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How Does Internet Facilitated Communication Impact Teacher and Parent Partnerships?

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LOYOLA UNIVERSITY CHICAGO

HOW DOES INTERNET FACILITATED COMMUNICATION IMPACT TEACHER
AND PARENT PARTNERSHIPS?

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF EDUCATION

PROGRAM IN CURRICULUM AND INSTRUCTION

BY

MARA PAICH GRUJANAC

CHICAGO, ILLINOIS

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DEDICATION

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
LIST OF FIGURES	vii
ABSTRACT	xii
CHAPTER I: INTRODUCTION	1
Partnerships in Schools	1
Home-School Partnerships	2
Legislation Regarding Home-School Communications	5
Factors Affecting Home-School Partnerships	8
Activity Theory as a Conceptual Framework	15
Statement of the Problem	19
Purpose and Objectives of the Study	22
Research Questions	23
Significance of the Study	25
Limitations of the Study	26
Definition of Terms	27
CHAPTER II: REVIEW OF THE LITERATURE	29
Introduction	29
Communication	31
Cultural Background	35
School Partnerships	39
Technology Use	47
School Technology Use	53
Technology Facilitated Communications	57
Summary	58
CHAPTER III: METHODOLOGY	60
Introduction	60
Research Strategy	64
Site Selection	67
Sampling Plan	70
Questionnaire Design	71
Informal Focus Group for Questionnaire	73
Data Collection	74
Data Analysis	75
Ethical and Validity Considerations	77
Limitations	77
Minimization of Bias	78
Summary of Methodology	80

CHAPTER IV: PRESENTATION OF DATA	82
Review of the Procedure	83
Site Description	85
Open-Ended Responses	129
Parent Demographic Data	144
District Technology Plans	227
Summary	228
CHAPTER V: INTERPRETATIONS, CONCLUSIONS, AND RECOMMENDATIONS	230
Introduction	230
Analysis and Interpretation	233
Board Policy	260
Discussion	264
Limitations of the Study	274
Recommendations for the Sample District	276
Considerations for Further Study	278
Implications for the Field	279
Final Thoughts	281
APPENDIX A: PHONE INTRODUCTION SCRIPT FOR DISTRICT PARTICIPATION	284
APPENDIX B: LETTER OF COOPERATION TO DISTRICT SUPERINTENDENT	287
APPENDIX C: LETTER OF COOPERATION TO BUILDING PRINCIPAL	291
APPENDIX D: LETTER OF CONSENT TO SCHOOL TEACHERS	295
APPENDIX E: TEACHER QUESTIONNAIRE	299
APPENDIX F: LETTER OF CONSENT TO DISTRICT PARENTS	303
APPENDIX G: PARENT QUESTIONNAIRE	306
REFERENCES	311
VITA	330

LIST OF FIGURES

Figure	Page
1. The Six Perspectives of Activity Theory	17
2. The Six Perspectives of Activity Theory as it Relates to This Study	18
3. Epstein's Spheres of Overlapping Influence	40
4. Parent and Teacher Communication Paths	65
5. Gender of Teacher	88
6. Cumulative Years Teaching Experience of Respondents	89
7. Years Teaching Experience in District	89
8. Years Teaching Experience in Building	90
9. Grades Taught	91
10. Number of Students in Class	92
11. Respondents' Use of Communication Methods With Parents	94
12. Teachers' Use of District Website to Communicate With Parents	98
13. Teachers' Use of District Website to Communicate With Parents by Experience	98
14. Teachers' Use of District Website to Communicate with Parents by Grade Taught	99
15. Teachers' Use of the Classroom Website to Communicate With Parents	101
16. Teachers' Use of Classroom Website to Communicate With Parents by Experience	102

17.	Teachers' Use of Classroom Website to Communicate With Parents by Grade Taught	102
18.	Teachers' Use of a Non-Electronic Classroom Newsletter to Communicate With Parents	105
19.	Teachers' Use of a Non-Electronic Classroom Newsletter to Communicate With Parents by Experience	105
20.	Teachers' Use of a Non-Electronic Classroom Newsletter to Communicate With Parents by Grade Taught	106
21.	Teachers' Use of an Electronic Classroom Newsletter to Communicate With Parents	108
22.	Teachers' Use of an Electronic Classroom Newsletter to Communicate With Parents by Experience	108
23.	Teachers' Use of an Electronic Classroom Newsletter to Communicate With Parents by Grade Taught	109
24.	Teachers' Use of Individualized Student Reports to Communicate With Parents	111
25.	Teachers' Use of Individualized Student Reports to Communicate With Parents by Experience	111
26.	Teachers' Use of Individualized Student Reports to Communicate With Parents by Grade Taught	112
27.	Teachers' Use of Personalized Communications to Parents Regarding Their Student on Paper	114
28.	Teachers' Use of Personalized Communications to Parents Regarding Their Student on Paper by Experience	114
29.	Teachers' Use of Personalized Communications to Parents Regarding Their Student on Paper by Grade Taught	115
30.	Teachers' Use of Email Communications to Individual Parents	117
31.	Teachers' Use of Email Communication to Parents by Experience	117
32.	Teachers' Use of Email Communication to Parents by Grade Taught	118
33.	Face-to-Face Meetings Regarding Student Progress	119

34.	Face-to-Face Meetings Regarding Student Progress by Teacher Experience	120
35.	Face-to-Face Meetings Regarding Student Progress by Grade Taught	120
36.	Informal Face-to-Face Meetings Regarding Student Progress	122
37.	Informal Face-to-Face Meetings Regarding Student Progress by Experience	123
38.	Informal Face-to-Face Meetings Regarding Student Progress by Grade Taught	123
39.	Homework Help Page	125
40.	Homework Help Page Considering Teachers' Experience	125
41.	Homework Help Page by Grade Level	126
42.	Frequency of Use of an Online Grade Book	128
43.	Frequency of Use of an Online Grade Book by Experience	128
44.	Frequency of Use of an Online Grade Book by Grade Taught	129
45.	Email from Parents to Teachers	133
46.	Effectiveness of Parent Communication	134
47.	Gender of Parent Respondents	144
48.	Language Spoken in Students' Homes as Reported by Parent Respondents	145
49.	Age of Youngest Student in Respondents' Homes	147
50.	Parents' Reported Use of the District Website to Gather Information	150
51.	Parents' Reported Use of the District Website to Gather Information by Grade Level	150
52.	Parents' Reported Use of the Classroom Website to Gather Information	152
53.	Parents' Reported Use of the Classroom Website to Gather Information by Grade Level	153
54.	Parents' Reported Use of the Printed Classroom Newsletter to Gather Information	155

55.	Parents' Reported Use of the Printed Classroom Newsletter to Gather Information by Grade Level	156
56.	Parents' Use of an Electronic Classroom Newsletter to Gather Information	158
57.	Parents' Use of an Electronic Classroom Newsletter to Gather Information by Grade Level	159
58.	Parents' Use of Individualized Reports to Gather Information	161
59.	Parents' Use of Individualized Reports to Gather Information by Grade Level	161
60.	Parents' Use of Personal Communication to Gather Information	163
61.	Parents' Use of Personal Communication to Gather Information by Grade Level	164
62.	Parents' Use of Email Communication to Gather Information	166
63.	Parents' Use of Email Communication to Gather Information by Grade Level	166
64.	Parents' Use of Face-to-Face Meetings to Gather Information	168
65.	Parents' Use of Face-to-Face Meetings to Gather Information by Grade Level	168
66.	Parents' Use of Informal Face-to-Face Meetings to Gather Information	170
67.	Parents' Use of Informal Face-to-Face Meetings to Gather Information by Grade Level	171
68.	Parents' Use of Homework Help Site to Gather Information	173
69.	Parents' Use of Homework Help Site to Gather Information by Grade Level	173
70.	Parents' Use of Online Grade Book to Gather Information	176
71.	Parents' Use of Online Grade Book to Gather Information by Grade Level	176
72.	Parents' Use of District Website to Communicate Successes or Concerns	179

