacher's perspective. Parents and teachers both received informational letters about the study. They were asked to read the letters prior to completing the survey along with the informed consent (Appendix G). The survey was conducted during the first semester of the school year, allowing for parents and teachers to be engaged early, reflect on what type of communication is effective and could potentially impact their practices for the current school year. The informational letters for parents and teachers were modified from Murphy's 2008

study. Participants were assured that there were no additional risks associated with their participation and that there was no compensation for their participation. Participants were notified that the data they provided were strictly confidential because the results are reported as aggregate summary data only and no individually identifiable information would be presented. All raw data are stored in a locked file cabinet in the researcher's home. Once the information was completely analyzed and after successful defense of the dissertation, all printed files would be shredded.

Validity

The validity of both the PCS and TCS was shown by two content validation processes. These included an expert panel content analysis and a pilot study content analysis (Stuck, 2004; Murphy, 2009). The initial PCS was first assessed by a panel of experts such as school administrators, parents, and teachers of the students. This panel reviewed the original PCS and provided feedback, which led to improvement of the instrument as well as clarification to specified questions on the survey (Murphy, 2009). The panel also reviewed the design and scaling of the instrument to ensure that the readability of the survey was suitable for the parents (Stuck, 2004). Upon all modifications, a pilot study was conducted in order to evaluate the instrument's ability to measure the components of the survey (Murphy, 2009).

A cognitive interview was originally conducted with two parents in order to refine the survey questions. The feedback from the interview was incorporated into the final version of the PCS that was used in the pilot study. The updated survey was given to a sample of 23 parents of students who attended a school that was demographically similar to that of the school used in the actual study (Stuck, 2004). The parents in the pilot study completed the survey in the same fashion as planned for the participants in the actual study. The pilot required the parents to

respond to the questions by circling the response that best represented their perceptions and how the question related to them (Murphy, 2009). This procedure was completed for each one of the sections on the PCS including the qualitative portion of the survey. After the parents finished the survey, the surveys were analyzed to determine the internal consistency for each one of the components on the survey (Murphy, 2009).

Reliability

The reliability of the PCS was determined by calculating internal consistency using Cronbach alpha scores. This calculation was completed for each component in the first section of the PCS survey. The first component, a measure of the frequency of communication, had an observed alpha score of .87 (Murphy, 2009). Based on the critical cut-off for the reliability statistic, which was .80, it was determined that this component was a reliable measure (Stuck, 2004). The second component of the first section, the parent's satisfaction with school-wide communication, was determined to have an internal consistency measure of .82, which demonstrates a reliable measure. The remaining two components of the study, parent satisfaction with child-specific information and parent satisfaction overall, had internal consistency measures of .89 and .93, respectively. Hence, the four combined components of the first section of the survey had an overall internal consistency of .93 (Stuck, 2004).

Data Analysis Plan

Parent and teacher perceptions were assessed by a survey. The statistical test that was used is the *t*-statistic for independent samples and the analysis of variance for significance. The analysis of variance was used to measure and compare the significance of the communication between the groups. In order to review the analysis of variance the sum of squares was calculated and evaluated within the groups as well as between the groups. All the groups were

then combined to comprise a sample to compute the total sum of squares, whereas Total Sum of Squares = Sum of Squares Between Groups + Sum of Squares Within Groups. The F calculation, degrees of freedom = all groups – 1, was calculated with Statistical Package for the Social Sciences (SPSS)® to observe if the score was in the rejection region. To find the final calculation the total Sum of Squares Between Groups was divided by the degrees of freedom. To determine the F ratio the number recorded from the final calculation is divided into what is being compared. In order to review the significance for the hypothesis, this ANOVA has one factor with three levels: $H_0: \mu_{A1} = \mu_{A2} = \mu_{A3}$; and H_1 ; not all means are equal. A post hoc analysis was conducted to identify where the differences existed.

The rationale for using the t -statistic was that the relationship of the study was to be used to make a comparison between independent groups. Since the population variation was unknown and four distinguishable samples existed, the t -test was appropriate. The independent samples t -test allowed the researcher to compare the mean scores from each population in order to establish if there were differences between the scores obtained. For the purposes of this study, the dependent variables, the scores that were compared between the teachers and parents were operationalized as continuous variables based on the scores that were received from the Likert-type scaled questions on the survey instruments. In order to operationalize the dependent variables as continuous, the scores from each item that made up the constructs were averaged, and resulted in a continuous variable that ranged between 0 and 3. The results allowed the researcher to assess whether a statistically significant difference in the scores for the teachers and parents in the study.

The test statistic that was used was the t -test statistic. The mean scores were received for the teachers and parents and placed in the numerator, while the denominator consisted of the

standard error of the difference between mean scores from both populations (Howell, 2011). The test statistic that was obtained from this calculation will follow a *t*-distribution. In order to determine if there was a difference between the two samples, the test statistic was compared to the critical value that came from the *t*-distribution. The critical value was based on the number of degrees of freedom and the level of significance (Howell, 2011). The level of significance for this study was set at .05 and the degrees of freedom for the study is equal to $n_1 + n_2 - 2$ where n_1 and n_2 is the number of observations in each population, meaning that the critical value for this study was based on a *t*-value with $n_1 + n_2 - 2$ degrees of freedom and a level of significance of .05.

In order to solve the hypotheses of this study, the computation that was included was the mean scores for the teachers and the parents. If the result of the test statistic was greater than .05 it was deemed nonsignificant and therefore not a difference between parents' and teachers' perceptions of effective communication. Contrarily, if the test statistic was less than .05 it was deemed significant and indicated that there is a difference between parents' and teachers' perceptions of effective communication. The differences between parents' and teachers' perceptions between both schools indicated effective communication measures that should be employed in order to provide information for future research. If there was no significant result, then it would be concluded that there is no difference in the perception of effective communication between teachers and parents.

Summary

This chapter presented the methodology that was implemented in this study in order to determine whether there was a significant difference between parents' and teachers' perceptions of effective communication. Also included was the research design and approach, the population

and sampling plan that was implemented, the instruments that were used to collect the data, the data collection procedures, and the statistical analysis used to address the objectives of this study. The following Chapter 4 presents the reported data of this research. The final Chapter 5 provides findings, implications, and recommendations for further research.

Chapter Four: Results

Introduction

The purpose of this chapter is to present detailed analysis and results of the data gathered from the data collection process of this study. The data collection process consisted of a Likert survey that centered around three domains of effective communication: frequency, school-wide, and specific communication. The survey was provided to parents and teachers of two elementary schools in online form. Both Title I schools have a predominantly low socioeconomic and high minority population. The independent *t*-test was conducted to compare the results between the groups within each domain and between the different scores of the survey questions for the parents and teachers for the three domains of effective communication for the purposes of this research: frequency, school-wide, and specific communication.

Purpose of the Study

The purpose of this study was to identify parents' and teachers' perceptions of effective communication in two schools with different levels of communication based on a previous survey. The previous district level survey provided insight into the schools. A review of two questions from the previous district survey led the researcher to explore further data at the schools to investigate perceptions. Parents from both schools were asked in the district survey, where do you get most of your information about your student's school; the parents reported receiving an average of 26% of information from teachers for School A and 31% from teachers at School B. Teachers from both schools were asked in the district survey, are parents at my school very engaged in the learning of their child, 46% of the teachers at school responded favorably in comparison to 15% of the teachers at School B.

This study identified how, when, and what types of communication occur between parents and teachers as well as related plausible solutions to improve communication. The following research questions guided this research.

Perceptions of communication:

1. What are the teachers' perceptions of effective communication?
2. What are the parents' perceptions of effective communication?

Differences by role:

3. What are the differences between parents' and teachers' perceptions of effective communication in School A?
4. What are the differences between parents' and teachers' perceptions of effective communication in School B?

Differences by school:

5. What are the difference between teacher perceptions of communication in School A and School B?
6. What are the difference between parent perceptions of communication in School A and School B?

Presentation of the Data

The analysis of the data was completed using the Statistical Package for the Social Sciences (SPSS)®. Descriptive statistics were calculated, independent samples *t*-tests and an Analysis of Variance along with post hoc tests were conducted.

Sample Population and Study Participants

All of the teachers and parents at both schools received three invitations to participate in the study. A total of 72 pre-Kindergarten through fifth grade teachers received invitation by

e-mail from the district's central office and a total of 862 parents received invitation by letter, which included a web link at survey.vt.edu to complete online. Both schools disseminated the information in the same manner to pre-Kindergarten through fifth grade parents and the district office provided reminder e-mails teachers at both schools. A total of 98 surveys were completed online.

Descriptive Data

The teacher sample (44) came from a random population of (72); 61% of teachers participated in the survey. The parent sample (54) came from a random population of (862); 6% of parents participated in the survey. Table 1 displays the number of responses received from each group.

Table 1

Survey Responses From School A and School B

Participants	School A	School B	Total
Teacher	18	36	54
Parent	23	21	44
Total	41	57	98

The independent *t*-test was used to further compare the results from the 21-question survey from the teachers and parents. Teachers and parents responded to survey questions based on their experiences at their respective school. The Likert scale questions (1-7) in the domain of frequency of communication allowed responses between 0-3 with the lowest response being never and the highest being frequently; questions (8-14) in the domain of providing school-wide information allowed responses between 0-3 with the lowest response being poor and the highest being very well; and questions (15-21) in the domain of providing specific student information also allowed responses between 0-3 with the lowest response being poor and the highest being

very well. The Independent *t*-test was used to determine whether the differences were significant. *P* values reported at a confidence level of 95% ($p < .05$) were used to determine significance.

Reliability Analysis

Because the delivery format was changed to an online method, the Cronbach's Alpha test was performed using SPSS®, to ensure that survey questions asked of the parents and teachers were a reliable measure. The internal reliability of the communication domains within the survey were assessed and the reliability coefficients had a minimum value of $\alpha = .883$ or 88% on all three domain items, which is above the 80% that is considered reliable (Howell, 2011). The reliability for each domain is presented in Table 2. Based on this analysis, there was sufficient information that the items included in the survey provided a reasonable measure for the communication perceptions of teachers and parents in this study. For the purposes of this study the item scores for each question were averaged within the domains of frequency, school-wide communication, and specific communication.

Table 2

Reliability Coefficients By Domain

Domain	Related survey questions	α
Frequency	1-7	.925 or 93%
School-wide	8-14	.744 or 74%
Specific	15-21	.776 or 78%

Table 3 explains the variables in this study. The independent variable was the school or the role of the participant and the dependent variable was their communication rating, as determined by their survey scores.

Table 3

Variables

Independent variables	IV groups	Dependent variables	Analyses
Role of participant at School A	Teacher Parent	Perception of effective communication in three domains	Independent <i>t</i> -test Analysis of variance
Role of participant at School B	Teacher Parent		
School location of teacher	School A School B		
School location of parent	School A School B		

Research Data Presented by Question

What are the teachers' perceptions of effective communication? Overall mean scores are presented in Table 4. Table 4 also includes the low and high mean scores of teachers from the survey as reported by domain.

Table 4

Descriptive Statistics of Mean Scores of All Teachers

Domain	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>
Frequency (1-7)	54	.50	2.38	1.49	.41
School-wide (8-14)	54	1.00	3.00	1.83	.49
Specific (15-21)	54	.71	3.00	2.00	.53

In the frequency communication domain, a rating of 0 for teacher responses equated to a rating of never; a rating of 1 indicated a rating of occasionally; a rating of 2 indicated a rating of regularly, and a rating of 3 corresponded to a rating of frequently. In the school-wide and specific communication domain a rating of 0 for both teacher and parent responses equated to a

poor rating; a rating of 1 indicated a fair rating, a rating of 2 indicated a rating of well, and a rating of 3 corresponded to a rating of very well.

As presented in Table 4, teachers rated themselves and had an average mean score of 2.00 (well) in the domain of specific communication, which indicates that teachers' perceptions of their communication of specific student information was well to parents. Teachers had an average mean score of 1.83 (fair) in the domain of school-wide communication, which indicates that teachers' perception of their communication of school-wide information to parents was fair. Teachers had an average mean score of 1.49 (occasionally) in the domain of frequency of communication to parents, which indicates that teachers' perceptions of their overall communication to parents was fair.

What are the parents' perceptions of effective communication? Overall mean scores are presented in the Table 5. The table also includes the low and high mean scores of parents from the survey as reported by domain.

Table 5

Descriptive Statistics of Mean Scores of All Parents

Domain	N	Min	Max	M	SD
Frequency (1-7)	44	.25	2.50	1.39	.49
School-wide (8-14)	44	.00	3.00	1.73	.83
Specific (15-21)	44	.00	3.00	1.82	.85

In the frequency communication domain a rating of 0 for parent responses equated to a rating of *never*; a rating of 1 indicated a rating of *occasionally*; a rating of 2 indicated a rating of *regularly*, and a rating of 3 corresponded to a rating of *frequently*. In the school-wide and specific communication domain a rating of 0 for both teacher and parent responses equated to a

poor rating; a rating of 1 indicated a *fair* rating, a rating of 2 indicated a rating of *well*, and a rating of 3 corresponded to a rating of *very well*.

As presented in Table 5, parents rated the schools and had an average mean score of 1.82 (fair) in the domain of specific communication, which indicates that parents' perceptions of communication between teachers and parents is fair. Parents had an average mean score of 1.73 (fair) in the domain of school-wide communication, which indicates that parents believe that communication about school-wide information is fair. Parents had an average mean score of 1.39 (fair) in the domain of frequency of communication, which indicates that parents' perceptions of communication from teachers is fair.

What are the differences between parents' and teachers' perceptions of effective communication in School A? The independent *t*-test was used to compare the results from the survey from parents and teachers at School A. The results in Table 5 indicate that teachers' perceptions of the frequency of communication were more favorable than that of parents. There was a significant difference in the perception of frequency of communication between teachers and parents at school A, $t(39) = 2.29, p = .027; d = .752$. The effect size for this analysis was found to exceed Cohen's (1992) convention for a large effect ($d > .50$). Table 5 also displays results that there was no significant difference in the perception of school-wide communication between teachers and parents at School A, $t(39) = .34, p = .733; d = .542$. The effect size for this analysis was found to also exceed Cohen's (1992) convention for a large effect ($d > .50$). The results in Table 6 indicate that there was no significant difference in the perception of specific student communication between teachers and parents at School A, $t(39) = .96, p = .345; d = .324$. The effect size for this analysis was small according to Cohen's (1992) convention, thus having a small effect.

Table 6

Independent t-Test Comparison School A

Outcome	Group-teacher A			Group-parent A			<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Frequency (1-7)	1.66	.33	18	1.35	.49	23	2.29	39	.027*
School-wide (8-14)	1.85	.46	18	1.77	.92	23	.370	33.98	.714
Specific (15-21)	2.08	.54	18	1.83	.98	23	1.02	35.46	.314

**p* < .05

Teacher and parent question analysis school A. Question 1 for teachers, *how often do you receive phone calls from each of your parents*, yielded a mean score of 1.06 (*SD* = 4.2, *N* = 18) and a mean score of .57 (*SD* = .73, *N* = 23) for Question 1 for parents, *how often do you receive phone calls from your child's teacher*, were found to be significant $t(36) = 2.71$, $p = .010$. These results indicate that both teachers and parents less than occasionally make phone calls to one another.

Question 2 for teachers, *how often do you conduct planned meetings/formal interactions with each of your parents*, yielded a mean score of 1.28 (*SD* = .46, *N* = 18) and a mean score of 1.61 (*SD* = .78, *N* = 23) for Question 2 for parents, *how often do you attend planned meetings/formal interactions with your child's teacher*, were found to be nonsignificant $t(37) = 1.69$, $p = .100$. These scores indicate that teachers occasionally conduct planned meetings and parents occasionally attend planned meetings.

Question 3 for teachers, *how often do you communicate in written form with each of your parents*, yielded a mean score of 2.22 (*SD* = .81, *N* = 18) and a mean score of 1.65 (*SD* = .83, *N*

= 23) for Question 3 for parents, *how often do you communicate in written form with your child's teacher*, yielded scores that indicate teachers and parents regularly communicate in written form were found to be significant $t(39) = 2.20, p = .033$. These scores indicate that teachers regularly communicate in written form with parents and parents occasionally communicate in written form with teachers.

Question 4 for teachers, *how often do you make phone calls to each of your parents*, yielded a mean score of 1.50 ($SD = .51, N = 18$) and a mean score of .64 ($SD = .66, N = 22$) for Question 4 for parents, *how often do you make phone calls to your child's teacher*, were found to be significant $t(38) = 4.54, p = .000$. Teachers occasionally make phone calls to parents and parents less than occasionally make calls to the teacher.

Question 5 for teachers, *how often do you have informal interactions with each of your parents*, yielded a mean score of 1.61 ($SD = .78, N = 18$) and a mean score of 1.13 ($SD = .76, N = 23$) for Question 5 for parents, *how often do you have informal interactions with your child's teacher*, were found to nonsignificant $t(39) = 2.00, p = .053$. Teachers and parents occasionally have formal interactions.

Question 6 for teachers, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with each of your parents*, yielded a mean score of 2.44 ($SD = .62, N = 18$) and a mean score of 1.70 ($SD = .93, N = 23$) for Question 6 for parents, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with your child's teacher*, were found to be significant $t(39) = 2.95, p = .005$. Teachers regularly use technology but parents occasionally use technology to communicate.

Question 7 for teachers, *overall, how often do you think your parents communicate with you*, yielded a mean score of 1.33 ($SD = .49, N = 18$) and a mean score of 1.61 ($SD = .84, N =$

23) for Question 7 for parents, *overall, how often do you think your child's teacher communicates with you*, were found to be nonsignificant $t(36) = 1.32, p = .196$. Teachers and parents think that overall communication occurs occasionally.

Question 8 for teachers, *how do you feel you do in using planned meetings/formal interactions to communicate important school-wide and classroom information to each of your parents*, yielded a mean score of 1.83 ($SD = .79, N = 18$) and a mean score of 1.87 ($SD = 1.06, N = 23$) for Question 8 for parents, *how do you feel your child's teacher does in using planned meetings/formal interactions to communicate important school-wide and classroom information to you*, were found to be nonsignificant $t(39) = -.12, p = .904$. Parents and teachers rate formal interactions well.

Question 9 for teachers, *how do you feel you do in using written communication to communicate important school wide and classroom information to each of your parents*, yielded a mean score of 2.17 ($SD = .71, N = 18$) and a mean score of 2.00 ($SD = .91, N = 23$) for question 9 for parents, *how do you feel your child's teacher does in using written communication to communicate important school wide and classroom information to you*, were found to be nonsignificant $t(39) = .64, p = .524$. Parents and teachers rate written communication for school wide and classroom information well.

Question 10 for teachers, *how do you feel you do in receiving phone calls to you to communicate important school wide and classroom information*, yielded a mean score of 1.89 ($SD = .76, N = 18$) and a mean score of 1.62 ($SD = 1.11, N = 21$) for question 10 for parents, *how do you feel your child's teacher does in making phone calls to you to communicate important school wide and classroom information*, were found nonsignificant $t(35) = .89, p = .378$. Teachers rate themselves fair in receiving phone calls to communicate important school-

wide and classroom information and parents rate teachers fair in making phone calls to communication important school wide and classroom information.

Question 11 for teachers, *how do you feel you do in making phone calls to parents that communicate important school wide and classroom information to each of your parents*, yielded a mean score of 1.28 ($SD = .75$, $N = 18$) and a mean score of 1.57 ($SD = .98$, $N = 21$) for Question 11 for parents, *how do you feel you do in making phone calls to your child's teacher to ask about important school wide and classroom information*, were found nonsignificant $t(37) = 1.04$, $p = .297$. Teachers and parents rate themselves fair in making phone calls to communicate important school wide and classroom information.

Question 12 for teachers, *how do you feel you do in communicating important school wide and classroom information to each of your parents in informal interactions*, yielded a mean score of 1.88 ($SD = .78$, $N = 18$) and a mean score of 1.64 ($SD = 1.00$, $N = 22$) for Question 12 for parents, *how do you feel your child's teacher does in communicating important school wide and classroom information to you in informal interactions*, were found nonsignificant $t(37) = .83$, $p = .410$. Teachers and parents rate themselves fair in communicating important school wide and classroom information in informal interactions.

Question 13 for teachers, *how do you feel you do in using technology: e-mails, web page, blog, cellular phones to communicate important school wide and classroom information to each of your parents*, yielded a mean score of 2.18 ($SD = .64$, $N = 17$) and a mean score of 1.82 ($SD = 1.14$, $N = 22$) for Question 13 for parents, *how do you feel your child's teacher does in using technology: e-mails, web page, blog, cellular phones to communicate important school wide and classroom information to you*, were found to be nonsignificant $t(34) = 1.25$, $p = .222$. Teachers

rate themselves well in using technology to communicate, and parents rate themselves fair in using technology to communicate important school wide and classroom information.

Question 14, *overall, how do you feel you do in communicating important school wide and classroom information to each of your parents*, yielded a mean score of 1.82 ($SD = .64$, $N = 17$) and a mean score of 1.83 ($SD = 1.07$, $N = 23$) for Question 14 for parents, *overall, how do you feel your child's teacher does in communicating important school wide and classroom information to you*, were found to be nonsignificant $t(37) = -.01$, $p = .993$. Teachers rate themselves fair in overall communication of important school wide and classroom information and parents rate teachers fair also.

Question 15, *how do you feel you do in using planned meetings/formal interactions to communicate specific information about a student to his or her parents*, yielded a mean score of 2.22 ($SD = .64$, $N = 18$) and a mean score of 1.78 ($SD = 1.04$, $N = 23$) for Question 15 for parents, *how do you feel your child's teacher does in using planned meetings/formal interactions to communicate specific information about your child*, were found to be nonsignificant $t(37) = 1.66$, $p = .106$. Teachers rate themselves well in using formal interactions to communicate specific information about a student to parents and parents rate teachers fair in using the formal interactions to communicate specific information about a student.

Question 16, *how do you feel you do in using written communication to communicate specific information to you about a student to his or her parents*, yielded a mean score of 2.11 ($SD = .58$, $N = 18$) and a mean score of 1.87 ($SD = 1.10$, $N = 23$) for Question 16 for parents, *how do you feel your child's teacher does in using written communication to communicate specific information to you about your child*, were found to be nonsignificant $t(36) = .96$, $p =$

.344. Teachers rate themselves well in using written communication to communicate specific information about a student and parents rate teachers fair in using written communication.

Question 17, *how do you feel you do in receiving phone calls from a parent to communicate specific information about a student to his or her parents*, yielded a mean score of 2.00 ($SD = .69, N = 18$) and a mean score of 1.91 ($SD = 1.04, N = 23$) for Question 17 for parents, *how do you feel your child's teacher does in responding to you to communicate specific information about your child*, were found nonsignificant $t(38) = .32, p = .750$. Teachers do well in receiving phone calls from parents and parents report the teacher as fair in responding to specific information using phone calls.

Question 18, *how do you feel you do in making calls to parents to communicate specific information about a student to his or her parents*, yielded a mean score of 1.89 ($SD = .83, N = 18$) and a mean score of 1.65 ($SD = 1.14, N = 20$) Question 18 for parents, *how do you feel your child's teacher does in making calls to you to communicate specific information about your child*, were found nonsignificant $t(35) = .74, p = .462$. Teachers report they are fair in making calls to parents about specific information and parents also report that teachers are fair in making calls to them regarding specific information.

Question 19, *how do you feel you do in using informal interactions to communicate specific information about a student to his or her parents*, yielded a mean score of 2.00 ($SD = .71, N = 17$) and a mean score of 1.78 ($SD = 1.04, N = 23$) for Question 19 for parents, *how do you feel your child's teacher does in using informal interactions to communicate specific information about your child*, were found nonsignificant $t(38) = .74, p = .463$. Teachers do well in using informal interactions to communicate specific information and parents report that teachers are fair in using informal interactions.

Question 20, *how do you feel you do in using technology: e-mails, web page, blog, cellular phones to communicate specific information about a student to his or her parents*, yielded a mean score of 2.06 ($SD = .73$, $N = 18$) and a mean score of 1.87 ($SD = 1.06$, $N = 23$) for Question 20 for parents, *how do you feel your child's teacher does in using technology: e-mails, web page, blog, cellular phones to communicate specific information about your child*, were found nonsignificant $t(39) = .64$, $p = .528$. Teachers do well in using technology to communicate specific information and parents rate teachers as fair in using technology to report specific information about students.

Question 21, *overall, how often do you think you communicate with parents about specific information about a student*, yielded a mean score of 2.22 ($SD = .65$, $N = 18$) and a mean score of 1.91 ($SD = .92$, $N = 22$) for Question 21 for parents, *overall, how do you think your child's teacher communicates with you about specific information about your child*, were found nonsignificant $t(38) = 1.17$, $p = .249$. Overall, teachers do well in communicating with parents about specific information and parents report that teachers are fair in communicating specific information about students. The results presented in Table 7 are from the Independent Samples t -tests completed on the survey questions grouped by participants utilizing an alpha level of .05.

What are the differences between parents' and teachers' perceptions of effective communication in school B? The independent t -test was used to compare the results from the survey from parents and teachers at school B. The results in Table 8 indicate that there was no significant difference in the perception of frequency of communication between teachers and parents at school B, $t(55) = -1.83$, $p = .856$; $d = .049$. The effect size for this analysis was found to be small according to Cohen's (1992) convention for small effect ($d < .20$).

Table 7

Independent t-Test Comparison by Question for School A

Survey question	Group-teacher A			Group-parent A			<i>T</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Q1	1.06	.42	18	.57	.73	23	2.71	36	.010*
Q2	1.28	.46	18	1.61	.78	23	1.69	37	.100
Q3	2.22	.81	18	1.65	.83	23	2.20	39	.033*
Q4	1.50	.51	18	.64	.66	22	4.54	38	.000*
Q5	1.61	.78	18	1.13	.76	23	2.00	39	.053
Q6	2.44	.62	18	1.70	.93	23	2.95	39	.005*
Q7	1.33	.49	18	1.61	.84	23	1.32	36	.196
Q8	1.83	.79	18	1.87	1.06	23	-.12	39	.904
Q9	2.17	.71	18	2.00	.91	23	.64	39	.524
Q10	1.89	.76	18	1.62	1.11	21	.89	35	.378
Q11	1.28	.75	18	1.57	.98	21	1.04	37	.297
Q12	1.88	.78	18	1.64	1.00	22	.83	37	.410
Q13	2.18	.64	17	1.82	1.14	22	1.25	34	.222
Q14	1.82	.64	17	1.83	1.07	23	-.01	37	.933
Q15	2.22	.64	18	1.78	1.04	23	1.66	37	.106
Q16	2.11	.58	18	1.87	1.01	23	.96	36	.344
Q17	2.00	.69	18	1.91	1.04	23	.32	38	.750

Table 7 - continued

Survey question	Group-teacher A			Group-parent A			<i>T</i>	<i>df</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Q18	1.89	.83	18	1.65	1.14	20	.74	35	.462
Q19	2.00	.71	17	1.78	1.04	23	.74	38	.463
Q20	2.06	.73	18	1.87	1.06	23	.64	39	.528
Q21	2.22	.65	18	1.91	.97	22	1.17	.38	.249

* $p < .05$

Table 8 also displays that there was no significant difference in the perception of school-wide communication between teachers and parents at school B $t(31) = .69, p = .494; d = .202$. As indicated in Table 8, there was no significant difference in the perception of specific student communication between teachers and parents at school B $t(33) = .81, p = .145; d = .233$. The effect size for these analyses was also small according to Cohen's (1992) convention; thus, having a small effect.

Table 8

Independent t-Test Comparison School B

Outcome	Group-teacher B			Group-parent B			<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Frequency (1-7)	1.41	.42	36	1.43	.49	21	-.183	55	.856
School-wide (8-14)	1.81	.51	36	1.69	.74	21	.693	31.33	.494
Specific (15-21)	1.95	.53	36	1.81	.71	21	.808	33.92	.145

* $p < .05$

Teacher and parent question analysis school B. Question 1 for teachers, *how often do you receive phone calls from each of your parents*, yielded a mean score of .94 ($SD = .67, N =$

36) and a mean score of .57 ($SD = .73, N = 21$) for Question 1 for parents, *how often do you receive phone calls from your child's teacher*, were found to be nonsignificant $t(55) = 1.94, p = .058$. These results indicate that both teachers and parents less than occasionally make phone calls to one another.

Question 2 for teachers, *how often do you conduct planned meetings/formal interactions with each of your parents*, yielded a mean score of 1.19 ($SD = .47, N = 36$) and a mean score of 1.81 ($SD = .75, N = 21$) for Question 2 for parents, *how often do you attend planned meetings/formal interactions with your child's teacher*, were found to be significant $t(55) = 3.82, p = .000$. These scores also indicate that teachers occasionally conduct planned meetings and parents occasionally attend planned meetings.

Question 3 for teachers, *how often do you communicate in written form with each of your parents*, yielded a mean score of 2.00 ($SD = .89, N = 36$) and a mean score of 2.00 ($SD = .83, N = 21$) for Question 3 for parents, *how often do you communicate in written form with your child's teacher* yield scores that indicate teachers and parents regularly communicate in written form were found to be nonsignificant $t(55) = .00, p = 1.00$. These scores indicate that teachers regularly communicate in written form with parents and parents occasionally communicate in written form with teachers.

Question 4 for teachers, *how often do you make phone calls to each of your parents*, yielded a mean score of 1.25 ($SD = .55, N = 36$) and a mean score of .71 ($SD = .56, N = 21$) for Question 4 for parents, *how often do you make phone calls to your child's teacher*, were found to be significant $t(55) = 3.51, p = .001$. Teachers occasionally make phone calls to parents and parents less than occasionally make calls to the teacher.

Question 5 for teachers, *how often do you have informal interactions with each of your parents*, yielded a mean score of 1.53 ($SD = .74$, $N = 36$) and a mean score of 1.14 ($SD = .96$, $N = 21$) for Question 5 for parents, *how often do you have informal interactions with your child's teacher*, were found to nonsignificant $t(55) = 1.70$, $p = .095$. Teachers and parents occasionally have formal interactions.

Question 6 for teachers, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with each of your parents*, yielded a mean score of 1.46 ($SD = .91$, $N = 36$) and a mean score of 1.52 ($SD = 1.08$, $N = 21$) for Question 6 for parents, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with your child's teacher*, were found to be nonsignificant $t(55) = -.19$, $p = .848$. Teachers and parents regularly use technology to communicate.

Question 7 for teachers, *overall, how often do you think your parents communicate with you*, yielded a mean score of 1.17 ($SD = .70$, $N = 36$) and a mean score of 1.81 ($SD = .87$, $N = 21$) for Question 7 for parents, *overall, how often do you think your child's teacher communicates with you*, were found to be significant $t(55) = 3.06$, $p = .003$. Teachers and parents think that overall communication occurs occasionally.

Question 8 for teachers, *how do you feel you do in using planned meetings/formal interactions to communicate important school-wide and classroom information to each of your parents*, yielded a mean score of 1.74 ($SD = .70$, $N = 35$) and a mean score of 1.90 ($SD = .83$, $N = 21$) for Question 8 for parents, *how do you feel your child's teacher does in using planned meetings/formal interactions to communicate important school-wide and classroom information to you*, were found to be nonsignificant $t(54) = -.78$, $p = .438$. Parents and teachers rate formal interactions fair.

Question 9 for teachers, *how do you feel you do in using written communication to communicate important school wide and classroom information to each of your parents*, yielded a mean score of 2.14 ($SD = .77$, $N = 35$) and a mean score of 2.05 ($SD = .74$, $N = 21$) for Question 9 for parents, *how do you feel your child's teacher does in using written communication to communicate important school wide and classroom information to you*, were found to be nonsignificant $t(54) = .45$, $p = .652$. Parents and teachers rate written communication for school wide and classroom information well.

Question 10 for teachers, *how do you feel you do in receiving phone calls to you to communicate important school wide and classroom information*, yielded a mean score of 1.83 ($SD = .89$, $N = 35$) and a mean score of 1.33 ($SD = .97$, $N = 21$) for Question 10 for parents, *how do you feel your child's teacher does in making phone calls to you to communicate important school wide and classroom information*, were found nonsignificant $t(54) = 1.96$, $p = .056$. Teachers rate themselves fair in receiving phone calls to communicate important school wide and classroom information and parents rate teachers fair in making phone calls to communication important school wide and classroom information.