73.	Parents' Use of District Website to Communicate Concerns or Successes by Grade Level	179
74.	Parents' Use of Classroom Website to Communicate	182
75.	Parents' Use of Classroom Website to Communicate by Grade Level	182
76.	Parents' Use of Classroom Newsletter to Communicate	185
77.	Parents' Use of Classroom Newsletter to Communicate by Grade Level	185
78.	Parents' Use of Individual Reports to Communicate	188
79.	Parents' Use of Individual Reports to Communicate by Grade Level	188
80.	Parents' Use of Personal Communication to Communicate	191
81.	Parents' Use of Personal Communication to Communicate by Grade Level	191
82.	Parents' Use of Electronic Mail to Communicate	194
83.	Parents' Use of Electronic Mail to Communicate by Grade Level	194
84.	Parents' Use of Face-to-Face Meetings to Communicate	196
85.	Parents' Use of Face-to-Face Meetings to Communicate by Grade Level	197
86.	Parents' Use of Informal Face-to-Face Meetings to Communicate	199
87.	Parents' Use of Informal Face-to-Face Meetings to Communicate by Grade Level	200
88.	Parents' Use of the Homework Help Page to Communicate	202
89.	Parents' Use of the Homework Help Page to Communicate by Grade Level	203
90.	Parents' Use of Online Grade Book to Communicate	205
91.	Parents' Use of Online Grade Book to Communicate by Grade Level	205
92.	Parents' Use and Follow-Up Actions When Using Electronic Communication	208
93.	Activity Theory Diagram Aligned to this Study	280

ABSTRACT

In 2001, Public Law 107-110, known as the *No Child Left Behind Act of 2001*, mandated that public schools become accountable for the achievement of all public school students. Included in Public Law 107-110 is a section that mandates that schools involve parents in the functioning of the institution and that parents be involved in their child's education. Schools have been utilizing Internet Facilitated Communication (IFC) to facilitate parent involvement within the school community.

This dissertation concentrates on parent-teacher communication specifically as it pertains to student achievement. This study examined the ways parents and teachers utilize electronic communication to invite one another to participate in activities designed for student academic achievements. The study also concentrated on the ways parents and teachers communicate, and the frequency of internet facilitated communication. Three themes emerged from the analysis of the results of this study. Classroom teachers predominantly use non-electronic communication means with the parents of their students. Teachers use electronic communication methods to a much lesser degree than non-electronic communication methods. Parents also predominantly use traditional, non-electronic communication forms with classroom teachers.

Schools continue to explore different methods of engaging parents in partnership activities that provide academic support for students. The standards found in Public Law 107-110 require that schools involve parents in the planning and implementation

activities designed to improve student academic achievements. Schools are also mandated to implement programs designed to lessen parental obstacles and enhance parental participation in partnership activities. Constraints on time and doubts regarding self-efficacy skills exist for some parents currently not involved in home-school relationships. To introduce new programs intended to persuade uninvolved parents to participate in school activities, it is prudent to further develop the collaboration methods already in place in the school community such as Internet Facilitated Communication.

CHAPTER I

INTRODUCTION

Partnerships in Schools

It has been suggested that one way to improve schools and positively impact the education of students is to involve family members and the community in partnerships with schools (Epstein, 2001; Sheldon, 2007; Sheldon & Epstein, 2004). Students learn from their environment and school setting. Individuals who comprise a student's home life, community, and school *each* impact student academic achievements. School partnerships are specifically designed to involve parents and the community in activities that support the goals of the school (Epstein, 1986; Epstein, 2001; Simon, 2001). Joyce Epstein (2001) has conducted numerous studies on the impact of family, school, and community partnerships. Epstein classified these relationships in her *Overlapping Spheres of Influence Model*. This model identified the family, schools, and the community as all influencing a student. As a student, these three facets come together (as well as interact separately and collaboratively) at different times in his or her life (Epstein, 2005).

Epstein (2001) commented:

In partnership, educators, families, and community members work together to share information, guide students, solve problems, and celebrate successes.

Partnerships recognize the shared responsibilities of home, school, and

community for children's learning and development. Students are central to successful partnerships. They are present in all three contexts, and they link the members of these groups to each other. (p. 4)

When there is less communication between the three units, the spheres are loosely joined and overlap very little. When communication and interactions between family, school, and the community are frequent, the spheres overlap a great deal. When the spheres are tightly overlapped, the student is more likely to hear consistent messages about what family, school, and the community collectively feel are important (Epstein, 1995). Central to consistent messages about what is valued by home, school, and community are deliberate and regular communications between these groups.

Home-School Partnerships

The relationships between student success and home-school partnerships have been widely researched. When schools partner with parents, and both parties share responsibility for student learning, students' performances in school improve. Also, parents become more involved in school and begin to feel more comfortable working with school community members toward a student's academic achievement and the overall success of the school. When partnerships extend to the community, academic concepts are removed from the classroom and its importance in students' lives reinforced (Anderson & Minke, 2007; DePlanty, Coulter-Kern, & Duchane, 2007; Epstein, 1986; Epstein, 2001; Epstein & Salinas, 2004; Green, Walker, Hoover-Dempsey, & Sandler, 2007; Hango, 2007; Hill & Taylor, 2004; Howland, Anderson, Smiley, & Abbott, 2006; Mapp, 2003; Sanders & Epstein, 1998; Warren, Hong, Rubin, & Uy, 2009).

Epstein (2005) outlined six types of home-school partnerships. Partnerships that:

1. Focus on helping parents with parenting issues (such as child development) and providing an appropriate home environment for children.
2. Encourage schools to communicate with parents regarding student progress and school programs.
3. Focus on volunteering partnerships that support school programs and students.
4. Are directed at helping families understand how to facilitate homework or other curricular projects.
5. Involve families in school by providing decision-making opportunities such as Parent Teacher Associations, school committees, or school councils.
6. Focus on community collaboration through school coordination of community resources for families.

A parent's involvement in their school-aged child can have beneficial impacts on the conditions their child learns in by reducing the impact of socioeconomic disadvantages, as well as improving student attendance in schools (DePlanty et al., 2007; Hango, 2007; Hill & Taylor, 2004; Howland et al., 2006; Lee & Bowen, 2006; Sheldon, 2004). Becker and Epstein (1982) found that teachers believe they can only be effective if they get parental assistance from home. Research indicates that strong, home-school partnerships support student learning and parental involvement (Auerbach, 2007; Becker & Epstein, 1982; DePlanty et al., 2007; Hill & Taylor, 2004). Additionally, it is vitally important for schools to partner with parents in developing a commitment from parents to support the process of learning from home (Becker & Epstein, 1982). Central to

successful partnerships between home and school are *trust* and *respect* for the parties involved. When thinking about developing partnership programs, Epstein stated that partnerships cannot be sustained unless everyone who shares an interest in the child understands each other (Epstein & Salinas, 2004). In addition, each member must demonstrate mutual trust in the design and implementation of parent partnership programs (Epstein, 2005).

The importance of communication is to break down barriers between a student's home and their school environment. Bryk and Schneider (2003) found that the strength of trust between groups in schools (such as parents and teachers) is a predictor of a school's effectiveness. Forsyth, Barnes, and Adams (2006) found that building positive and trusting relationships between home and school can be linked to high academic achievements. Home-school partnerships promote collaborations that positively impact student academic outcomes. Research indicates that parents feel they understand their child's academic programs better through these collaborative relationships; parents feel they are more competent to help their child at home (Epstein & Salinas, 2004; Forsyth et al., 2006; Sanders, 2008; Sheldon, 2007). Research also indicates that parent involvement in schools does not only affect schoolwork but also impacts the quality time that parents and children spend with one another (Becker & Epstein, 1982; Epstein, 1982). Cochran and Dean (1991) found that when teachers and parents participated in workshops designed to facilitate parent-home collaboration, and after spending time with the parents, teachers reported that parents began to realize the ways that home and the community affected their student's lives.

Legislation Regarding Home-School Communications

In 1965, the federal government became involved in public school education legislation when President Lyndon B. Johnson signed the Elementary and Secondary Education Act (ESEA) into law. Title I of ESEA was passed to address the inadequacies in the educational system and to help children of low income families and educationally disadvantaged students academically achieve in school (Kirst & Jung, 1980; McDonnell, 2005). ESEA attempted to equalize the quality of education for low income and disabled students by providing federal funding to schools that gave students, regardless of their background, the opportunity to succeed in school (Robelen, 2005). In 1981, then-Secretary of Education, T. H. Bell, created the *National Commission of Excellence in Education*. The purpose of this commission was to report on the quality of education in the United States and to provide recommendations toward improving the education program. In 1983, the commission presented Bell with a report entitled, *A Nation at Risk*. The commission reported that the quality of American education was mediocre and American students were no longer the *best-educated* as they were now scoring lower than European students. The report suggested that the education program was in dire need of change and should focus on providing excellent education to individual students or the United States would lose its international status. In the report, parents were cited as being supportive of education yet frustrated with the quality of education their child/children received (National Commission on Excellence in Education, 1983). As a result of the *Nation at Risk* report, then-president of the United States, Ronald Reagan, began conversations with educators and government officials to discuss how to improve public

education. Reagan addressed school-family partnerships by stating that schools should communicate more frequently with parents (Kirst & Jung, 1980; McDonnell, 2005; Stallings, 2002).

In 1994, the *Goals 2000: Educate America Act* (Public Law 103-227) was signed into law by then-President William Clinton (U.S Department of Education, 1994). The purpose of this Act was to provide performance standards for schools. If schools adopted these performance standards, then they could receive federally-funded educational grants (McDonnell, 2005; Standerfer, 2006). While this Act did not dramatically change public education, it did introduce the idea of establishing standards for the United States education system (McDonnell, 2005). In 1994, the ESEA was reauthorized when government passed the *Improving America's Schools Act of 1994* (Public Law 103-382). This law concentrated on setting high standards for students, ensuring better trained teachers, initiating local education reform, and developing partnerships amongst families, schools, and communities. Through this Act, states could use different methods to measure annual student performance (Department of Education, 1995; McDonnell, 2005; Standerfer, 2006).

The 107th United States Congress reauthorized ESEA (through Public Law 107-110), which is commonly referred to as the *No Child Left Behind Act of 2001* (NCLB). This Act forced public schools to be accountable for students' annual academic growth and centered on standards-based reform (U.S. Department of Education, 2001). NCLB's intent was to reform elementary and secondary education toward a system held

accountable for the achievement of all public school students (Rudalevige, 2003; Simpson, LaCava & Graner, 2004).

NCLB identifies the importance of home-school relationships. As affirmation of the impact of home-school partnerships on student academic achievements, included in NCLB is a section that mandates that schools involve parents in the functioning of the institution, and that parents be involved in their child's education (McDonnell, 2005; Simpson et al., 2004). NCLB further designated school districts to:

1. Develop a plan for strong parental involvement (Section 1118 of Public Law 107-110). (For instance, an activity that parents should be involved in is the planning and implementation of activities designed to improve student academic achievement.) As part of this plan, schools were mandated to refer to current research when implementing parental involvement programs. These programs must be designed to *lessen* parental obstacles and *enhance* parental participation in partnership activities (U.S. Department of Education, 2001).
2. Communicate with parents on a regular basis in the form of parent-teacher conferences, frequent reports about student progress, access to staff, and opportunities to be involved through volunteer activities. Also, schools must set aside a portion of its operating budget to fund various forms of communication (U.S. Department of Education, 2001).

However, providing opportunities to become involved in schools is only effective if parents participate in establishing these collaborative partnerships (Epstein, 2005). Barriers may exist that inhibit parents from participating in home-school partnerships

(Anderson & Minke, 2007; DePlanty et al., 2007; Green et al., 2007; Hango, 2007).

These barriers can range from cultural issues to parents' perceptions regarding their abilities to be effective when partnering with schools toward student academic achievements (Green et al., 2007; Hoover-Dempsey et al., 2005; Wong & Hughes, 2006).

To alleviate these barriers and conform to federal legislation, school personnel need to understand a parent's reticence to participate, and provide opportunities for home-school partnerships to attempt to overcome these barriers.

Factors Affecting Home-School Partnerships

Partnerships between schools and home can lend insight into classroom structure and expectations for parents, and can help teachers understand student families as well. Schools can begin to understand the student as a whole by establishing regular communications with student families and gathering information on student family dynamics. Through communication with the school, parents can begin to understand the educational process. Additionally, parents can begin to become more familiar with the programs that can lead to their increased involvement in school activities.

Involvement of Parents in the Functioning of Schools

Just because a school reaches out to parents for partnership opportunities does not guarantee parental participation. Hoover-Dempsey et al. (2001) said that a parent's background, interests, and beliefs about school involvement also influence the reasons and ways parents become involved in their child's school (Green et al., 2007; Hoover-Dempsey et al., 2001; Hoover-Dempsey et al., 2005).

Hoover-Dempsey et al. (2001) and others outlined specific reasons parents become involved:

1. Parents believe their involvement will have positive effects (make a difference) in helping their child learn.
2. School invites parental involvement.
3. Students indicate they want their parent to become involved.
4. Parents' perceptions of their abilities to help their child. (Anderson & Minke, 2007; Green et al., 2007).

Of these reasons, communications from teachers have the most impact on parents' decisions to become involved in their child's school. These communications can override parents' perceptions of their own inadequacies regarding their effectiveness as a partner in their child's education. Models that support the most effective solutions support strong reciprocal relationships between a student's home and school (Cochran & Dean, 1991; Epstein, 1986; Green et al., 2007; Hoover-Dempsey et al., 2005; Walker, Hoover-Dempsey, Whetsel, & Green, 2004).

Research indicates that parental involvement in schools is important because it leads to increased success for the student (DePlanty et al., 2007; Epstein & Salinas, 2004; Green et al., 2007; Hill & Taylor, 2004; Jeynes, 2005; Sheldon, 2004). While all parents express a desire to support their children in school, social class impacts how involved parents actually are in their child's education. Parents' expectations for their students' academic success is associated with achievement across socioeconomic statuses and cultural backgrounds (Hango, 2007; Lee & Bowen, 2006; Sirin, 2005). Not only do

home-school partnerships impact the student, but also the parents. When parents are involved in schools, they feel more invested (Auerbach, 2007; Desimone, 1999; Ho Sui-Chu & Willms, 1996; Lee & Bowen, 2006). When parents are more invested, they are more willing to participate with teachers in partnership activities designed to foster student academic achievements (Anderson & Minke, 2007; DePlanty et al., 2007; Epstein & Salinas, 2004; Hoover-Dempsey et al., 2005). The expectation for parent responsibility in their child's schooling transcends race, religion, and ethnicity (Berger, 1991; Hoover-Dempsey, Bassler, & Brissie, 1987; Hoover-Dempsey et al., 2001). Yet, despite the desire to be involved, parents sometimes face other factors that limit their ability to participate.