Question 11 for teachers, *how do you feel you do in making phone calls to parents that communicate important school wide and classroom information to each of your parents*, yielded a mean score of 1.58 ($SD = .81$, $N = 36$) and a mean score of 1.32 ($SD = 1.06$, $N = 19$) for Question 11 for parents, *how do you feel you do in making phone calls to your child's teacher to ask about important school wide and classroom information*, were found nonsignificant $t(53) = 1.04$, $p = .299$. Teachers and parents rate themselves fair in making phone calls to communicate important school wide and classroom information.

Question 12 for teachers, *how do you feel you do in communicating important school wide and classroom information to each of your parents in informal interactions*, yielded a mean score of 1.86 ($SD = .72, N = 36$) and a mean score of 1.57 ($SD = .98, N = 21$) for Question 12 for parents, *how do you feel your child's teacher does in communicating important school wide and classroom information to you in informal interactions*, were found nonsignificant $t(33) = 1.18, p = .246$. Teachers and parents rate themselves fair in communicating important school wide and classroom information in informal interactions.

Question 13 for teachers, *how do you feel you do in using technology: e-mails, web page, blog, cellular phones to communicate important school wide and classroom information to each of your parents*, yielded a mean score of 1.60 ($SD = .88, N = 35$) and a mean score of 1.71 ($SD = .90, N = 21$) for Question 13 for parents, *how do you feel your child's teacher does in using technology: emails, web page, blog, cellular phones to communicate important school wide and classroom information to you*, were found to be nonsignificant $t(54) = -.47, p = .643$. Teachers rate themselves fair in using technology to communicate, and parents rate themselves fair in using technology to communicate important school wide and classroom information.

Question 14, *overall, how do you feel you do in communicating important school wide and classroom information to each of your parents*, yielded a mean score of 1.82 ($SD = .64, N = 17$) and a mean score of 1.83 ($SD = 1.07, N = 23$) for Question 14 for parents, *overall, how do you feel your child's teacher does in communicating important school wide and classroom information to you*, were found to be nonsignificant $t(55) = .33, p = .744$. Teachers rate themselves fair in overall communication of important school wide and classroom information and parents rate teachers fair as well.

Question 15, *how do you feel you do in using planned meetings/formal interactions to communicate specific information about a student to his or her parents*, yielded a mean score of 2.03 ($SD = .70$, $N = 36$) and a mean score of 1.95 ($SD = .83$, $N = 20$) for Question 15 for parents, *how do you feel your child's teacher does in using planned meetings/formal interactions to communicate specific information about your child*, were found to be nonsignificant $t(54) = .38$, $p = .709$. Teachers rate themselves well in using formal interactions to communicate specific information about a student to parents and parents rate teachers fair in using the formal interactions to communicate specific information about a student.

Question 16, *how do you feel you do in using written communication to communicate specific information to you about a student to his or her parents*, yielded a mean score of 2.11 ($SD = .68$, $N = 35$) and a mean score of 1.86 ($SD = .85$, $N = 21$) for Question 16 for parents, *how do you feel your child's teacher does in using written communication to communicate specific information to you about your child*, were found to be nonsignificant $t(54) = 1.25$, $p = .218$. Teachers rate themselves well in using written communication to communicate specific information about a student and parents rate teachers fair in using written communication.

Question 17, *how do you feel you do in receiving phone calls from a parent to communicate specific information about a student to his or her parents*, yielded a mean score of 1.91 ($SD = .78$, $N = 25$) and a mean score of 2.19 ($SD = 1.04$, $N = 23$) for Question 17 for parents, *how do you feel your child's teacher does in responding to you to communicate specific information about your child*, were found nonsignificant $t(54) = 1.30$, $p = 1.99$. Teachers report they are fair in receiving phone calls from parents and parents report the teacher do well in responding to specific information using phone calls.

Question 18, *how do you feel you do in making calls to parents to communicate specific information about a student to his or her parents*, yielded a mean score of 2.00 ($SD = .72$, $N = 36$) and a mean score of 1.24 ($SD = 1.00$, $N = 21$) Question 18 for parents, *how do you feel your child's teacher does in making calls to you to communicate specific information about your child*, were found nonsignificant $t(35) = .74$, $p = .462$. Teachers report they are well in making calls to parents about specific information and parents also report that teachers are fair in making calls to them regarding specific information.

Question 19, *how do you feel you do in using informal interactions to communicate specific information about a student to his or her parents*, yielded a mean score of 1.92 ($SD = .69$, $N = 36$) and a mean score of 1.67 ($SD = .73$, $N = 21$) for Question 19 for parents, *how do you feel your child's teacher does in using informal interactions to communicate specific information about your child*, were found nonsignificant $t(55) = 1.29$, $p = .203$. Teachers are fair in using informal interactions to communicate specific information and parents report that teachers are fair in using informal interactions.

Question 20, *how do you feel you do in using technology: emails, web page, blog, cellular phones to communicate specific information about a student to his or her parents*, yielded a mean score of 1.67 ($SD = .86$, $N = 36$) and a mean score of 1.76 ($SD = .89$, $N = 21$) for Question 20 for parents, *how do you feel your child's teacher does in using technology: emails, web page, blog, cellular phones to communicate specific information about your child*, were found nonsignificant $t(55) = -.40$, $p = .692$. Teachers report fair in using technology to communicate specific information and parents rate teachers as fair in using technology to report specific information about students.

Question 21, overall, how often do you think you communicates with parents about specific information about a student, yielded a mean score of 2.06 ($SD = .53$, $N = 36$) and a mean score of 2.00 ($SD = .78$, $N = 22$) for Question 21 for parents, overall, how do you think your child's teacher communicates with you about specific information about your child, were found nonsignificant $t(38) = .29$, $p = .773$. Overall, teachers do well in communicating with parents about specific information and parents report that teachers do well in communicating specific information about students. The results presented in Table 9 are from the Independent Samples t -tests completed on the survey questions grouped by participants utilizing an alpha level of .05.

Table 9

Independent t-Test Comparison by Question for School B

Survey question	<u>Group-teacher B</u>			<u>Group-parent B</u>			T	df	p
	M	SD	N	M	SD	N			
Q1	.94	.67	36	.57	.73	21	1.94	55	.058
Q2	1.19	.47	36	1.81	.75	21	3.82	55	.000*
Q3	2.00	.89	36	2.00	.83	21	.00	55	1.00
Q4	1.25	.55	36	.71	.56	21	3.51	55	.001*
Q5	1.53	.74	36	1.14	.96	21	1.70	55	.095
Q6	1.47	.91	36	1.52	1.08	21	-.19	55	.848
Q7	1.17	.70	36	1.81	.87	21	3.06	55	.003*
Q8	1.74	.70	35	1.90	.83	21	-.78	54	.438

Table 9 - continued

Survey question	Group-teacher B			Group-parent B			<i>T</i>	<i>df</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Q9	2.14	.77	35	2.05	.74	21	.45	54	.652
Q10	1.83	.89	35	1.33	.97	21	1.96	54	.056
Q11	1.58	.81	36	1.32	1.06	19	1.04	53	.299
Q12	1.86	.72	36	1.57	.98	21	1.18	33	.246
Q13	1.60	.88	35	1.71	.90	21	-.47	54	.643
Q14	1.97	.65	36	1.90	.89	21	.33	55	.744
Q15	2.03	.70	36	1.95	.83	20	.38	54	.709
Q16	2.11	.68	35	1.86	.85	21	1.25	54	.218
Q17	1.91	.78	35	2.19	.75	21	1.30	54	.199
Q18	2.00	.72	36	1.24	1.00	21	3.07	32	.004*
Q19	1.92	.69	36	1.67	.73	21	1.29	55	.203
Q20	1.67	.86	36	1.76	.89	21	-.40	55	.692
Q21	2.06	.53	36	2.00	.78	21	.29	31	.733

**p* < .05

What are the difference between teacher perceptions of communication in school A and school B? First, in responding to the research question, the researcher looked at the overall ratings by grouping for teachers in Schools A and B. The independent *t*-test was used to compare the results from the survey from teachers based on the school at which they worked. The independent *t*-test was used to determine whether the differences were significant. As displayed in Table 10, the results of the independent *t*-test indicate there was a significant difference in the perceptions of frequency of communication between teachers at both School A

and School B, $t(52) = 2.19, p = .033; d = .659$. The effect size for this analysis was found to exceed Cohen's (1992) convention for a large effect ($d > .50$). The results in Table 10 for school-wide communication, indicate that there was no significant difference in the perception of school-wide communication between teachers at both School A and School B, $t(52) = .317, p = .752; d = .093$. The results in Table 10 for specific communication, indicate that there was no significant difference in the perception of specific student communication between teachers at both School A and B, $t(52) = .813, p = .420; d = .234$. The effect size for both school-wide and specific communication analyses was found to be small according to Cohen's (1992) convention; thus, having a small effect.

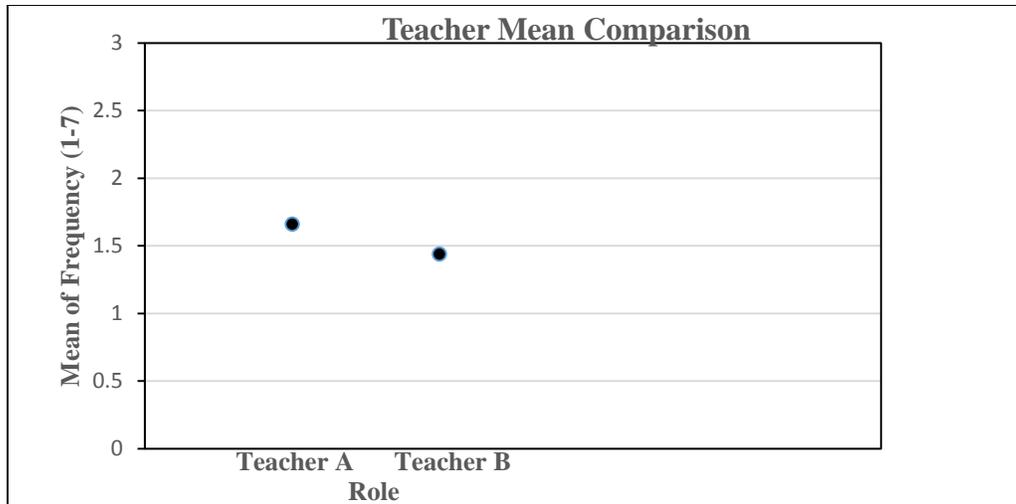
Table 10

Independent t-Test Comparison Teachers

Domain	Group-teacher A			Group-teacher B			<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Frequency (1-7)	1.66	.33	18	1.41	.42	36	2.19	52	.033*
School-wide (8-14)	1.85	.46	18	1.81	.51	36	.317	52	.752
Specific (15-21)	2.08	.54	18	1.95	.53	36	.813	52	.420

* $p < .05$

The average mean difference between teachers' perceptions at School A and School B regarding frequency of communication can be seen in Figure 2. In comparison, in the graph teachers at School A have a higher mean score but communication with parents occurs occasionally at both schools.



Frequency of Communication

Figure 2. Average mean difference between teachers' perceptions of frequency of communication at school A and school B.

More specifically, a review of the individual survey responses informs the researcher on the mean scores for each aspect of the frequency domain. Question 1 for teachers, *how often do you receive phone calls from each of your parents*, yielded a mean score of 1.06 ($SD = .42$, $N = 18$) for teachers at school A, and a mean score of .94 ($SD = .67$, $N = 36$) for teachers at school B were found to be nonsignificant $t(52) = .64$, $p = .525$. Teachers less than occasionally receive phone calls from parents.

Question 2 for teachers, *how often do you conduct planned meetings/formal interactions with each of your parents* yielded a mean score of 1.28 ($SD = .46$, $N = 18$) for teachers at School A and a mean score of 1.19 ($SD = .47$, $N = 36$) for teachers at School B were found to be nonsignificant $t(52) = .62$, $p = .538$. Teachers occasionally conduct planned meetings with parents.

Question 3 for teachers, *how often do you communicate in written form with each of your parents*, yielded a mean score of 2.22 ($SD = .81, N = 18$) for teachers at School A and a mean score of 2.00 ($SD = .89, N = 36$) for teachers at School B were found to be nonsignificant $t(52) = .89, p = .379$. Teachers regularly communicate in written form with parents.

Question 4 for teachers, *how often do you make phone calls to each of your parents*, yielded a mean score of 1.50 ($SD = .51, N = 18$) for teachers at school A and a mean score of 1.25 ($SD = .55, N = 36$) for teachers at school B were found to be nonsignificant $t(52) = 1.60, p = 1.16$. Teachers occasionally make phone calls to parents.

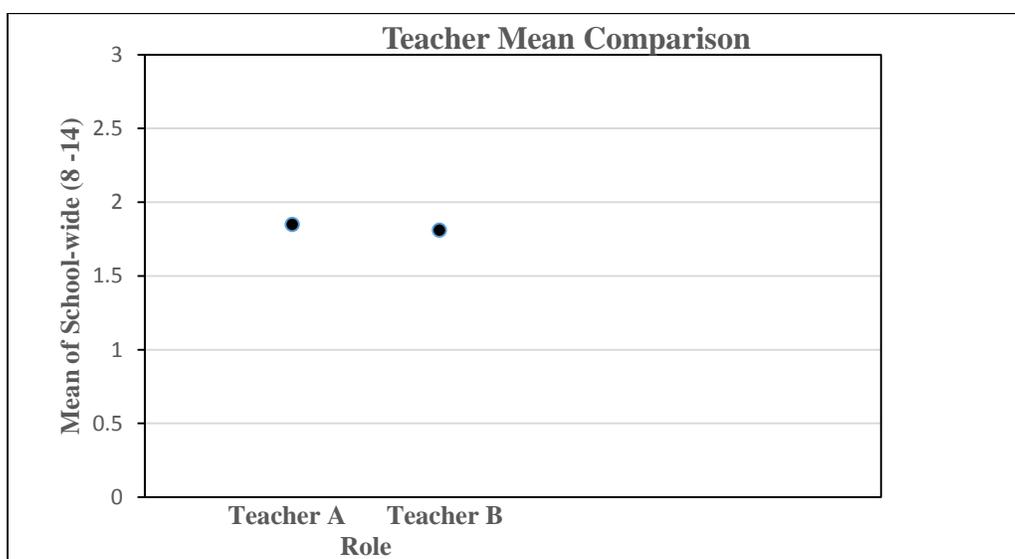
Question 5 for teachers, *how often do you have informal interactions with each of your parents*, yielded a mean score of 1.61 ($SD = .78, N = 18$) for teachers at School A, and a mean score of 1.53 ($SD = .74, N = 36$) for teachers at School B were found to be nonsignificant $t(52) = .39, p = .702$. Teachers occasionally have informal interactions with parents.

Question 6 for teachers, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with each of your parents*, yielded a mean score of 2.44 ($SD = .62, N = 18$) for teachers at School A, and a mean score of 1.47 ($SD = .91, N = 36$) for teachers at School B were found to be significant $t(52) = .408, p = .000$. Teachers at School A regularly use technology to communicate, whereas, teachers at School A occasionally use technology to communicate to parents.

Question 7 for teachers, *overall, how often do you think your parents communicate with you*, yielded a mean score of 1.33 ($SD = .49, N = 18$) for teachers at School A, and a mean score of 1.17 ($SD = .70, N = 36$) for teachers at School B were found to nonsignificant $t(52) = .91, p = .368$. Overall, the survey revealed that teachers perceive that parents occasionally communicate. Thus, with the exception of Question 3 and Question 6 where the mean score was 2.00 or

higher—meaning that the frequency of communication between teachers and parents as rated by teachers was regularly, all the other mean scores indicate that teachers rated themselves and the frequency of communication with parents as occasionally.

The average mean difference between teachers' perceptions for school-wide communication at School A and School B can be seen in Figure 3. In comparison, in the graph teachers at school A have a higher mean score but the perceptions of teachers at School A and School B is that communication is fair as it relates to school-wide information to parents.



School-wide Communication

Figure 3. Average mean difference between teachers' perceptions of school-wide communication at school A and school B.

More specifically, a review of the individual survey responses informs the researcher on the mean scores for each aspect of the school-wide domain. Question 8 for teachers, *how do you feel you do in using planned meetings/formal interactions to communicate important school-wide and classroom information to each of your parents*, yielded a mean score of 1.83 ($SD = .79$, $N = 18$) for teachers at School A, and a mean score of 1.74 ($SD = .70$, $N = 35$) for teachers at School

B were found to be nonsignificant $t(51) = .43, p = .671$. Survey results indicate that teachers do well in using planned meetings to communicate school-wide information to parents.

Question 9 for teachers, *how do you feel you do in using written communication to communicate important school-wide and classroom information to each of your parents*, yielded results of a mean score of 2.17 ($SD = .71, N = 18$) for teachers at School A, and a mean score of 2.14 ($SD = .77, N = 35$) for teachers at School B were found to be nonsignificant $t(51) = .11, p = .913$. Teachers do well in using written communication to communicate school-wide information to parents.

Question 10 for teachers, *how do you feel you do in receiving phone calls to you to communicate important school-wide and classroom information*, yielded a mean score of 1.89 ($SD = .76, N = 18$) for teachers at School A, and a mean score of 1.83 ($SD = .90, N = 35$) for teachers at School B were found to be nonsignificant $t(51) = .25, p = .807$. The survey indicates that teachers receiving phone calls from parents is fair regarding the communication of school-wide information.

Question 11 for teachers, *how do you feel you do in making phone calls to parents that communicate important school-wide and classroom information to each of your parents*, yielded a mean score of 1.28 ($SD = .75, N = 18$) for teachers at School A, and a mean score 1.58 ($SD = .81, N = 36$) for teachers at School B were found to be nonsignificant $t(52) = 1.34, p = .186$. Teachers are fair in making phone calls to parents that communicate school-wide communication.

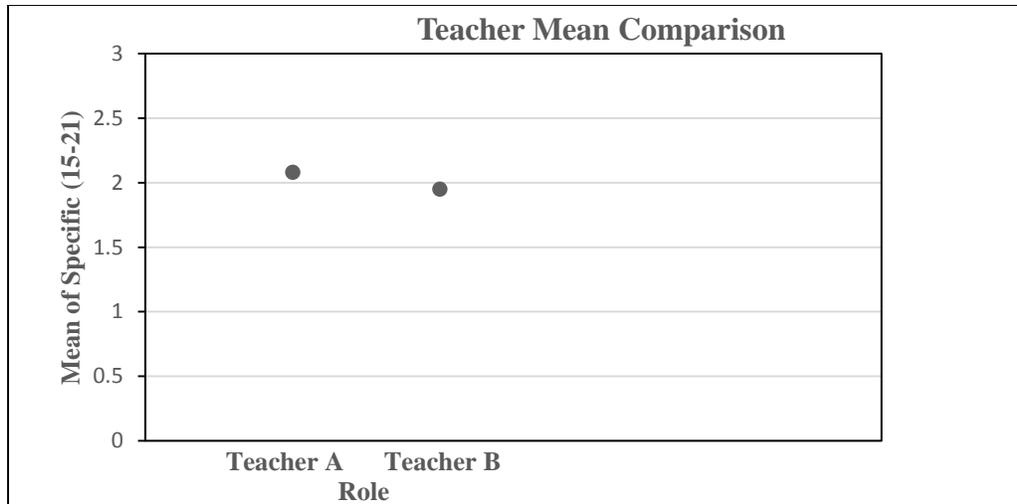
Question 12 for teachers, *how do you feel you do in communicating important school-wide and classroom information to each of your parents in informal interactions*, yielded a mean score of 1.88 ($SD = .78, N = 17$) for teachers at School A, and a mean score of 1.86 ($SD = .72, N$

= 36) for teachers at School B were found to be nonsignificant $t(51) = .10, p = .923$. Teachers are fair in using informal interactions to communicate school-wide information.

Question 13 for teachers, *how do you feel you do in using technology: e-mails, web page, blog, cellular phones to communicate important school-wide and classroom information to each of your parents*, yielded a mean score of 2.18 ($SD = .64, N = 17$) for teachers at School A, and a mean score of 1.60 ($SD = .89, N = 35$) for teachers at School B were found to be significant $t(42) = 2.69, p = 0.10$. Teachers at School A do well in using technology to communicate information to parents, and teachers at school B are fair in using technology to communicate school-wide information.

Question 14, *overall, how do you feel you do in communicating important school-wide and classroom information to each of your parents*, yielded a mean score of 1.82 ($SD = .64, N = 17$) for teachers at School A, and a mean score of 1.97 ($SD = .65, N = 36$) for teachers at School B were found to be nonsignificant $t(51) = -.78, p = .439$. Overall, teachers are fair in communicating school-wide information to parents. Thus, with the exception of Question 9 where teachers from both School A and B rated school-wide communication as well, and Question 13 where the difference is indicated that teachers at School A rate the use of technology as well and teachers at School B rate the use of technology as fair, all other questions were rated by teachers at both schools as fair.

The average mean difference between teachers' perceptions at School A and School B can be seen in Figure 4. In comparison, the perceptions of teachers at School A are that specific communication is well and at School B specific communication is fair. The graph indicates that teachers at School A have a higher mean score, which indicates that they communicate more specific student information to parents.



Specific Communication

Figure 4. Average mean difference between teachers' perceptions of specific communication at school A and school B.

More specifically, a review of the individual survey responses informs the researcher on the mean scores for each aspect of the specific communication domain. Question 15, *how do you feel you do in using planned meetings/formal interactions to communicate specific information about a student to his or her parents*, yielded a mean score of 2.22 ($SD = .65$, $N = 18$) for teachers at School A, and a mean score of 2.03 ($SD = .70$, $N = 36$) for teachers at School B were found to be nonsignificant $t(52) = 1.99$, $p = .327$. Teachers do well in using planned meetings to communicate specific information about a student.

Question 16, *how do you feel you do in using written communication to communicate specific information to you about a student to his or her parents*, yielded a mean score of 2.11 ($SD = .58$, $N = 18$) for teachers at School A, and a mean score of 2.11 ($SD = .68$, $N = 35$) for teachers at School B were found to be nonsignificant $t(51) = -.02$, $p = .987$. Teachers do well in using written communication to communicate specific information about a student.

Question 17, *how do you feel you do in receiving phone calls from a parent to communicate specific information about a student to his or her parents*, yielded a mean score of 2.00 ($SD = .69$, $N = 18$) for teachers at School A, and a mean score of 1.91 ($SD = .78$, $N = 35$) for teachers at School B were found to be nonsignificant $t(51) = .39$, $p = .695$. Teachers at School A do well in receiving phone calls from a parent and teachers at School B are fair in receiving phone calls from a parent about a student.

Question 18, *how do you feel you do in making calls to parents to communicate specific information about a student to his or her parents*, yielded a mean score of 1.89 ($SD = .83$, $N = 18$) for teachers at School A, and a mean score of 2.00 ($SD = .72$, $N = 36$) for teachers at School B were found to be nonsignificant $t(52) = -.51$, $p = .613$. Teachers at School A are fair in making phone calls to parents about a student and teachers at School B do well in making phone calls to parents.

Question 19, *how do you feel you do in using informal interactions to communicate specific information about a student to his or her parents*, yielded a mean score of 2.00 ($SD = .71$, $N = 17$) for teachers at School A and a mean score of 1.92 ($SD = .69$, $N = 36$) for teachers at School B were found to be nonsignificant $t(51) = .41$, $p = .686$. Teachers at School A do well in using informal interactions to communicate specific information about a student and teachers at School B are fair in using informal interactions.

Question 20, *how do you feel you do in using technology: e-mails, web page, blog, cellular phones to communicate specific information about a student to his or her parents*, yielded a mean score of 2.06 ($SD = .73$, $N = 18$) for teachers at School A, and a mean score of 1.67 ($SD = .86$, $N = 36$) for teachers at School B were found nonsignificant $t(52) = 1.64$, $p =$

1.06. Teachers at School A do well in using technology and teachers at School B are fair in using technology to communicate specific information about a student.

A review of Question 21, *overall, how often do you think you communicate with parents about specific information about a student*, yielded a mean score of 2.22 ($SD = .65$, $N = 18$) for teachers at School A and a mean score of 2.06 ($SD = .53$, $N = 36$) for teachers at School B were found to be nonsignificant $t(52) = 1.01$, $p = .317$. Overall, teachers do well in communicating specific information about a student to parents. However, questions 17, 18, 19, 20 indicate a difference of perceptions for teachers at both schools. Teachers at both schools have a similar perception for questions 15, 16, and 21, which were rated well. The results of the t -tests for each question are provided in Table 11. A review of the 21 survey results for teachers require the researcher to accept the null hypothesis for questions 1-5, 7-12, and 14-21, there is no statistical difference between the teachers' perceptions at School A and B. However, for Q6 and Q13, the researcher must reject the null hypothesis, there is a difference between teacher perceptions at School A and School B.

Table 11

Independent t-Test Comparison by Question for All Teachers

Survey questions	Group-teacher A			Group-teacher B			T	df	p
	M	SD	N	M	SD	N			
Q1	1.06	.42	18	.94	.67	36	0.64	52	.525
Q2	1.28	.46	18	1.19	.47	36	.62	52	.538
Q3	1.50	.51	18	2.00	.89	36	.89	52	.379
Q4	1.50	.51	18	1.25	.55	36	1.60	52	.116
Q5	1.61	.78	18	1.53	.74	36	.39	52	.702
Q6	2.44	.62	18	1.47	.91	36	4.08	52	.000*

Table 11 - continued

Survey questions	Group-Teacher A			Group-teacher B			<i>T</i>	<i>df</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Q7	1.33	.49	18	1.17	.69	36	.91	52	.368
Q8	1.83	.79	18	1.74	.70	36	.43	51	.671
Q9	2.17	.71	18	2.14	.77	35	.11	51	.913
Q10	1.89	.76	18	1.83	.89	35	.25	51	.807
Q11	1.28	.75	18	1.58	.81	36	1.34	52	.186
Q12	1.88	.78	17	1.86	.72	36	.10	51	.923
Q13	2.18	.64	17	1.60	.88	35	2.69	42	.010*
Q14	1.82	.64	17	1.97	.65	36	-.78	51	.439
Q15	2.22	.65	18	2.03	.70	36	1.00	52	.327
Q16	2.11	.58	18	2.11	.68	35	-.02	51	.987
Q17	2.00	.69	18	1.91	.78	35	.39	51	.695
Q18	1.89	.83	18	2.00	.72	36	-.51	52	.613
Q19	2.00	.71	19.2	.69	36	21	.41	51	.686
Q20	2.06	.73	18	1.67	.86	36	1.64	52	.106
Q21	2.22	.65	18	2.06	.53	36	1.01	52	.317

**p* < .05

What are the differences between parent perceptions of communication in school A and school B? First, in responding to the research question, the researcher looked at the overall ratings by grouping for parents in Schools A and B. The independent *t*-test was used to compare the results from the survey from parents. The independent *t*-test was used to compare the results from the survey from parents. As displayed in Table 12, there was no significant difference in

the perceptions of frequency of communication between parents at both School A and B, $t(42) = -.575, p = .56; d = .173$. The results in Table 12 also indicate that there was no significant difference in the perception of school-wide communication between parents at both School A and B $t(42) = .357, p = .723; d = .109$. Table 12 also displays that there was no significant difference in the perception of specific communication between parents at both School A and B $t(42) = .092, p = .927; d = .028$. The effect size for this analysis was small according to Cohen's (1992) convention; thus, having a small effect in the results for the three domains for parents.

Table 12

Independent t-Test Comparison Parents

Domain	Group-parent A			Group-parent B			<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Frequency (1-7)	1.35	.49	23	1.43	.49	21	-.575	42	.568
School-wide (8-14)	1.77	.92	23	1.69	.74	21	.357	42	.723
Specific (15-21)	1.83	.98	23	1.81	.71	21	.092	42	.927

* $p < .05$

The average mean difference between parents' perceptions at School A and School B can be seen in Figure 5, frequency of communication. In comparison, parents at School B have a higher mean score but parents at both schools indicate that communication with teachers occurs occasionally.

More specifically, a review of the individual survey responses informs the researcher on the mean scores for each aspect of the frequency domain.

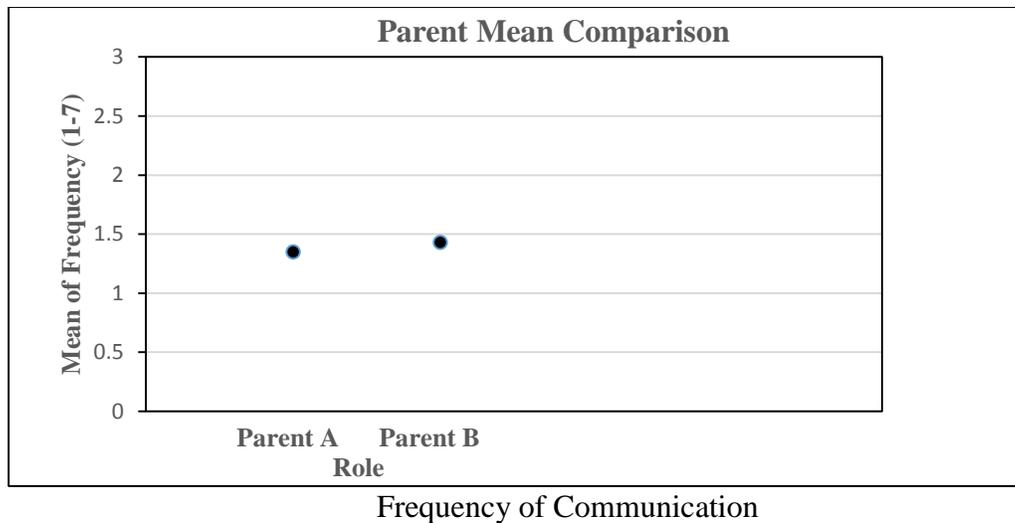


Figure 5. Average mean difference between parents' perceptions of frequency of communication at school A and school B.

Question 1 for parents, *how often do you receive phone calls from your child's teacher*, yielded a mean score of .57 ($SD = .73$, $N = 23$) for parents at School A and a mean score of .57 ($SD = .75$, $N = 21$) for parents at School B were found to be nonsignificant $t(42) = -.03$, $p = .978$. Thus, parent's perception is that they less than occasionally receive calls from their child's teacher.

Question 2 for parents, *how often do you attend planned meetings/formal interactions with your child's teacher* yielded a mean score of 1.61 ($SD = .78$, $N = 23$) for parents at School A, and a mean score of 1.81 ($SD = .75$, $N = 21$) for parents at School B were found to be nonsignificant $t(42) = -.87$, $p = .391$. Thus, parents occasionally attend planned meetings.

Question 3 for parents, *how often do you communicate in written form with your child's teacher* yielded a mean score of 1.65 ($SD = .83$, $N = 23$) for parents at School A and a mean score of 2.00 ($SD = .83$, $N = 21$) for parents at School B were found to be nonsignificant $t(42) = 1.38$, $p = .174$. Thus, parents regularly communicate in written form with teachers.

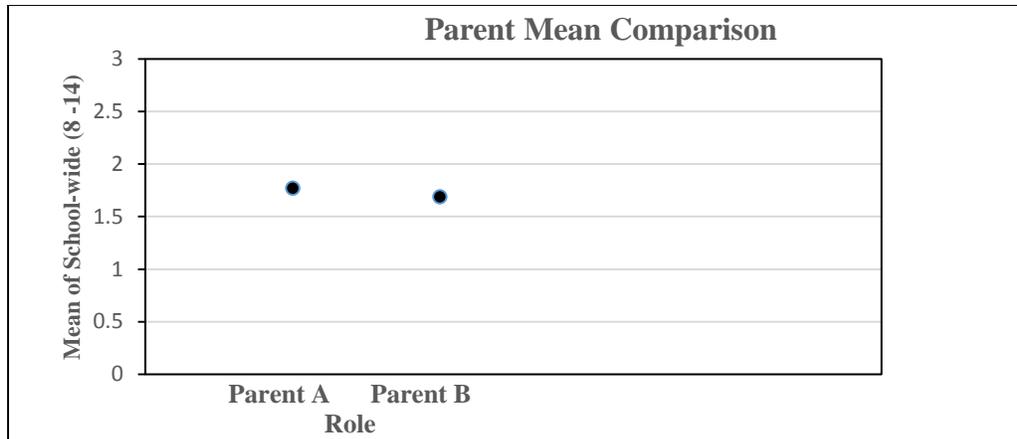
Question 4 for parents, *how often do you make phone calls to your child's teacher*, yielded a mean score of .64 ($SD = .66, N = 22$) for parents at School A and a mean score of .71 ($SD = .56, N = 21$) for parents at School B were found to be nonsignificant $t(41) = -.42, p = .679$. Thus, parents less than occasionally make calls to the teacher.