Socioeconomic Status

While most parents desire to be involved in their child's school, the socioeconomic status of a family can directly impact their ability to be involved. Parents from different socioeconomic backgrounds sometimes become involved in schools, as a result of the resources afforded them (Anderson & Minke, 2007; Green et al., 2007). Research suggests that schools are essentially middle class institutions with middle class values—and middle class parents feel most comfortable in these institutions while parents from other classes don't feel as comfortable (Auerbach, 2007; Desimone, 1999; Hoover-Dempsey et al., 1987; Sirin, 2005; Vang, 2006). To fit in, parents of other classes find ways to be involved as a way of offsetting their discomfort in forming an actual partnership with the school. These attitudes are not just held by parents. School staff often do not have the necessary training to develop programs designed to involve

working parents. As a consequence, working parents perceive this as a subtle discriminatory practice (Auerbach, 2007; Desimone, 1999; Hoover-Dempsey et al., 1987; Sirin, 2005).

Parents from different socioeconomic statuses articulate a desire to be involved in school partnerships. Lareau and Horvat (1999) asserted that these parents view the execution of partnerships with school and the community in very different ways. Parents of *higher* socioeconomic status take advantage of resources in the community to enrich their child's education. Parents of *lower* socioeconomic status may not take advantage of these community resources due to a lack of resources or because utilizing community resources, such as museums, are not important to the family's values (Lareau, 1987; Lareau & Horvat, 1999). Lareau's research (2000) identified specific factors that impacted parental involvement in schools, including parents' educational backgrounds and the value placed on education from the perspective of the socioeconomic status of the family and the family's peer group. Parents from lower socioeconomic families tend to have lower occupational statuses than their child's classroom teachers. In these instances, parents regard the teachers as professionals with specialized training that uniquely help their child. Additionally, parents may interpret teacher conversations as them (the parents) being dictated to by a dominant individual (the teachers) so they are less able to participate in collaborative efforts (Cochran & Dean, 1991; Hango, 2007; Lareau, 1987; Lareau, 2000; Mapp, 2003). Working class parents see their responsibility in education ending when they drop their child off at the school door. From that point, these parents often turn over the responsibility of their children's education to the professionals at

school. Conversely, parents of higher socioeconomic statuses have frequently achieved a similar or higher academic status as their child's classroom teacher. So, in these classrooms, parents are not intimidated by the teacher's background; parents treat the teacher as their equal (Auerbach, 2007; Ho Sui-Chu & Willms, 1996; Lareau, 2000; Lareau & Horvat, 1999).

Often, a parent's socioeconomic status can also impact their interactions with individuals at their child's school in the form of demands (or flexibility) in the workplace, or as a result of the amount of education a parent has completed because they do not see themselves as equals with members of the school community. Either way, schools should be aware of this impact and the importance that socioeconomic status has on parent interactions with schools (Auerbach, 2007; DePlanty et al., 2007; Epstein & Salinas, 2004; Hango, 2007).

Parents frequently pass-on the assumptions of the time constraints of their workplace onto their child's schoolwork. Parents of lower socioeconomic statuses frequently work in situations where the workday is clearly defined by shifts or specific hours. In these situations, the demands of the workday stay at the workplace and are not brought home at the end of the work shift. Parents often expect their child's schoolwork to be confined to the school day just as the parent's work is confined to the workplace. Parents draw clear lines between what happens at home and what happens at school. In comparison, parents of higher socioeconomic statuses frequently travel for work or are expected to be productive without regard to a traditional workday. These parents often feel their child's education should not be defined by a school day and often feel education

takes place both at school and at home (Auerbach, 2007; Ho Sui-Chu & Willms, 1996; Lareau, 2000; Lareau & Horvat, 1999).

School activity participation often favors parents from higher socioeconomic groups. This may be because parents from these groups have more flexibility in scheduling their work responsibilities so they can alter their schedules to accommodate school programming. Demands of a rigid workday also impact the amount of participation parents can expect at their child's school. Parents with less flexibility often cannot attend school day presentations due to their work obligations. Conversely, parents that have more autonomy in their professions can often make time to attend school day programs (Auerbach, 2007; DePlanty et al., 2007; Epstein & Salinas, 2004; Hango, 2007). Government, schools, and families have delineated the importance of collaboration between families and schools. Regardless of family backgrounds or socioeconomic status, parental involvement in schools makes unique and significant contributions to a student's academic achievement (Desimone, 1999; Hango, 2007; Ho Sui-Chu & Willms, 1996; Lee & Bowen, 2006; Sirin, 2005). While partnerships between families and schools are necessary to facilitate academic success in students, constraints still remain that inhibit the development of collaborative relationships between parents and teachers (Auerbach, 2007; DePlanty et al., 2007; Lee & Bowen, 2006; Hango, 2007).

School Communication with Parents

Parents participate in partnership activities between home and school with the goal of facilitating academic achievement for their child. DePlanty et al. (2007) found a difference between the activities parents chose and the activities teachers felt were

helpful to a child's success. A lack of time and availability still limits the formation of collaborative relationships between families and schools and schools still need to provide opportunities for collaboration to parents who are not able to participate in activities at school (Lee & Bowen, 2006). Anderson and Minke (2007) studied parent decision-making toward their participation in school partnerships and suggested researchers look at how parents perceive teachers' communicated invitations to become involved. Similarly, Jeynes (2005) calls for communication to both parents regarding school involvement. With the impact of parent invitations on partnership activities, Green et al. (2007) suggested schools train teachers on how to utilize resources to encourage activities that are effective in supporting academic achievement in students.

Teacher communication that encourages parent involvement is an important factor in parental decisions to become involved (Green et al., 2007). Traditional forms of home-school partnerships include parent participation in the parent-teacher association, back-to-school or open house nights, and parent-teacher conferences (Berger, 1991; Hoover-Dempsey et al., 2005; Waldbart, Meyers, & Meyers, 2006). Teachers have greater knowledge of available options for home-school partnerships than parents. From their perspective, they feel parents are not effectively participating in partnership programs (Wong & Hughes, 2006). It is the school's responsibility to provide parents with programs that fit their varied lifestyles (Souto-Manning & Swick, 2006; Waldbart et al., 2006; Wong & Hughes, 2006). Partnerships depend on trust between the parties involved. Schools often depend on the classroom teacher to reach out and help parents feel comfortable in accepting requests to participate in partnership activities (Bryk &

Schneider, 2003). It is the classroom teacher's responsibility to take time to get to know the home situation of their students and provide partnership opportunities inclusive of diverse home situations—both in and out of the classroom (Souto-Manning & Swick, 2006; Waldbart et al., 2006). When parents feel understood, and have outlets to build trusting relationships with teachers, they are more willing to participate in home-school partnerships (Bryk & Schneider, 2003; Waldbart et al., 2006). When an initial trusting relationship is established, parents can begin to initiate their own communications to their student's teachers—requesting reciprocal partnerships toward supporting achievement (Bryk & Schneider, 2003).

Schools are exploring various methods of inviting parents to join in partnership activities designed to provide academic support for students. Nardi (1995) explained that Activity Theory can be used to study how individuals utilize tools such as outside resources toward accomplishing this goal.

Activity Theory as a Conceptual Framework

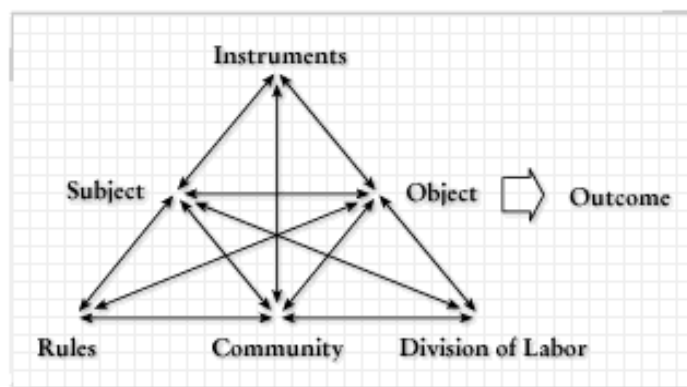
Activity Theory is a conceptual framework that examines how individual and groups work as a community under a set of rules to use various tools toward a purpose. In the 1920s, Activity Theory was proposed by Vygotsky (1978) and his student Leont'ev. The theory explained learning as a social activity, which is socially constructed and mediated by a simultaneously-used tool (Engeström, 2004). From his own work on how people learn, Leont'ev (1978) expanded on Vygotsky's original theory by explaining learning as a *Collective Activity*. Leont'ev explained that groups of people work toward the accomplishment of a goal using tools in their surroundings. These tools are mediated

by the cultural rules of the group (Center for Activity Theory and Developmental Work Research, 2008; Engeström, 2004; Jonassen & Rohter-Murphy, 1999). Activity Theory proposed that all human activity can be studied from six different perspectives, and that each of these perspectives interacts with the other as an individual is in the process of completing an activity toward the accomplishment of a goal. Human activity can be studied by considering:

1. Subject of the action.
2. Result (or object) of an action.
3. Tools used to complete the action (instruments).
4. Community in which the action is taken.
5. Rules of the community.
6. Division of labor found in the community. (Engeström, 2004)

Engeström (2004) illustrated the interrelated nature of the different perspectives at play in a triangular diagram with arrows interconnecting each perspective (see Figure 1). Engeström's diagram clarifies the subjects, the objects toward the completion of a task, the interconnected nature of the instruments, the community, the rules, and the division of labor. Researchers have used Activity Theory to study how new tools are used by different community members (Berrett, 2005; Blin & Munro, 2008; Narasimhan, 2004; Scanlon, 2005). When considering home-school partnerships, using various methods of communication can be thought of as tools toward the goal of developing collaborative relationships between parents and teachers. Considering the importance parents place on teacher communications to become involved in their child's school experiences, delivery

systems for these communications are considered tools that can be studied through Activity Theory (Anderson & Minke, 2007; Green et al., 2007; Jeynes, 2005).



(Center for Activity Theory and Developmental Work Research, 2008)

Figure 1. The Six Perspectives of Activity Theory

Anderson and Minke (2007) have suggested that schools look at different communication forms to determine the forms that are most effective for parents. With time demands on both teachers and parents, it is useful to look at communication forms that support collaborative and personal relationships between parents and teachers, and also allow for flexibility in the delivery and response to communication. Internet Facilitated Communication (IFC) technology is a tool that can be used by school community members to communicate at interpersonal levels (see Figure 2). Internet facilitated communications allows for flexibility in delivery and response by the users (Hurst, 2007). How people use IFC as a tool toward the completion of work is worthy of study since Activity Theory suggests that at some point, the process of learning the fundamentals of technology use should become embedded for the user (Jonassen & Rohrer-Murphy, 1999). Should IFC use become second-hand, other aspects of the activity would also be impacted—such as the rules that govern the use of the tools or

even message outcomes that are sent using it. Implementation of IFC in school communities can be studied using Activity Theory, particularly when focusing on the tools, community, and rules of the community.

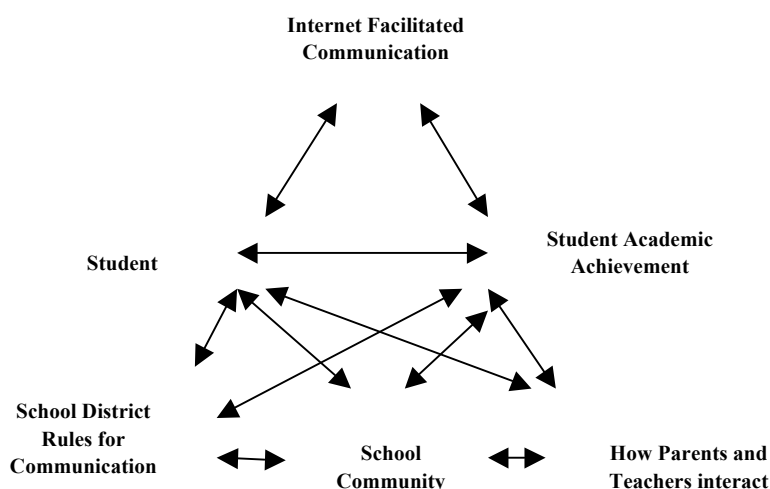


Figure 2. The Six Perspectives of Activity Theory as it Relates to This Study

The use of IFC as a communications tool with the school community toward student academic success can be studied utilizing this theory (Hung & Chen, 2002; Waycott, Jones, & Scanlon, 2005). Parents and teachers most often are the primary community members involved in communicating about student academic achievements. Internet Communications Technology is the tool in this study used by the community (Center for Activity Theory and Developmental Work Research, 2008; Engeström, 2004). The rules and division of labor in communication follow the rules set forth by the school district that regulates communication activities in general. Activity Theory defines the object of the study as the purpose of the action; therefore, the subject of communication is the student (Engeström, 2004; Jonassen & Rohrer-Murphy, 1999).

Using Activity Theory to understand technology use in school communities has been established by previous research (Berrett, 2005; Blin & Munro, 2008; Hung & Chen, 2002; Kelceoglu, 2006; Kirkup & Kirkwood, 2005; Murphy, 2005; Waycott et al., 2005; Yamagata-Lynch, 2001). The purpose of IFC in schools is to enable teachers to integrate computer technology into their everyday professional practice (Blin & Munro, 2008; Kelceoglu, 2006; Keller & Bichelmeyer, 2004; Murphy, 2005). Most teachers use IFC for professional purposes such as preparing lessons, grading students, or email communications (Bebell, Russell, & O'Dwyer, 2004; Clark, Demont-Heinrich, & Webber, 2005; Clemente, 2002; Fletcher, 2006; Longfellow, 2004). Additionally, technology is emerging as a way to increase parent-teacher interactions in a timely and efficient manner (Bauch, 1989; Hurst, 2007). While IFC is a common tool, it may not be the best tool to use because community members may not have the same comfort level in using it as a professional tool (Britto, Fish & Throckmorton, 2002; Clemente, 2002; Ely, 1990; Owen & Demb, 2004; Wilczenski & Coomey, 2006).

Statement of the Problem

This study concentrated on parent-teacher communications specifically as it pertained to student academic achievement. Activity Theory is a conceptual framework that can be used to study how members of a community complete an action (Engeström, 2004; Jonassen & Rohrer-Murphy, 1999). Specific facets of Activity Theory guided this study. Of interest were the ways parents and teachers use Internet Communication Technology (ICT) to communicate and build partnerships that facilitate student achievement. This research study was focused on communications regarding student

academic achievements as an outcome (Anderson & Minke, 2007). The subjects in this study consisted of both teachers and parents. The object under investigation was the *format* in which the communications takes place. Various researchers have documented that school members use IFC to communicate with parents regarding student progress (Cameron & Lee, 1997; Clemente, 2002; Longfellow, 2004; Merkley, Schmidt & Dirksen, 2006; Miretzky, 2004; Penuel et al., 2002). Of importance to this study were:

1. The ways IFC's were used.
2. Rules that governed use.
3. The combination of both the IFC tools used and rules that governed use to facilitate good communications regarding student academic achievement.