Question 5 for parents, *how often do you have informal interactions with your child's teacher*, yielded a mean score of 1.13 ($SD = .76, N = 23$) parents at School A, and a means score of 1.14 ($SD = .96, N = 21$) for parents at School B were found to be nonsignificant $t(42) = .57, p = .573$. Thus, parents occasionally have formal interactions with teachers.

Question 6 for parents, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with your child's teacher*, yielded a mean score of = 1.70 ($SD = .93, N = 18$) for parents at School A, and a mean score of 1.52 ($SD = 1.08, N = 21$) for parents at School B were found to be nonsignificant $t(42) = .57, p = .573$. Thus, parents regularly use technology to communicate with teachers.

Question 7 for parents, *overall, how often do you think your child's teacher communicates with you*, yielded a mean score of 1.61 ($SD = .84, N = 23$) for parents at School A, and a mean score of 1.81 ($SD = .87, N = 21$) for parents at School B were found to be nonsignificant $t(42) = -.78, p = .441$. Thus, parents think that overall communication occurs occasionally with teachers.

The average mean difference between parent's perceptions at School A and School B can be seen in Figure 6, school-wide communication. In comparison, in the graph parents at School A have a higher mean score but parents at both schools rate teachers fair in communicating important school-wide/classroom information than at School B.



School-wide Communication

Figure 6. Average mean difference between parents' perceptions of school-wide communication at school A and school B.

Question 8 for parents, *how do you feel your child's teacher does in using planned meetings/formal interactions to communicate important school-wide and classroom information to you*, yielded a mean score of 1.87 ($SD = 1.06, N = 23$) for parents at School A, and a mean score of 1.90 ($SD = .83, N = 21$) for parents at School B were found to be nonsignificant $t(42) = -.12, p = .904$. Parents report that teachers do well in using planned meetings to communicate school-wide information.

Question 9 for parents, *how do you feel your child's teacher does in using written communication to communicate important school-wide and classroom information to you*, yielded a mean score of 2.00 ($SD = .91, N = 23$) for parents at School A, and a mean score of 2.05 ($SD = .74, N = 21$) for parents at School B were found to be nonsignificant $t(42) = -.19, p = .850$. Parents rate written communication for school-wide and classroom information well from teachers.

Question 10 for parents, *how do you feel your child's teacher does in making phone calls to you to communicate important school-wide and classroom information*, yielded a mean score

of 1.62 ($SD = 1.12, N = 21$) for parents at School A, and a mean score of 1.33 ($SD = .97, N = 21$) for parents at School B were found to be nonsignificant $t(40) = -.89, p = .301$. Parents rate teachers fair in making phone calls to communication important school-wide and classroom information.

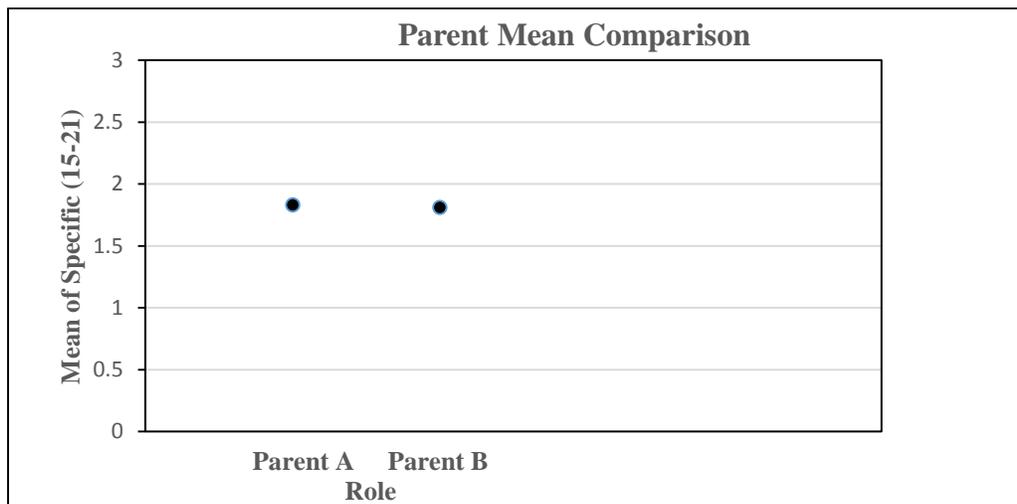
Question 11 for parents, *how do you feel you do in making phone calls to your child's teacher to ask about important school-wide and classroom information*, yielded a mean score of 1.57 ($SD = .98, N = 21$) for parents at School A, and a mean score of 1.32 ($SD = 1.06, N = 19$) for parents at School B were found to be nonsignificant $t(38) = .79, p = .432$. Parents rate themselves fair in making phone calls to communicate important school-wide and classroom information.

Question 12 for parents, *how do you feel your child's teacher does in communicating important school-wide and classroom information to you in informal interactions*, yielded a mean score of 1.64 ($SD = 1.00, N = 22$) for parents at School A, and a mean score of 1.57 ($SD = .98, N = 21$) for parents of School B were found to be nonsignificant $t(41) = .22, p = .831$. Parents rate themselves fair in communicating important school-wide and classroom information in informal interactions.

Question 13 for parents, *how do you feel your child's teacher does in using technology: emails, web page, blog, cellular phones to communicate important school-wide and classroom information to you*, yielded a mean score of 1.82 ($SD = 1.14, N = 22$) for parents at School A, and a mean score of 1.71 ($SD = .90, N = 21$) for parents at School B were found to be nonsignificant $t(41) = .33, p = .743$. Parents from both School A and B rate teachers fair in using technology to communicate important school-wide and classroom information.

Question 14 for parents, *overall, how do you feel your child's teacher does in communicating important school-wide and classroom information to you*, yielded a mean score of 1.83 ($SD = 1.07, N = 23$) for parents at School A, and a mean score of 1.90 ($SD = .89, N = 21$) for parents at School B were found to be nonsignificant $t(42) = -.26, p = .793$. Parents rate teachers fair in communicating school-wide communication.

The average mean difference between parent's perceptions at School A and School B can be seen in Figure 7, specific student communication. In comparison, the perceptions of parents at School A and School B is that communication is fair. However, as seen in the graph, parents at School A have a higher mean score but parents at both school rate the teachers fair in communicating specific student information.



Specific Communication

Figure 7. Average mean difference between parents' perceptions of specific communication at school A and school B.

In comparison, Question 15 for parents, *how do you feel your child's teacher does in using planned meetings/formal interactions to communicate specific information about your child*, yielded a mean score of 1.78 ($SD = 1.04, N = 23$) for parents at School A, and a mean

score of 1.95 ($SD = .83$, $N = 20$) for parents at School B were found to be nonsignificant $t(41) = -.58$, $p = .567$. Parents rate teachers fair in using the formal interactions to communicate specific information about a student.

Question 16 for parents, *how do you feel your child's teacher does in using written communication to communicate specific information to you about your child*, yielded a mean score of 1.87 ($SD = 1.01$, $N = 23$) for parents at School A, and a mean score of 1.86 ($SD = .85$, $N = 21$) for parents at School B were found to be nonsignificant $t(42) = .04$, $p = .925$. Parents rate teachers fair in using written communication to communicate specific information.

Question 17 for parents, *how do you feel your child's teacher does in responding to you to communicate specific information about your child*, yielded a mean score of 1.91 ($SD = 1.04$, $N = 23$) for parents at School A, and a mean score of 2.19 ($SD = .75$, $N = 21$) for parents at School B were found to be nonsignificant $t(42) = 1.01$, $p = .320$. Parents from School A rate teachers fair in responding to specific information about their child and parents from School B rate teachers well in responding to specific information about their child.

Question 18 for parents, *how do you feel your child's teacher does in making calls to you to communicate specific information about your child*, yielded a mean score of 1.65 ($SD = 1.14$, $N = 20$) for parents at School A, and a mean score of 1.24 ($SD = 1.00$, $N = 21$) for parents at School B were found to be nonsignificant $t(39) = 1.24$, $p = .224$. Parents from both schools rate teachers fair in making calls to communicate specific information about a child.

Question 19 for parents, *how do you feel your child's teacher does in using informal interactions to communicate specific information about your child*, yielded a mean score 1.78($SD = 1.04$, $N = 23$) for parents at School A, and a mean score of 1.67 ($SD = .73$, $N = 21$) for parents

at School B were found to be nonsignificant $t(42) = .42, p = .674$. Parents rate teachers fair in using informal interactions to communicate specific information about a student to parents.

Question 20 for parents, *how do you feel your child's teacher does in using technology: e-mails, web page, blog, cellular phones to communicate specific information about your child*, yielded a mean score of 1.87 ($SD = 1.06, N = 23$) for parents at School A, and a mean score of 1.76 ($SD = .89, N = 21$) for parents at School B were found to be nonsignificant $t(42) = .36, p = .718$. Parents from School A and B rate teachers fair in using technology to communicate.

Question 21 for parents, *overall, how do you think your child's teacher communicates with you about specific information about your child*, yielded a mean score of 1.91 ($SD = .91, N = 22$) for parents at School A, and a mean score of 2.00 ($SD = .78, N = 21$) for parents at School B were found to be nonsignificant $t(41) = -.24, p = .737$. Parents from School A and B rate teachers well overall in their communication about specific information about a child. The results of the t-test for each question are provided in Table 13.

Table 13

Independent t-Test Comparison by Question for All Parents

Survey question	Group-parent A			Group-parent B			T	df	p
	M	SD	N	M	SD	N			
Q1	.57	.73	23	.57	.75	21	-.03	42	.978
Q2	1.61	.78	23	1.81	.75	21	-.87	42	.391
Q3	1.65	.83	23	2.00	.83	21	1.38	.42	.174
Q4	.64	.66	22	.71	.56	21	-.42	41	.679

Table 13 - continued

Survey questions	Group-parent A			Group-parent B			<i>T</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>			
Q5	1.13	.76	23	1.14	.96	21	-.05	42	.962
Q6	1.70	.93	23	1.52	1.08	21	.57	42	.573
Q7	1.61	.84	23	1.81	.87	21	-.78	42	.441
Q8	1.87	1.06	23	1.90	.83	21	-.12	42	.904
Q9	2.00	.91	23	2.05	.74	21	-.19	42	.850
Q10	1.62	1.12	21	1.33	.97	21	.89	40	.381
Q11	1.57	.98	21	1.32	1.06	19	.79	38	.432
Q12	1.64	1.00	22	1.57	.98	21	.22	41	.831
Q13	1.82	1.14	22	1.71	.90	21	.33	41	.743
Q14	1.83	1.07	23	1.90	.89	21	-.26	42	.793
Q15	1.78	1.04	23	1.95	.83	20	-.58	41	.567
Q16	1.87	1.01	23	1.86	.85	21	.04	42	.965
Q17	1.91	1.04	23	2.19	.75	21	1.01	42	.320
Q18	1.65	1.14	20	1.24	1.00	21	1.24	39	.224
Q19	1.78	1.04	23	1.67	.73	21	.42	42	.674
Q20	1.87	1.06	23	1.76	.89	21	.36	42	.718
Q21	1.91	.97	22	2.00	.78	21	-.34	41	.737

**p* < .05

Analysis of Overall Perceptions

A One-Way Analysis of Variance (ANOVA) was conducted to determine if significance existed within the domains of communication between the groups. The following tables present the results from the ANOVA completed on the frequency of communication for all groups.

Table 14 and Figure 8 display the means between the perceptions of frequency of communication among teachers and parents at both schools. There are small differences in the mean scores for each group as indicated by the standard deviations in the table.

Table 14

Frequency of Communication (Survey Questions 1-7)

Participants	<i>N</i>	Mean	<i>SD</i>
Teacher A	18	1.66	.33
Teacher B	36	1.41	.42
Parent A	23	1.35	.49
Parent B	21	1.43	.49
Total	98	1.45	.44

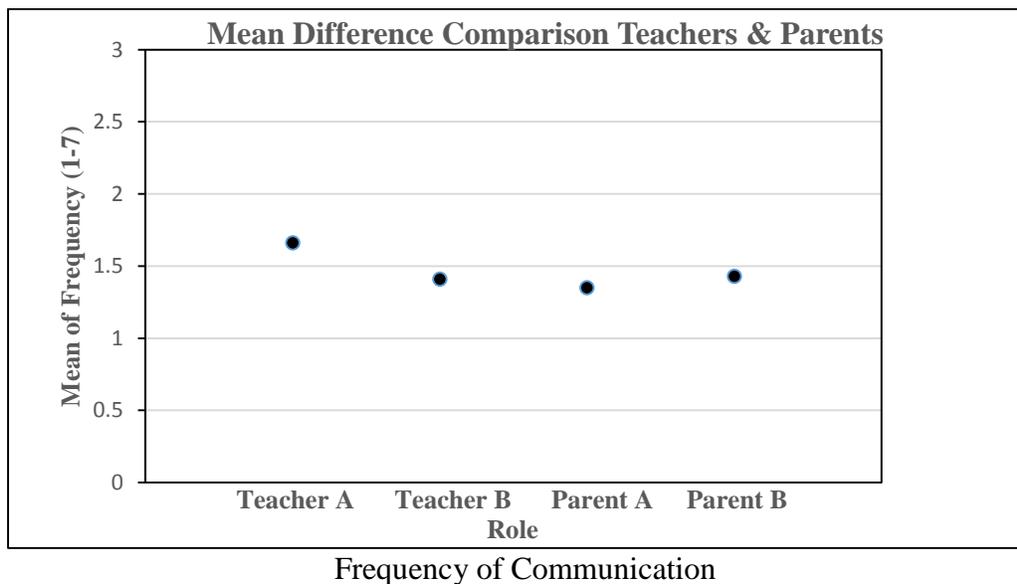


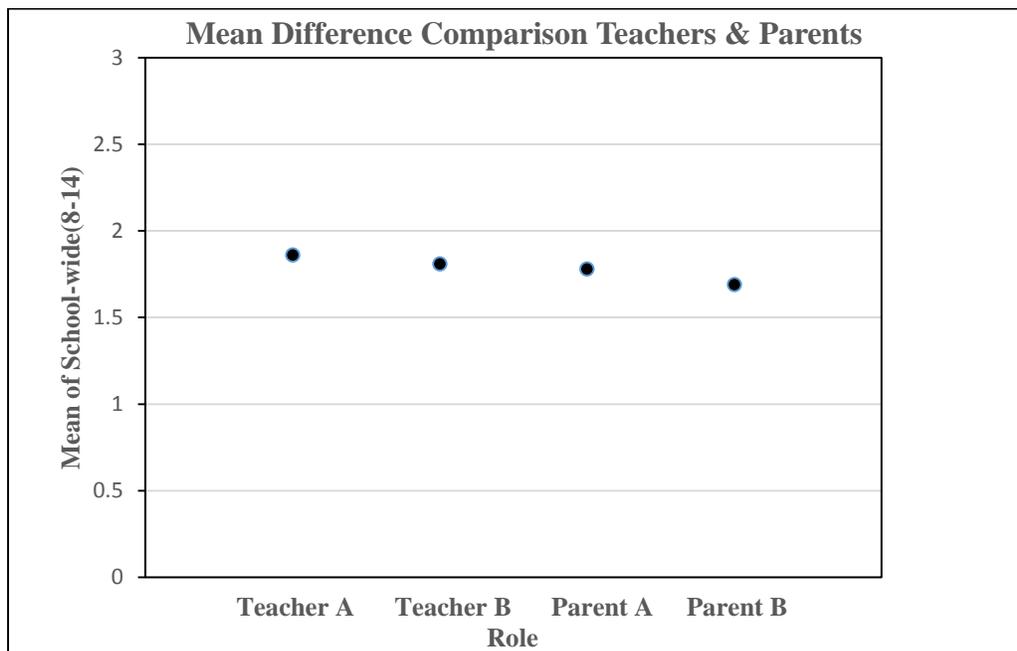
Figure 8. Means between the perceptions of frequency of communication among teachers and parents in school A and school B.

Table 15 and Figure 9 display the means between perceptions of school-wide communication among teachers and parents at both schools. There are small differences in the mean scores for each group as indicated by the standard deviations in the table.

Table 15

School-wide Communication (Survey Questions 8-14)

Participants	<i>N</i>	Mean	<i>SD</i>
Teacher A	18	1.86	.46
Teacher B	36	1.81	.51
Parent A	23	1.78	.92
Parent B	21	1.69	.74
Total	98	1.79	.66



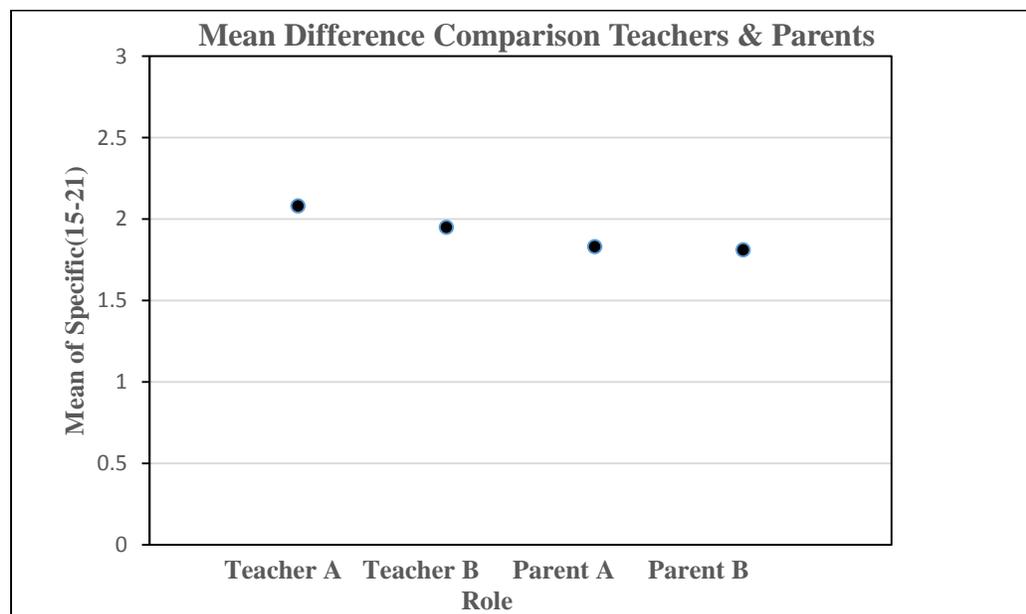
School-wide Communication

Figure 9. Means between the perceptions of school-wide communication among teachers and parents in school A and school B.

Table 16, figure 10 display the means between the perception of perception of specific communication among teachers and parents at both schools. There are small differences in the mean scores for each group as indicated by the standard deviations in the table.

Table 16
Specific Communication (Survey 15 – 21)

Participants	N	Mean	SD
Teacher A	18	2.08	.54
Teacher B	36	1.95	.53
Parent A	23	1.83	.98
Parent B	21	1.81	.71
Total	98	1.92	.70



Specific Communication

Figure 10. Means between the perceptions of specific communication among teachers and parents in school A and school B.

The analysis of variance, Table 17, was not significant in frequency of communication: $F(3, 94) = 1.87, p = .139, n^2 = .02$; school-wide communication: $F(3, 94) = .244, p = .865, n^2 = .02$; and specific communication $F(3, 94) = .631, p = .597, n^2 = .02$. Thus as indicated in Table 17, there is not significant evidence to reject the null hypothesis and conclude there is a significant difference in overall parents' and teachers' perceptions of communication for each domain. The actual difference in the mean scores between the groups determined large and small sizes between both parents and teachers at both School A and School B and between the comparison of the parent groups of School A and B and teacher groups of School A and B in all three categories based on Cohen's (1992) conventions for interpreting effect size.

Table 17

Analysis of Variance Between Groups

	Sum of squares	df	Mean square	F	P
Between groups for frequency (1-7)	1.081	3	.360	1.873	.139
Between groups for school-wide (8-14)	.331	3	.110	.244	.865
Between groups for specific (15-21)	.927	3	.309	.631	.597

* $p < .05$

Post hoc comparisons were completed with the use of Tukey's HSD test. The tests revealed that parents' and teachers' perceptions overall do not significantly differ in regards to the frequency of communication, school-wide communication, and specific student communication for both schools, $p > .05$, Table 14. There is not a significant difference between groups for both schools in all three communication domains.

Summary of the Evidence

This chapter presented detailed analyses and results of the data collected to investigate parents' and teachers' perceptions of effective communication. Effective communication was assessed by three domains: frequency of communication, school-wide communication, and specific student communication. Parents and teachers responded to survey questions rating their experiences. An independent *t*-test was conducted for each research question and indicated that there is a difference in the perception of the frequency of communication, but no difference between the communication of school-wide and specific communication at both schools. The results presented that there is a difference between parents' and teachers' perceptions of effective communication in School A but not School B, and a number of differences exists as reported in the data by individual survey questions. However, an analysis of variance was conducted for each overall domain to compare overall perceptions and indicated that collectively there is no significant difference of perceptions in effective communication between parents and teachers.

In Chapter Five, the researcher will summarize the findings, present implications for schools, and make suggestions for future studies regarding effective communication between teachers and parents.

Chapter 5: Summary of Findings

The researcher's purpose was to identify parent and teacher perceptions of effective communication in two schools in one division. The two schools were selected because of their different levels of communication based on a previous survey. This study identified where, when and how communication occurs between parents and teachers as well as related plausible solutions to improve communication. This study sought to determine whether or not the key elements identified in the literature review were prevalent in effective communication channels in elementary schools. The researcher surveyed parents and teachers educators from two elementary schools in central Virginia; both have a high percentage of socioeconomic and a majority minority student population. The teacher participants received three e-mail reminders requesting their input on a Likert-scale survey, and parents received two letters that contained a web link to a Likert-scale survey. The sampling included 98 parents and teachers, 41 from (School A) and 57 from (School B).

Research Questions

The research was based on six research questions and 21 questions, which were used as survey questions:

Perceptions of communication:

1. What are the teachers' perceptions of effective communication?
2. What are the parents' perceptions of effective communication?

Differences by role:

3. What are the differences between parents' and teachers' perceptions of effective communication in School A?

4. What are the differences between parents' and teachers' perceptions of effective communication in School B?

Differences by school:

5. What is the difference between teacher perceptions of communication in School A and School B?

6. What is the difference between parent perceptions of communication in School A and School B?

Findings and Discussion

Finding 1. Teacher's perceptions of effective communication, as indicated by the survey, were ratings of regularly for frequency, and very well for both school-wide and specific communication. The mean score in the domain of frequency was 2.38, which falls between regularly and frequently. The mean scores for school-wide and specific were both 3.00 which equates to a rating of frequently. Teacher invitations to involvement are effective in supporting parental involvement across all levels of schooling and with varied school populations (Hoover-Dempsey, et al., 2005).

Finding 2. Parents' perceptions of effective teacher communication, as indicated by the survey, were ratings of higher than regularly for frequency and very well for both school-wide and specific communication. The mean score in the domain of frequency was 2.50, which falls between regularly and frequently. The means scores for school-wide and specific were both 3.00 which equates to a rating of frequently. Parents' trust in teachers impacts their responses to invitations and perceptions that schools are safe, supportive, and trustworthy have been consistently associated with improved parental involvement (Adams & Christenson, 2000; Lareau & Horvat, 1993).

Finding 3. Parents' and teachers' perceptions of effective communication differed relating to frequency, with teachers' perceptions of their frequency of communication higher than the perceptions of the parents at School A. The rate for frequency was found to be significant $t(39) = 2.29, p = .027$. The results of this study reveal that parents, teachers, and students believe in the importance of parent involvement in education. Researchers of this study found that communication between the two groups was not as open as we expected; thus, if mutual communication between school and home had occurred, then the results from the teachers, parents, and students on the second portion of the survey would have been the same (DePlanty et al., 2007). Epstein (1986) and Sheldon and Epstein (2002) agree that open communication between parents and teachers can benefit the academic success of school students.

Finding 4. There were no differences in the perceptions of teacher and parents regarding the three areas of effective communication, as measured by the survey. The rate for frequency, school-wide, and specific domains were reported as nonsignificant where all p values were above .05. Communication between parents and teachers about child progress occur through notes, phone calls, or meetings. "Thus, it appears that communication is an important element in the development of positive, congruent relationships" (Minke, Sheridan, Kim, Ryoo, & Koziol, 2014, p. 541).

Finding 5. Teachers' perceptions of school wide and specific communication were no different in school A and in school B, but the frequency of communication was higher in school A than they it was in school B. The results of the independent t -test indicate there was a significant difference in the perception of frequency of communication between teachers at both school A and school B, $t(52) = 2.19, p = .033$. Anderson and Minke (2007) investigated the

relationship between parents' role construction and sense of efficacy and their involvement behaviors that would be influenced by their perceptions of time and energy demands and specific teacher invitations. The researchers, however, focused this study on understanding parents' decisions to become involved, but the emergence of specific invitations from teachers as the primary most influential item on parents' involvement choices is meaningful because schools have new knowledge to affect teacher practices and improve parent involvement (Anderson & Minke, 2007).

Finding 6. There were no differences in the parents' perceptions in schools A and B in any of the three areas of communication, based on the survey. The rate for frequency, school-wide, and specific domains were reported as nonsignificant where all p values were above .05. Likewise, when teachers offer suggestions to parents about helping their children with particular subjects, the parents come to understand that their involvement in these areas is needed (Daniel-White, 2002; Drummond & Stipek, 2004). When parents believe they are receiving more communication and invitations from teachers, they respond by getting involved in helping their children not only at home but also school (Reed et al., 2000).

Finding 7. Teacher and parent perceptions are not similar at school A regarding the written communication. The mean scores indicate that teachers regularly communicate in written form with parents and parents occasionally communicate in written form with teachers as determined by Question 3 for teachers, *how often do you communicate in written form with each of your parents*, yielded a mean score of 2.22 ($SD = .81$, $N = 18$) and a mean score of 1.65 ($SD = .83$, $N = 23$) for Question 3 for parents, *how often do you communicate in written form with your child's teacher* yield scores that indicate teachers and parents regularly communicate in written form were found to be significant $t(39) = 2.20$, $p = .033$. Teachers regularly communicate in

written form to provide parents with information and to document the educational progress of the student.

When parents and teachers have rich and frequent communication, they can build partnerships that are beneficial for children (Merkley, Schmidt, Dirksen, & Fulher, 2006). Furthermore, as conversations between homes and schools increases - understanding improves, suggestions are shared, and positive attitudes are more easily maintained (Ames, Khoju, & Watkins, 1993). The Epstein Model shifts some of the responsibility from parents to the school by acknowledging communication as a two-way process and encouraging schools to develop pathways for parent ownership and collaboration with teachers to increase student achievement (Barnard, 2004; Ingram, Wolfe, & Lieberman, 2007; Lopez & Donovan, 2009).

Finding 8. Teacher and parent perceptions are not similar regarding the frequency of using phones for communication at school A. Teachers occasionally make phone calls to parents and parents less than occasionally make calls to the teacher as determined by Question 4 for teachers, *how often do you make phone calls to each of your parents*, yielded a mean score of 1.50 ($SD = .51, N = 18$) and a mean score of .64 ($SD = .66, N = 22$) for Question 4 for parents, *how often do you make phone calls to your child's teacher*, were found to be significant $t(38) = 4.54, p = .000$. Phones are tools that can be used to respond to inquiries, find out information and set up conferences between parents and teachers.

Communication between parents and teachers about child progress occur through notes, phone calls, or meetings. “Thus, it appears that communication is an important element in the development of positive, congruent relationships” (Minke et al., 2014, p. 541). NCLB describes at least six ways in which parents can collaborate with schools on behalf of their children (Henderson & Mapp, 2002). The six ways typically provide parents with opportunities to make

individual choices, such as transferring their children to different schools, requesting supplemental services, accessing school records, and increasing opportunities for direct communication with schools (Bolivar & Chrispeels, 2011).

Finding 9. Teacher and parent perceptions are different regarding the use of technology at school A. Teachers regularly use technology but parents occasionally use technology to communicate as determined by Question 6 for teachers, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with each of your parents*, yielded a mean score of 2.44 ($SD = .62$, $N = 18$) and a mean score of 1.70 ($SD = .93$, $N = 23$) for Question 6 for parents, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with your child's teacher*, were found to be significant $t(39) = 2.95$, $p = .005$. Technology provides a way for parents and teachers to stay in contact and for parents to readily retrieve some information.

The frequency of the communication was identified as a challenge to teachers, specifically in the area of phone calls. The use of technology was also identified as a challenge to teachers. Wanat (2010) believes that schools must be proactive in establishing regular communication with parents whose children struggle academically. Opening lines of communication would result in new, creative ways to make parents feel more welcome and to provide them an opportunity to contribute to their children's school experience (Wanat, 2010).

Finding 10. Surveyed parents indicated that they communicated with teachers occasionally. Parents think that overall communication occurs occasionally with teachers, as reported in Question 7 for parents, *overall, how often do you think your child's teacher communicates with you*, yielded a mean score of 1.61 ($SD = .84$, $N = 23$) for parents at School A, and a mean score of 1.81 ($SD = .87$, $N = 21$) for parents at School B were found to be

nonsignificant $t(42) = -.78, p = .441$. Occasional communication with teachers may not provide the parent with the most current information; therefore, increased parental involvement is imperative to improving the rate by which teachers communicate with parents.

Numerous parental involvement interventions have provided support for when teachers reach out to parents and improve communication with them, parents become more involved in school in a variety of ways (Comer, 1986; Epstein, 1991). Conversely, the parent's level of involvement may influence the teacher's perception of the parent and, consequently, influence the quality of the parent-teacher relationship. Parents' perceptions of the school, as measured by their endorsement of it, may influence their willingness to be involved (Kohl et al., 2000). Evidence shows that many parents desire to become involved but do not feel encouraged nor do they have the open communication or support from the school to do so (DePlanty et al., 2007).

Finding 11. Surveyed parents indicated that teachers communicated school-wide information.

Parents rate teachers fair in communicating school-wide communication as reported in Question 14 for parents, *overall, how do you feel your child's teacher does in communicating important school-wide and classroom information to you*, yielded a mean score of 1.83 ($SD = 1.07, N = 23$) for parents at School A, and a mean score of 1.90 ($SD = .89, N = 21$) for parents at School B were found to be nonsignificant $t(42) = -.26, p = .793$. Routine communication of school-wide information will help train parents on what to expect regarding correspondence that is sent home.

“Although trust and empowerment in the partnership require two-way communication across time, invitations offer an effective starting point for the creation of a partnership” (Hoover-Dempsey et al., 2005, p. 110). Teacher invitations to involvement are effective in

supporting parental involvement across all levels of schooling and with varied school populations (Hoover-Dempsey et al., 2005). Parents' perception of the school, as measured by their endorsement of it, may influence their willingness to be involved (Kohl et al., 2000).

Finding 12. Surveyed parents indicated that teachers communicated specific information in a fair manner. Parents from School A and School B rate teachers well overall in their communication about specific information about a child as reported in Question 21 for parents, *overall, how do you think your child's teacher communicates with you about specific information about your child*, yielded a mean score of 1.91 ($SD = .91$, $N = 22$) for parents at School A, and a mean score of 2.00 ($SD = .78$, $N = 21$) for parents at School B were found to be nonsignificant $t(41) = -.24$, $p = .737$. Teachers work diligently to document student progress and ensure that parents are provided with specific information about their child.