Since this study focused on technology use as a communications means, it was important to clarify the various forms of electronic communication (Hung & Chen, 2002; Waycott et al., 2005). Parents and teachers engage in various communication forms including *formal* (which is traditional) scheduled communication and *informal* communication. Under consideration was the use of IFC as a tool to facilitate formal and informal communications between parents and teachers. Schools communicate with parents in traditional and formal methods such as report cards, parent-teacher conferences, newsletters, or classroom notes (Anderson & Minke, 2007). Schools communicate with parents in informal, less frequent methods such as quick, face-to-face encounters before or after school, appointments, and/or notes between parents and teachers (Anderson & Minke, 2007). It is unclear if IFC use has changed these communication methods between parents and teachers.

Activity Theory surmises that communities function under a set of rules that governs its actions. Of interest was who decided what the communication rules are in a school community. Additionally, the structure of the rules was considered—including if there was a set of rules that governed who initiates and who received communications about student academic achievements (Center for Activity Theory and Developmental Work Research, 2008; Engeström, 2004; Hung & Chen, 2002). The frequency and outcome of parent-teacher communications was also considered. Activity Theory was used to study how IFC facilitates contact between a student's school and home when considering the goal of communication between home and school regarding academic achievement.

Underlying how communication tools were used and the rules that govern technology use was the question regarding who took responsibility for communications about student academic achievements (Anderson & Minke, 2007). It was of vital importance to ask questions that enabled the examination of the roles teachers, parents, and administration took when considering the technology use as a communications device. It was imperative that subjects considered and answered whether there are established or understood rules that govern technology use as a communications outlet. The existence of rules and whether these rules were clearly articulated and followed were central to this study.

The use of Activity Theory as the conceptual framework gave perspective to research the impact of technology on teacher practices pertaining to communicating with parents about student academic achievements. This theory focuses on how tools are used

in a community toward obtaining a goal. Internet communications technology are used in school communities as a tool for the school faculty and staff to communicate with parents toward the goal of developing collaborative relationships between parents and teachers. This study was completed to determine how electronic communication was used as a tool in the school district.

Purpose and Objectives of the Study

Of specific interest were the ways parents and teachers utilized IFC to engage one another in activities designed to support student academic achievements. To best consider how school communities and parents use IFC to communicate, research included direct input from participants in the community. A qualitative study that included individual responses to a set of questions focusing on IFC use was integral to understanding how school community members used this technology as a tool. This study considered how IFC was used in a district that encompasses families from varied socioeconomic backgrounds.

A large district close to a major metropolitan city was chosen for this study. The district was large enough to encompass parents from varying socioeconomic backgrounds. The district had written articulated plans regarding the use of IFC as a communications tool. These plans provided evidence for document analysis when considering responses from study participants. Parents and teachers were provided qualitative questionnaires, which they completed independently and returned to the researcher in a timely manner. As a qualitative study, responses were explored in regards to how IFC facilitated partnerships between parents and teachers.

Since researchers have found that parents of different socioeconomic backgrounds view their relationships with classroom teachers differently, it was important to analyze responses for evidence of *top-down* dominance or *bottom-up* resistance when considering why parents and teachers communicate, and the outcomes of that communication (Lareau, 2000). Lareau indicated that qualitative responses to questions can be analyzed, and trends can emerge from this analysis. For example, top-down and bottom-up analysis is a facet of *discourse analysis*. Discourse analysis looks at relationships in terms of social power and dominance. These relationships can take different forms when considering socioeconomic strata found in diverse school districts. This is an important factor for research to consider: whether or not parent or teacher groups use tools to communicate with one another while adhering to the rules that govern the communication.

It was important to determine how school community members used IFC in their daily lives to collaborate with one another regarding student academic achievements. Not only was the initiation of communication regarding student academic achievements important to this study, but also important was the vocabulary used in communications between parents and teachers. Additionally, consideration needed to be given to the outcomes of these conversations.

Research Questions

1. What are the types, frequency, and degree of communications initiated by parents and teachers with the advent of instantaneous communication created by electronic communications technology?

2. When parents initiate electronic communication regarding student academic achievement, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?
3. When teachers initiate electronic communication regarding student academic achievements, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

To address these questions, parents and teachers from a large diverse socioeconomic school district were asked about the outcomes of IFC intended to build partnerships between parents and the school. Examined was the use of IFC as a tool, and how IFC use can change conversations about student academic achievement. The frequency and ways teachers used IFC to initiate programs, or invited parents to participate in partnership activities at the school, were examined as well. Anderson and Minke (2007) suggested that schools need to provide training to teachers to facilitate the most effective communication methods when inviting parents into family-school partnerships. Additionally, parents' responses to teacher communication were evaluated to determine their effectiveness and the effectiveness of parent-initiated requests for collaboration were investigated. Just as it was worthy to evaluate the effectiveness of teacher communication regarding parent involvement, it was equally important to evaluate teacher responses toward parent requests for collaboration. Green et al. (2007) found that reciprocal relationships must exist for family-school relationships to be effective. It's also relevant to evaluate the perceived effectiveness of ICT to determine if

the participants in these conversations view it as an effective way to establish partnerships that result in student academic achievements.

Significance of the Study

Schools are exploring various methods of encouraging parents to join in partnership activities that provide academic support for students. The 2001 *No Child Left Behind* standards require schools to involve parents in the planning and implementation activities designed to improve student academic achievements. Schools are also mandated to implement programs designed to lessen parental obstacles and enhance parental participation in partnership activities (U.S. Department of Education, 2001). Constraints on time and doubts regarding self-efficacy skills exist for some parents currently not involved in home-school relationships (DePlanty et al., 2007; Hoover-Dempsey et al., 2005). To introduce new programs intended to persuade uninvolved parents to participate in school activities, it is prudent to develop collaboration methods already in place in the school community.

School administration should be aware of effective types of communication used to solicit participation in school-family partnerships. If there are communication methods available at the school, but school community members are not well trained in how to use or manage these tools, administrators need to be aware of this deficit and provide the appropriate training to members (Anderson & Minke, 2007).

Utilizing a qualitative study provided perspectives on the value of IFC for partnership activities. Qualitative responses allowed for analyses that revealed trends and

attitudes of the participants. This type of analysis revealed perceptions of usefulness, as well as the value of rules.

Limitations of the Study

School districts are mandated to establish partnership programs with parents. These districts also have a number of other concerns. While only one district was chosen for this study, it had a very diverse socioeconomic parent base. The district may have felt the current programs in place are sufficient to elicit and sustain parent partnership activities. In this case, providing formal partnership opportunities through ICT would not have been perceived as a necessity. Consequently, answers to questions about partnerships may be tempered by the perception that discussions that occur through IFC were no different than discussions that happened in person or via a written note.

Since this study concentrated on IFC use, all members of the diverse school community chosen may not have been able to use technology for two-way collaborations between family and school. Additionally, if there were community members not using technology to respond to or initiate family-school partnerships, this may have significantly reduced the sample size of the population participating in the questionnaire. Also, schools may not have had the resources available to train teachers and parents in IFC methods toward the development of internet facilitated partnership activities. This study was delivered to participants in both English and Spanish was translated into English for evaluation purposes. So, the meaning behind some of the answers might have been diluted during the translation process.