There is a greater likelihood for elementary school teachers to have strong communication practices in place and to demonstrate more effective collaboration with parents at school and at home with homework (Dauber & Epstein, 1993). Invitations for participation received by the parent directly from the teacher or student encouraged families to engage in homework activities more than families who did not receive invitations (Patel & Stevens, 2010). Van Voorhis (2003) similarly reported significantly increased parent involvement from parents who received invitations to interact with their children on their homework. Epstein (1986) and Sheldon and Epstein (2002) agree that open communication between parents and teachers can benefit the academic success of school students.

Finding 13. Both teacher and parent perceptions of effective communication in school B had low ratings regarding planned/formal meetings. The scores indicate that teachers occasionally conduct planned meetings and parents occasionally attend planned

meetings, as indicated in Question 2 for teachers, *how often do you conduct planned meetings/formal interactions with each of your parents*, yielded a mean score of 1.19 ($SD = .47$, $N = 36$) and a mean score of 1.81 ($SD = .75$, $N = 21$) for Question 2 for parents, *how often do you attend planned meetings/formal interactions with your child's teacher*, were found to be significant $t(55) = 3.82$, $p = .000$. Teachers and parents goals for meetings should be established early in the school year in order to have a trusting relationship in which both parents and teachers commit to attending formal meetings.

Many teachers make assumptions that some parents are not interested or do not really care about their children's education (Hornby 2011). Actually parents often feel incompetent on the topics of the curriculum as well as processes within the schools. Parents may also believe that teachers are not genuine in the relationship and are only concerned with resolving immediate problems rather than working toward long-term solutions. Because of this belief, it is not surprising that there is a lack of mutual understanding between parents and teachers that results in mistrust and an additional barrier to communication (Horny & Lafaele, 2011).

Finding 14. Both teacher and parent perceptions of effective communication in school B had low ratings in the use of phone calls for communication. Teachers occasionally make phone calls to parents and parents less than occasionally make calls to the teachers, as indicated in Question 4 for teachers, *how often do you make phone calls to each of your parents*, yielded a mean score of 1.25 ($SD = .55$, $N = 36$) and a mean score of .71 ($SD = .56$, $N = 21$) for Question 4 for parents, *how often do you make phone calls to your child's teacher*, were found to be significant $t(55) = 3.51$, $p = .001$. Phone calls should be encouraged at the appropriate times from teachers to parents and parents should use phone calls to acquire information that they may not know.

Whitaker and Hoover's (2013) study demonstrated that general communications from schools to families integrated with the concept of school climate for parent and family involvement, defined school expectations of involvement as including varied school wide efforts to communicate with parents through such modes as: automated phone calls, school marquees, school newsletters and mailings or e-mails, that is, broad, informative involvement initiatives that are often separate from the personal and social interactions most often reflective of school climate. School expectations also included explicit invitations to involvement, which stem from requests for parents' support and participation in school-wide activities and community service projects (Whitaker & Hoover Dempsey, 2013).

Finding 15. Both teacher and parent perceptions of effective communication in school B had low ratings overall for the frequency of communication. Teachers and parents think that overall communication occurs occasionally, as indicated in Question 7 for teachers, *overall, how often do you think your parents communicate with you*, yielded a mean score of 1.17 ($SD = .70, N = 36$) and a mean score of 1.81 ($SD = .87, N = 21$) for Question 7 for parents, *overall, how often do you think your child's teacher communicates with you*, were found to be significant $t(55) = 3.06, p = .003$. Occasional communication needs to improve to regular communication in order to build partnerships and engage all stakeholders in the child's education.

Schools have the ability to impact parent-involvement levels. Evidence shows that many parents desire to become involved but do not feel encouraged nor do they have the open communication or support from the school to do so (DePlanty et al., 2007). According to Young et al. (2013), it is important that a communication process that reaches out to family and community through various means be established and implemented both informally and

formally. When parents believe they are receiving more communication and invitations from teachers, they respond by getting involved in helping their children not only at home but also school (Reed et al., 2000).

Finding 16. Surveyed teachers indicated a different rate of using technology to communicate with parents. Teachers at School A regularly use technology to communicate, whereas, teachers at School B occasionally use technology to communicate to parents, as reported in Question 6 for teachers, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with each of your parents*, yielded a mean score of 2.44 ($SD = .62$, $N = 18$) for teachers at School A, and a mean score of 1.47 ($SD = .91$, $N = 36$) for teachers at School B were found to be significant $t(52) = .408$, $p = .000$. Technology is a useful tool for teachers to provide ongoing information to all stakeholders.

Advances in technology have provided websites that give a more formal and general form of communication, to deliver various kinds of information, whereas email sends more private communication. (Kosaretsk & Chernyshova 2013) “The frequency of communication has a tangible influence on parents’ involvement” (Kosaretsk & Chernyshova 2013, p. 84). Thus, communication should be sufficiently frequent in order to make parents feel informed as partners with the school.

Finding 17. Surveyed teachers indicate that they communicate specific student information in formal and informal meetings consistently. Teachers do well in using planned meetings to communicate specific information about a student, as reported in Question 15, *how do you feel you do in using planned meetings/formal interactions to communicate specific information about a student to his or her parents*, yielded a mean score of 2.22 ($SD = .65$, $N = 18$) for teachers at School A, and a mean score of 2.03 ($SD = .70$, $N = 36$) for teachers at School

B were found to be nonsignificant $t(52) = 1.99, p = .327$. Teachers are aware of the importance of meeting with parents to discuss a student's progress.

In a study conducted by Wiseman (2010), observations and conversations identified that families need to feel support and encouragement in order for relationships to develop. Culture and power relationships also have a profound influence on the relationships between families and school and many minority families feel alienated from schools as a result of their own negative experiences while they were students (Wiseman, 2010). Developing these relationships with a focus on sharing school knowledge among parents also fosters mutual support, which Lareau and Weininger (2003) found lacking in low-income parents.

Finding 18. Surveyed teachers indicated there are differences in effective communication and a significant difference in frequency of communication. Teachers at School A regularly use technology to communicate, whereas, teachers at School B occasionally use technology to communicate to parents as determined in Question 6, *how often do you use technology: e-mails, web page, blog, cellular phones to communicate with each of your parents*, yielded a mean score of 2.44 ($SD = .62, N = 18$) for teachers at School A, and a mean score of 1.47 ($SD = .91, N = 36$) for teachers at School B were found to be significant $t(52) = .408, p = .000$ in the frequency of communication domain.

Eccles and Harold (1993) determined that informing parents of their children's education and of school programs a strategy for improved parental involvement. These findings lead to speculation that increased communication between the school and parents and increased empowerment of parents should lead to increased parent participation or involvement in school activities and satisfaction with schools (Barnard, 2004). Strong communication between parents and school personnel is fundamental to a partnership with parents and in building a sense of

community between home and school; therefore, school personnel must continue to be innovative and improve their skills to maximize effective communication with parents (Williams & Sanchez, 2011).

Finding 19. Surveyed teachers indicated that they communicated school wide information moderately well. Teachers do well in using written communication to communicate school-wide information to parents, as reported in Question 9 for teachers, *how do you feel you do in using written communication to communicate important school-wide and classroom information to each of your parents*, yielded results of a mean score of 2.17 ($SD = .71$, $N = 18$) for teachers at School A, and a mean score of 2.14 ($SD = .77$, $N = 35$) for teachers at School B were found to be nonsignificant $t(51) = .11$, $p = .913$.

Strong communication between parents and school personnel is fundamental to a partnership with parents and in building a sense of community between home and school; therefore, school personnel must continue to be innovative and improve their skills to maximize effective communication with parents (Williams & Sanchez, 2011). Kosaretsk and Chernyshova (2013) believe that a major condition needed to involve parents in the education of their children is communication between the school and families and with parents taking part in school the life of the children a favorable environment for teaching and learning is created.

Summary of Findings

Overall the perception of effective communication for teachers and parents is different at School A and consistently low for teachers and parents at School B. The perceptions of teachers as a group overall is similar with the exception of the use of technology. The perceptions of parents as a group overall is that teachers communicate occasionally and communicate school-wide and specific information fair. Overall, it is recognized that the participants (teachers and

parents) have an idea of how important communication is and even have similar perceptions on many aspects of effective communication. They do, however, vary in a number of areas as to how that communication occurs as reported by survey responses.

Implications for Practice

The following recommendations stem from the findings and literature review of this study.

Implication 1. Schools should use various modes of communication to effectively communicate opportunities of involvement to parents. Teacher invitations emerge from teachers' recognition and valuing of parents' contributions to student learning (Adams & Christenson, 2000) and from teachers' responsiveness to parents' requests on how to help their children learn (Hoover-Dempsey, Bassler, & Burrow, 1995). Parents and teachers must make a concerted effort to build relationships and share information that will positively impact the educational success of the student

Implication 2. Teachers must continue to consistently communicate with parents about school wide and specific student information to parents in order to improve the parent response rate to student issues. Schools have the ability to impact parent-involvement levels. Evidence shows that many parents desire to become involved but do not feel encouraged nor do they have the open communication or support from the school to do so (DePlanty et al., 2007). While it seems a daunting task since parents respond to school-related issues at a low rate, educators must continue to provide information.

Implication 3. Teachers must work to build relationships with parents in order to ensure that parents will openly communicate.

Theoretical work by Vygotsky (1978) and Rogoff et al. (2003) illustrates the significance of social environment in the creation and preservation of individuals' ideas and beliefs about their roles in varied contexts. Critical in this social process are interpersonal communications and collaborations, explicit expectations and goals for the new role for parents (Whitaker & Hoover Dempsey, 2013). "Thus, parents' interactions with students, teachers, and other school members combine to create a social context in which parental roles are constructed" (Whitaker & Hoover Dempsey, 2013, p. 90).

Implication 4. Parents must understand their roles in schools in order to help provide a positive learning environment for their child. Hoover-Dempsey and Sandler (1997) also developed a comprehensive theoretical framework for parental involvement, which focused on three main issues (a) why parents become involved, (b) how parents choose their type of involvement, and (c) why parental involvement has a positive impact on students. Bloom (1980) has defined the meaning of parental involvement in practice, as various parental behaviors and parenting practices.

Implication 5. Teachers and parents must participate in the communication process to make it effective, teachers must consistently and continuously provide information and parents in the same fashion must request and require information. Communicating is establishing effective two-way communication about school programs and children's progress. Parent-teacher conferences, clear information on school policies and programs, and phone calls are some practices of this kind of communication. Many benefits for children stem from awareness of individual progress, understanding school policies, and improving communication skills (Epstein et al., 2002). It is important that a communication process that reaches out to

family and community through various means be established and implemented both informally and formally (Young et al., 2013).

Implication 6. School leaders must strategize and implement methods that will guide parents and teachers in the communication process. Teachers and parents are able to recognize and realize that principals who are experts in collaborating as well as communicating sincerely and with clear messages to resolve common problems are able to successfully build relationships and trust among all stakeholders (Reppa et. al., 2010). These methods personally encourage parents and the teachers in the highest levels of significances of motivators of Maslow’s Hierarchy of Needs and facilitate the growth of strong relations between the school and parents. This level of communication contains a high degree of emotional intelligence because of two basic factors: (a) promotion of effective collaboration from the school side, and (b) from the side of parent (Reppa et. al., 2010).

Recommendations for Future Studies

The following recommendations have been made for future researchers as a result of this study:

1. Expand the study to include students as study participants in order to gauge the impact of parent involvement and communication with the teachers.
2. Include a qualitative portion to identify the roles parents, teachers and students perceive are theirs.
3. Include more schools in order to gain more participants.

Reflections

This study has shown the researcher the significance of research and its impact on education. The literature for parental involvement provides educators with a plethora of

information on how important parents are to the educational success of children. This study enabled the researcher to gain a deeper understanding of components of parental involvement, specifically the communication process that occurs between parents and teachers regarding students. Because teachers and parents often report a feeling of distrust in their relationships, communication is highlighted in this study.

In order for students to improve, parents and teachers not only have to work around any differences but also be able to trust and communicate openly to actively work toward the common goal of student excellence. Parents need invitations to communicate on a regular basis. A movement from traditional to nontraditional means to communicate to include different modes of technology should be utilized to communicate with parents.

Parents need to take a more active role in communicating with the school and being involved in their child's education. Parents need to understand why it is important that they become more involved and they need to know how to be involved. Teachers need to be trained on how to best communicate with parents. To include what information, how to speak to parents and when.

School Leaders need to incorporate communication plans at all levels, from the central division level to individual schools that will help to actively engage parents in conversations regarding student learning. School Leaders must also develop professional development opportunities to train teachers on how best to communicate with parents. Additionally, school leaders must teach parents on how to constructively communicate with administrators and teachers to advocate fairly for their children.

This study has equipped the researcher with information and adequate tools to help educators understand how to improve the communication process between parents and teachers.

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Appendix A

Training in Human Subjects Protection Certificate of Completion



Appendix B

Institutional Review Board Approval



Office of Research Compliance
 Institutional Review Board
 North End Center, Suite 4120, Virginia Tech
 300 Turner Street NW
 Blacksburg, Virginia 24061
 540/231-4606 Fax 540/231-0959
 email irb@vt.edu
 website <http://www.irb.vt.edu>

MEMORANDUM

DATE: October 15, 2014
TO: Carol S Cash, Kecia O Lipscomb
FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)
PROTOCOL TITLE: Parent and Teacher Perceptions of Effective Communication
IRB NUMBER: 14-945

Effective October 14, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2,4**
 Protocol Approval Date: **October 14, 2014**
 Protocol Expiration Date: **N/A**
 Continuing Review Due Date*: **N/A**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

Appendix B – continued



Office of Research Compliance
 Institutional Review Board
 North End Center, Suite 4120, Virginia Tech
 300 Turner Street NW
 Blacksburg, Virginia 24061
 540/231-4606 Fax 540/231-0959
 email irb@vt.edu
 website <http://www.irb.vt.edu>

MEMORANDUM

DATE: November 12, 2014
TO: Carol S Cash, Kecia O Lipscomb
FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)
PROTOCOL TITLE: Parent and Teacher Perceptions of Effective Communication
IRB NUMBER: 14-945

Effective November 12, 2014, the Virginia Tech Institution Review Board (IRB) Administrator, Carmen T Papenfuss, approved the Amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2,4**
 Protocol Approval Date: **October 14, 2014**
 Protocol Expiration Date: **N/A**
 Continuing Review Due Date*: **N/A**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
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Appendix C

Permission to Conduct Research and Distribute Surveys



Department of Research & Planning

10/2/2014

Ms. Kecia Lipscomb
6729 Bryanbell Dr.
North Chesterfield, VA 23234

Dear M.s Lipscomb:

The Department of Research and Planning has reviewed and approved your research study entitled “Parent and teacher perception of effective communication”. Your study was approved by the review committee with the following revisions and/or conditions:

- Revise the teacher and parent letters and the teacher and parent surveys.
- All communication to the schools will be through Research and Planning. Research and Planning will email the teachers the invitation letter and online survey link. The parent paper copies will be developed and packaged by the researcher and Research and Planning will deliver the parent copies to the schools to be sent home with the students. All completed parent surveys should be mailed directly to the researcher.

Approval to conduct the study is limited to one year from the time of proposal submission. If the research timeline or any other aspect of your study changes during the time frame, please contact Helen Whitehurst and submit the changes for review prior to proceeding. If you are affiliated with an organization with an Institutional Review Board (IRB), the IRB approval letter must be on file in our office prior to beginning the study. Although your study has been approved, participation by individuals and schools is completely voluntary. Reports and publications generated from this study should not identify the individuals, schools, or the division and all research materials should accurately represent the party conducting the study. It is our expectation that you will submit a final report upon completion of the study to the Department of Research and Planning.

Please contact Helen Whitehurst at hswhiteh@henrico.k12.va.us or (804) 652-3831 who will assist you in the process of beginning your research studies in the schools or offices that you have requested.

Thank you for your interest in Henrico County Public Schools.

Sincerely,

Tiffany Hinton, Ph.D.
Director of Research and Planning
Henrico County Public Schools
804-652-3835

Helen Whitehurst, Ph.D.
Educational Specialist - Research
Henrico County Public Schools
804-652-3831

Appendix D: Permission to Use Tool

Kecia O. Lipscomb (kolipscomb) <kolipscomb@henrico.k12.va.us>

to JMurphy, me

Hello,

I am writing my dissertation on the perceptions of effective communication and came across your study. I am writing to ask you permission to use your tool and the opportunity to speak with you if needed and if you are available.

Thank you for your time and consideration.

Thanks,

Kecia O. Lipscomb

Principal

Arthur Ashe Elementary

P.[804/343-6550](tel:8043436550) F.[804/343-6514](tel:8043436514)

"Start where you are. Do what you can. Use what you have." Arthur Ashe J

--

Confidentiality Message

This message is intended only for the named recipient and may contain information for the intended recipient, you are hereby notified that any use, dissemination, distribution, or disclosure of this communication in error, please notify me immediately by return email.



Kecia O. Lipscomb (kolipscomb) <kolipscomb@henrico.k12.va.us>

to kolipscomb, me

Thanks,

Kecia O. Lipscomb

Principal

Appendix D – continued



Kecia O. Lipscomb (kolipscomb)

Hello, I am writing my dissertation on the perceptions of effective communica



Kecia O. Lipscomb (kolipscomb) <kolipscomb@henrico.k12.va.us>

to kolipscomb, me

Thanks,

Kecia O. Lipscomb

Principal

Arthur Ashe Elementary

P. [804/343-6550](tel:8043436550) F. [804/343-6514](tel:8043436514)

"Start where you are. Do what you can. Use what you have." Arthur Ashe J

--

Confidentiality Message

This message is intended only for the named recipient and may contain information intended for the named recipient. If you are not the named recipient, you are hereby notified that any use, dissemination, distribution, or disclosure of this information is strictly prohibited. If you received this communication in error, please notify me immediately by returning the message to the sender.

From: Jill Murphy [jmurphy@rockdale.k12.ga.us]

Sent: Tuesday, August 12, 2014 5:31 AM

To: Kecia O. Lipscomb (kolipscomb)

Subject: Re: Survey Instrument

Good morning, Kecia,

You have my permission to use my communication survey. I wish you the bes

Thank you,

Jill Murphy

--

Appendix E: Parent Teacher Communication Survey

October, 2014

Dear Parent or Guardian:

I am Kecia Lipscomb and I am currently enrolled as a doctoral student at Virginia Polytechnic Institute and State University in the School of Education. I am conducting a survey to learn about parents' and teachers' perception of effective communication. You are receiving this survey because you are the parent or guardian of a student at ____Elementary School and play a significant role in helping your child succeed in school.

You are invited to participate in a study that will review the different ways your child's teacher communicates with you. Participation in this study involves completing the attached survey which should take only 15 minutes of your time. The survey is intended to be completed by the adult within the family who has the most contact with your child's teacher. ***Your participation in this research is strictly voluntary and you may decide not to participate or choose to stop your involvement at any time during this research without fear or penalty or negative consequences of any kind.*** You may complete the questionnaire at your leisure and return it by mail using the stamped enclosed preaddressed envelope by October 15, 2014. There are no risks associated with your participation and there is no compensation for your participation.

The information you provide will be strictly confidential. Results of this research will be reported as aggregate summary data only and no individually identifiable information will be presented. Additionally, all raw data will be stored in a locked safe in my home. You also have the right to review a copy of the research results by contacting me via email at kecial7@vt.edu.

By completing and returning this survey, it is assumed that you have read and understand the preceding information explaining the purpose of this research and your rights and responsibilities as a participant, and you consent to participate in this research according to the terms and conditions outlined above.

If you have any questions regarding the survey process or your participation in this survey, please contact me at kecial7@vt.edu or my supervising chair at Virginia Polytechnic Institute and State University, Dr. Carol Cash at ccash48@vt.edu.

Sincerely,

Kecia Lipscomb

Appendix E - continued**Parent Communication Survey**

Directions: Please answer the following questions about the communication from your child's teacher. Communication is an important element in the development of positive, two way relationships between parents and teachers. When communication is open and pleasant it improves the interactions between home and school and therefore provides a supportive environment by which parents and teachers are willing to work together to ensure high student performance (Minke, Sheridan, Kim, Ryoo & Koziol, 2014, p. 541).

SECTION 1: Methods of Communication**PART A**

Please use the scale below to indicate how often you or your child's teacher uses each of the six types of communication.

“Occasionally” = inconsistent; approximately once or twice a nine weeks

“Regularly” = more consistently; approximately one or twice a month

“Frequently” = consistently; approximately once or twice a week

METHOD OF COMMUNICATION	NEVER 0	OCCASIONALLY 1	REGULARLY 2	FREQUENTLY 3
Planned Meetings/Formal Interactions	0	1	2	3
Written	0	1	2	3
Phone Calls FROM Teacher	0	1	2	3
Phone Calls To Teacher	0	1	2	3
Informal Interactions	0	1	2	3
Technology: emails, web page, blog, cell phones, etc.	0	1	2	3
OVERALL, how often do you think your child's teacher communicates?	0	1	2	3

Appendix E – continued

PART B

Please use the scale below to indicate how you feel your child’s teacher does in using each of the six types of communication to communicate *important school-wide and classroom information* (i.e., report card, student progress, school events, school notices).

METHOD OF COMMUNICATION	POOR 0	FAIR 1	WELL 2	VERY WELL 3
Planned Meeting/Formal Interactions	0	1	2	3
Written	0	1	2	3
Phone Calls FROM Teacher	0	1	2	3
Phone Calls TO Teacher	0	1	2	3
Informal Interactions	0	1	2	3
Technology: emails, web page, blog, cell phones, etc.	0	1	2	3
OVERALL, how often do you think your child’s teacher communicates?	0	1	2	3

PART C

Please use the scale below to indicate how you feel your child’s teacher does in using each of the six types of communication to communicate *specific information about your child* (i.e., great successes, specific learning challenges, ways you may help your child at home, school performance, behavior issues).

METHOD OF COMMUNICATION	POOR 0	FAIR 1	WELL 2	VERY WELL 3
Planned Meeting/Formal Interactions	0	1	2	3
Written	0	1	2	3
Phone Calls FROM Teacher	0	1	2	3
Phone Calls TO Teacher	0	1	2	3
Informal Interactions	0	1	2	3
Technology: emails, web page, blog, cell phones, etc.	0	1	2	3
OVERALL, how often do you think your child’s teacher communicates?	0	1	2	3

Appendix E - continued**SECTION 2: Parent Demographic Information**

Please provide general information about yourself by checking the boxes that describe you.

1. Please indicate your relationship to the student:
Parent _____ Grandparent _____ Aunt/Uncle _____ Foster Parent _____
Step-parent _____ Other _____ No Response _____
2. What is your gender? Male _____ Female _____
3. What is your ethnicity? (Please check only one.)
Caucasian _____ African-American _____ Asian _____ Native American _____
Hispanic _____ Other _____ No Response _____
4. What grade is your child? K _____ 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Appendix E - continued

Parent Communication Survey Questions

Frequency (Q1.-Q7)

- Q1. How often do you receive phone calls from your child's teacher?
- Q2. How often do you attend planned meetings/formal interactions with your child's teacher?
- Q3. How often do you communicate in written form with your child's teacher?
- Q4. How often do you make phone calls to your child's teacher?
- Q5. How often do you have informal interactions with your child's teacher?
- Q6. How often do you use technology: emails, web page, blog, cellular phones to communicate with your child's teacher?
- Q7. Overall, how often do you think your child's teacher communicates with you?
-

School wide (Q8. – Q14)

- Q8. How do you feel your child's teacher does in using planned meetings/formal interactions to communicate important school-wide and classroom information to you?
- Q9. How do you feel your child's teacher does in using written communication to communicate important school wide and classroom information to you?
- Q10. How do you feel your child's teacher does in making phone calls to you to communicate important school wide and classroom information?
- Q11. How do you feel you do in making phone calls to your child's teacher to ask about important school wide and classroom information?
- Q12. How do you feel your child's teacher does in communicating important school wide and classroom information to you in informal interactions?
- Q13. How do you feel your child's teacher does in using technology: emails, web page, blog, cellular phones to communicate important school wide and classroom information to you?
- Q14. Overall, how do you feel your child's teacher does in communicating important school wide and classroom information to you?
-

Specific (Q15. – Q21.)

- Q15. How do you feel your child's teacher does in using planned meetings/formal interactions to communicate specific information about your child?
- Q16. How do you feel your child's teacher does in using written communication to communicate specific information to you about your child?
- Q17. How do you feel your child's teacher does in responding to you to communicate specific information about your child?
- Q18. How do you feel your child's teacher does in making calls to you to communicate specific information about your child?
- Q19. How do you feel your child's teacher does in using informal interactions to communicate specific information about your child?
- Q20. How do you feel your child's teacher does in using technology: emails, web page, blog, cellular phones to communicate specific information about your child?
- Q21. Overall, how do you think your child's teacher communicates with you about specific information about your child?
-

Appendix F: Teacher Communication Survey

October, 2014

Dear Colleague:

I am Kecia Lipscomb and I am currently enrolled as a doctoral student at Virginia Polytechnic Institute and State University in the School of Education. I am conducting a survey to learn about parents' and teachers' perception of effective communication.

You are invited to participate in a study that will review the different ways you communicate with your students' parents. Participation in this study involves completing an online survey which should take only 15 minutes of your time. The survey is intended to be completed in reference to your current communication practices. ***Your participation in this research is strictly voluntary and you may decide not to participate or choose to stop your involvement at any time during this research without fear or penalty or negative consequences of any kind.*** You may complete the questionnaire at your leisure online by October 15, 2014. There are no risks associated with your participation and there is no compensation for your participation.

The information you provide will be strictly confidential. Results of this research will be reported as aggregate summary data only and no individually identifiable information will be presented. Additionally, all raw data will be stored in a locked safe in my home. You also have the right to review a copy of the research results by contacting me via email at kecial7@vt.edu.

By completing and returning this survey, it is assumed that you have read and understand the preceding information explaining the purpose of this research and your rights and responsibilities as a participant, and you consent to participate in this research according to the terms and conditions outlined above.

If you have any questions regarding the survey process or your participation in this survey, please contact me at kecial7@vt.edu or my supervising chair at Virginia Polytechnic Institute and State University, Dr. Carol Cash at ccash48@vt.edu.

Sincerely,

Kecia Lipscomb

Appendix F - continued**Teacher Communication Survey**

Directions: Please answer the following questions about the communication with parents. Communication is an important element in the development of positive, two-way relationships between parents and teachers. When communication is open and pleasant it improves the interactions between home and school and therefore provides a supportive environment by which parents and teachers are willing to work together to ensure high student performance (Minke, Sheridan, Kim, Ryoo & Koziol, 2014, p. 541).

SECTION 1: Methods of Communication**PART A**

Please use the scale below to indicate how often you use each of the six types of communication with each of your parents.

“Occasionally” = inconsistent; approximately once or twice a nine weeks

“Regularly” = more consistently; approximately one or twice a month

“Frequently” = consistently; approximately once or twice a week

METHOD OF COMMUNICATION	NEVER 0	OCCASIONALLY 1	REGULARLY 2	FREQUENTLY 3
Planned Meetings/Formal Interactions	0	1	2	3
Written	0	1	2	3
Phone Calls FROM Parent	0	1	2	3
Phone Calls TO Parent	0	1	2	3
Informal Interactions	0	1	2	3
Technology: emails, web page, blog, cell phones, etc.	0	1	2	3
OVERALL, how often do you think your child’s teacher communicates?	0	1	2	3

Appendix F - continued

PART B

Please use the scale below to indicate how you feel you do in using each of the six types of communication to communicate *important school-wide and classroom information* (i.e., report card, student progress, school events, school notices) to the parents of your students.

METHOD OF COMMUNICATION	POOR 0	FAIR 1	WELL 2	VERY WELL 3
Planned Meeting/Formal Interactions	0	1	2	3
Written	0	1	2	3
Phone Calls FROM Parent	0	1	2	3
Phone Calls TO Parent	0	1	2	3
Informal Interactions	0	1	2	3
Technology: emails, web page, blog, cell phones, etc.	0	1	2	3
OVERALL, how often do you think your child's teacher communicates?	0	1	2	3

PART C

Please use the scale below to indicate how you feel you do in using each of the six types of communication to communicate *specific information about a student to his or her parent(s)* (i.e., great successes, specific learning challenges, ways you may help your child at home, school performance, behavior issues).

METHOD OF COMMUNICATION	POOR 0	FAIR 1	WELL 2	VERY WELL 3
Planned Meeting/Formal Interactions	0	1	2	3
Written	0	1	2	3
Phone Calls FROM Parent	0	1	2	3
Phone Calls TO Parent	0	1	2	3
Informal Interactions	0	1	2	3
Technology: emails, web page, blog, cell phones, etc.	0	1	2	3
OVERALL, how often do you think your child's teacher communicates?	0	1	2	3

Appendix F - continued

(Teacher Communication Survey Questions)

Frequency (Q1.-Q7)
Q1. How often do you receive phone calls from your each of your parents?
Q2. How often do you conduct planned meetings/formal interactions with each of your parents?
Q3. How often do you communicate in written form with each of your parents?
Q4. How often do you make phone calls to each of your parents?
Q5. How often do you have informal interactions with each of your parents?
Q6. How often do you use technology: emails, web page, blog, cellular phones to communicate with each of your parents?
Q7. Overall, how often do you think your parents communicate with you?
School wide (Q8. – Q14)
Q8. How do you feel you do in using planned meetings/formal interactions to communicate important school-wide and classroom information to each of your parents?
Q9. How do you feel you do in using written communication to communicate important school wide and classroom information to each of your parents?
Q10. How do you feel you do in receiving phone calls to you to communicate important school wide and classroom information?
Q11. How do you feel you do in making phone calls to parents that communicate important school wide and classroom information to each of your parents?
Q12. How do you feel you do in communicating important school wide and classroom information to each of your parents in informal interactions?
Q13. How do you feel you do in using technology: emails, web page, blog, cellular phones to communicate important school wide and classroom information to each of your parents?
Q14. Overall, how do you feel you do in communicating important school wide and classroom information to each of your parents?
Specific (Q15. – Q21.)
Q15. How do you feel you do in using planned meetings/formal interactions to communicate specific information about a student to his or her parents?
Q16. How do you feel you do in using written communication to communicate specific information to you about a student to his or her parents?
Q17. How do you feel you do in receiving phone calls from a parent to communicate specific information about a student to his or her parents?
Q18. How do you feel you do in making calls to parents to communicate specific information about a student to his or her parents?
Q19. How do you feel you do in using informal interactions to communicate specific information about a student to his or her parents?
Q20. How do you feel you do in using technology: emails, web page, blog, cellular phones to communicate specific information about a student to his or her parents?
Q21. Overall, how often do you think you communicates with parents about specific information about a student?

Appendix G: Informed Consent

Please Keep this Informed Consent Form for Your Records

Parent and Teacher Perception of Effective Communication

The purpose of this study is to investigate the perception of communication between teachers and parents as reported by teachers about parents and as reported by parents about teachers from two elementary schools within one K – 12 public school district. Findings may further inform educators how to improve communication between parents and teachers.

When considering participation, please remember the following.

- Participation in the study is **voluntary**.
- Your completion and **submission of the online survey items implies consent to participate** in this study and consent to use the information you provide in aggregate form in the study write-up, presentations, or publications.
- It is estimated that completion of all survey items will take approximately **15 minutes**.
- You may elect to not participate or **withdraw from this study at any time** without adverse consequences or jeopardizing your relationship with your district.
- You may **benefit** by knowing that study findings will contribute to a limited research base and for a dissertation.
- You may **benefit** as study findings may further inform district practices regarding communication between schools and parents.
- **Individual responses will not be reported, and responses do not require participant personal identification.**
- All survey data will be reported only in summative, aggregate form.
- **There are no risks associated with your participation and there is no compensation for your participation.**
- The Data Retention and Sharing Guidelines of the American Psychological Association (2010) will be followed for secure electronic and paper data storage.
- If you have any questions about your rights as a research subject, please contact the Virginia Tech Institutional Review Board (IRB) www.irb.vt.edu. This is an IRB approved study.

Researcher Contact Information: Kecia Lipscomb/804.502.6199/email:kecial7@vt.edu

Supervising Chair at Virginia Polytechnic Institute and State University: Dr. Carol Cash at ccash48@vt.edu.

If you need further clarification or have questions regarding this study please contact Dr. Moore/IRB, by email moored@vt.edu or call 540-231-4991.