The researcher maintained a journal to gather reactions and impressions while the study was conducted. As a professional with experience in training faculty and parents in the use of technology as a tool, it was difficult for the researcher to maintain objectivity in analyzing the presented data. To maintain objectivity, and to systematically review participants' responses to questions, discourse analysis was used in order to analyze respondent data.

In conclusion, this research attempted to mediate these limitations by using an inclusive method of sampling that involved a sufficient number of school community members to provide quantifiable results. By selecting a school district already using technology throughout its district for instructional and communication purposes, an understanding of the potential of IFC should have been present. In this case, the research was able to concentrate on investigating the impact of IFC use as a communications tool with the community toward student academic successes.

Definition of Terms

Bottom-Up Resistance - From the perspective of a low-level individual in an organization, the resistance to change is seen as bottom-up resistance.

Collective Activity - A group of individuals who share similar objectives, procedures, and reasons for participating together in an activity to achieve a particular goal.

Discourse Analysis - The analysis of written, spoken, or signed language through the use of specific approaches that consider naturally occurring language and the dynamics between participants.

Division of Labor - The specialization of tasks and roles by a collection of individuals designed to increase productivity toward the completion of a job.

Internet Communications Technology (ICT) - The use of technology that allows a user to store, produce, manipulate, or communicate information, or to provide access and experiences to a wide range of people. Usually, these actions are completed using a computer-based system.

Internet Facilitated Communications (IFC) - The use of computers or digital devices to allow digital communication between parties.

Locus of Control - A person's belief regarding who is in control of one's life. *Internal* locus of control is a person's own control over his or her life. *External* locus of control refers to a person's belief that another individual (or power) controls the events in one's life.

Self-Efficacy - When an individual believes they are capable of performing in a particular way to achieve a particular goal; a personal belief that actions can impact situations and to act in that manner to achieve desired outcomes.

Socioeconomic Strata - The hierarchical social groups or social classes that individuals are placed in based on their economic or cultural backgrounds.

Top-Down Dominance - Change in an organizational structure from the dominant authority that will affect change in structure or behavior in lower-level subordinates in the same organizational structure without their consent or support.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This study is concerned with parent-teacher communications regarding student academic achievements. Schools can positively impact a student's education by involving family members and the community in school partnerships (Epstein, 2001; Sheldon, 2007; Sheldon & Epstein, 2004). Students learn from their environment and school. Individuals who comprise a student's home life, community, and school each impact student academic achievements. Effective school partnerships are specifically designed to involve parents and the community in activities that support the school's goals of student achievement (Epstein, 1986; Epstein, 2001; Simon, 2001). By forming partnerships with parents, schools have an opportunity to work toward developing a commitment from parents to support the process of learning from home (Becker & Epstein, 1982). Building positive and trusting relationships between home and school have been linked to high academic achievements (Forsyth et al., 2006).

Parents' expectations for their student's academic achievements are similar across socioeconomic status and cultural backgrounds (Hango, 2007; Lee, Turnbull, & Zan, 2009; Sirin, 2005). Parents want to be involved in their child's education. Schools that reach out to parents via partnership opportunities don't necessarily guarantee parent participation (Anderson & Minke, 2007; DePlanty et al., 2007; Green et al., 2007;

Hoberecht, 1998). Parents' backgrounds and interests also influence the reasons and ways they become involved in their child's school (Hoover-Dempsey et al., 2001; Hoover-Dempsey et al., 2005). Socioeconomic and cultural barriers are important to understand and manage in diverse communities because they influence how and why parents get involved in their child's education (Desimone, 1999; Lee & Bowen, 2006; Lupi & Tong, 2001).

Parents and teachers engage in various communication forms, including formal scheduled communications and informal communications. Under consideration will be the use of internet facilitated communications (IFC) as a tool to facilitate formal and informal communications between parents and teachers. Of specific interest are the ways parents and teachers use IFC to invite one another to participate in activities designed to affect student academic achievements (Anderson & Minke, 2007). This study intends to form an understanding of the following:

1. What are the types, frequency, and degree of communications initiated by parents and teachers with the advent of instantaneous communication created by electronic communications technology?
2. When parents initiate electronic communication regarding student academic achievement, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?
3. When teachers initiate electronic communication regarding student academic achievements, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

Internet communications technology (ICT) is used to involve parents in their child's education (Thompson, 2008). Digital contact between schools and a student's home takes many forms including a school's internet pages and email communications. Of importance to this study are the ways ICT tools are used, rules that govern use, and how the combination of these facilitate good communications regarding student academic achievements.

Communication

Partnerships between parents and their child's school are based on relationships developed between school district members and families (Epstein, 2001). Partnerships between schools and students' homes are based on communication, or a sharing of information between the two parties (Chavkin & Williams, 1987; DePlanty et al., 2007; Epstein, 2001; Olmsted, 1991). Solid communication practices between schools and student families are essential to building relationships between individuals that have an impact on a child's development (Epstein, 2001; Green et al., 2007; Hill & Taylor, 2004).

Communication between schools and parents can help parents become more comfortable with approaching school community members regarding any concerns about their child's school and its programs (Epstein, 2001). Parent communications regarding school programming is achieved through school meetings, open houses, and curriculum meetings (Epstein & Salinas, 2004). To inform parents of school programming, schools also utilize written communications and IFC to communicate with parents via the school's internet site and digital communications (Flanagan & Jacobsen, 2003; Kennedy & Wellman, 2007; Thompson, 2008).

Communications between classroom teachers and parents take several forms:

1. Individualized written communications regarding student progresses in the form of report cards, weekly classroom communications, and personalized notes between a student's home and classroom (Epstein, 2001).
2. Formal, face-to-face communications implemented through parent-teacher conferences.
3. Informal, face-to-face communications that take place in person with impromptu discussions when parents and teachers meet at school. Face-to-face meetings allow parents and teacher to become familiar with each other on personal levels (Epstein & Salinas, 2004).
4. Formal parent communication methods through curriculum nights and student communication reports.
5. Informal parent communication methods, which are important because of the opportunities for parents to become involved in schools.

Both formal and informal communications between schools and families foster a sense of partnership on behalf of the student (Epstein, 2001). These partnerships help parents build connections with school personnel to foster collaborative relationships that benefit both the school and student academic achievements (Forsyth et al., 2006).

Communication can be seen as attempts to involve parents in their child's academic progresses through encouraging extended learning activities at home (Epstein, 2001). Teachers reach out to parents to work with students at home to enhance and reinforce lessons taught in school (Epstein, 1984). Schools communicate with parents and

community members regarding partnerships designed to support the academic achievements of students (Henderson, Mapp, & Southwest Educational, 2002). The school is not always in control of all communications that are intended to support students' academic achievements in the community. Sometimes, the community partners directly with parents toward supporting academic gains in students (Catsambis & Garland, 1997). Schools and teachers recognize that student achievement is higher when parents understand the academics taught in the classroom (Epstein, 1984). When teachers believe parents can effectively help with homework, they are more likely to communicate with parents regarding how they can support learning at home (Pang & Watkins, 2000).

As students matriculate through school, parent communications tend to decline. Therefore, communication plans need to change as students get older; parent information needs to change as well (Epstein, 2001). To accommodate different needs, parent communications must differ (Epstein, 1984; Howland et al., 2006).

Schools can communicate with parents in various ways such as:

1. Scheduled conferences or meetings at school.
2. Weekly or monthly folders that include general information regarding curriculum, important announcements, or student work.
3. Regular use of memos, notes, phone calls, or newsletters designed to inform parents of various activities. (Epstein, 2001)

Schools face cultural challenges when communicating with parents. In her 2001 book on school, home, and community partnerships, Joyce Epstein detailed these challenges as language barriers between parents not fluent in the language used by the

school. Epstein also cautioned schools to review the clarity and frequency of print and other communication forms. To encourage and establish clear forms of two-way communication between home and school, Epstein encourages schools to design communications that encourage parents to respond to the school with questions or comments. When communication forms are reliable and clearly established, parents have better perceptions of a school's abilities to communicate with them regarding academic programs (Townsend, 1985).

Student academic achievement is positively impacted when parents and teachers communicate regarding students' academic work. Standardized test scores indicated improvement in reading when classroom teachers take a lead role and encourage parental involvement in children's homework (Catsambis & Garland, 1997; Epstein, 1984; Pang & Watkins, 2000). When parents communicate with members of the professional school community about how to help their student complete homework, parents are more willing to help. Additionally, parents find helping their student to be an invaluable way to support their child's learning. With added instructional support, students' scores on standardized testing increase (Epstein, 1984). When parents receive *less* communications from school, they are not as confident about helping—which impacts parents' perceptions of the school's academic programs (Epstein, 1984). When teachers demonstrate an understanding that partnering with parents in activities that support learning are important components to a home-school relationship, students benefit (Pang & Watkins, 2000).

Students are influenced by members of their homes, schools, and community. When the individuals who comprise these three entities communicate with one another,

the result is a more unified message of expectation for the student (Epstein, 2001). This type of communication can have a positive impact on student behavior and student achievement (Epstein, 2001).

Cultural Background

Students come to school with differing backgrounds; they come with their parents' cultural models and unique social communities (Ogbu, 1992). When a person is from a different culture than the dominant culture, two types of differences can occur. Ogbu identified primary cultural differences as variations in culture that are present before a person moves into a new culture. These distinctions may appear in dress or in the way a culture raises their children. Ogbu also identified secondary cultural differences as those that appear when two distinct cultures come in contact with one another. Usually these differences become apparent when the dominant culture identifies the differences in the subordinate culture. In the United States, middle class white culture is the dominant culture (Lareau & Horvat, 1999; Ogbu, 1992). Students from cultures other than this may find they encounter secondary cultural differences once in school (Eberly, Joshi, & Konzal, 2007; Fuller & Clarke, 1994; Ogbu, 1992).

When school-aged children from families with different cultural backgrounds begin to attend school, cultural differences can result in classroom issues such as different cultures that don't include the concepts or learning styles understood in the United States. Because these children come to school with different expectations and backgrounds than the dominant culture, students and their families may find it difficult to succeed due to these cultural barriers (Eberly et al., 2007; Lee & Bowen, 2006; Ogbu, 1992).

When parents know more about classroom instructional practices, they are more apt to become involved in instructional practices at home. When parents of diverse cultures are less familiar with instructional practices, they are less able to participate in instruction at home and feel more alienated from the school culture (Li, 2006). Lee and Bowen (2006) found that parents from African American, Hispanic, and Latino cultures were more likely to believe it was important to help with homework and manage their child's activity time regardless of their abilities—similar to their European American counterparts. Across cultures, parents who are involved in their child's education have students that are more likely to achieve academically (Joshi, Eberly, & Konzal, 2005; Lee & Bowen, 2006). This type of involvement can come from parent communication, but also from parents becoming more involved in school activities.

Communication between parents and teachers is not the only form of partnership that impact student's academic achievements. Parent expectations for student success can also impact student success regardless of parent involvement in school communication or activities. Hong and Ho (2005) found that direct parent involvement in the forms of communication with teachers and attending school meetings had less of an impact on culturally diverse students as parent aspirations for their child's academic successes. Parent expectations for student success are more pronounced in some cultures. When parents communicate with their children about school, the child feels more in control of his or her education and demonstrates higher academic achievements (Fan, 2001; Hong & Ho, 2005). Fan (2001) found that higher parent expectations for children resulted in higher academic achievement by the student. Parents should be encouraged to talk with

their child about aspirations for his/her academic achievements and successes (Hong & Ho, 2005).

Schools should communicate with parents and involve them in school as a way of familiarizing them with instructional practices and institutional norms (Li, 2006).

Sensitivity to cultural differences must be addressed within a school as well. In a 2007 study, researchers found that teachers often reflect the attitudes of the dominant culture and do not realize they harbor cultural biases toward families from subordinate cultures. To develop effective partnerships with parents of culturally diverse students, these teachers were forced to confront their biases by overtly acknowledging them (Eberly et al., 2007). For communications between culturally diverse families and schools to be productive, schools should help teachers understand the cultural differences in the families of their students instead of trying to influence culturally diverse parents to change their practices to become more like the dominant culture (Eberly et al., 2007; Lee & Bowen, 2006). Through the use of books (including teaching units in classroom instruction on the heritage of various cultures), or even by inviting parents of different cultures in to speak about their beliefs and practices prevalent in their background, schools can provide professional development to classrooms teachers about the cultural practices of the families in their classrooms (Joshi et al., 2005). Teachers who work with culturally diverse families should understand and respect the cultural differences present in their classrooms regardless of the length of their teaching career. Additionally preservice teachers should be instructed in cultural diversity to lessen the presence of cultural biases in all teachers (DeCastro-Ambrosetti & Cho, 2005).

It is important for teachers to understand the cultural diversity of their families (DeCastro-Ambrosetti & Cho, 2005; Joshi et al., 2005; Peel, 1995). When parents and teachers don't understand one another, the parents and teachers begin to ascribe different meanings to the same interactions. The relationship between a teacher and a parent can suffer as a consequence of these misunderstandings (Wong & Hughes, 2006). As a way to begin to understand and respect the diverse cultures of their students' home lives, teachers can utilize student conferences (Peel, 1995). When meeting with parents, teachers should be sensitive to backgrounds and how a parent's diversity might influence their comfort levels in participating as a partner in their child's education (Peel, 1995). Schools should make an effort to hire personnel who represent diverse cultural backgrounds throughout the building, including school administration, classroom teachers, and other school personnel. If these teachers, administrators, and school personnel represent cultures that are present in the building, students and families will feel less like they are from a subordinate culture and will be more likely to engage in partnerships (Shah, 2009).

In a study that considered ethnic and language obstacles to parental involvement, Wong and Hughes (2006) found that Spanish-speaking parents were less likely to become involved in their child's education. This was not as a result of the parent's disinterest in their child's education, but more due to a lack of proficiency in English—which led to lower levels of involvement. Lack of communication between home and school in Spanish-speaking households is significant given the predictive nature of parental involvement and academic successes in Hispanic and Latino families.

A 2006 medical study entitled, *The Interpreter as Cultural Educator of Residents*, was conducted by Dr. Ann Chen Wu and her associates to investigate how Latino parents preferred to be educated about their children's illnesses. Latino parents reported being more comfortable in settings where the professional understood the Latino cultural values. Latino parents were also more able to act as partners in the conversation when provided with a person to act as the language interpreter. De Gaetano (2007) found that the most important factor in building successful partnerships between schools and Hispanic and Latino families was an understanding and respect for the Hispanic and Latino cultures and languages. Of primary importance to the success of De Gaetano's research was the fact that two researchers were of Latino descent and the researchers were able to communicate with the families in their language. Overall, schools need to consider the cultural backgrounds of school families in their student populations, and facilitate a respect and understanding for cultural differences throughout the school community. Familial cultural differences influence the way parents participate in the relationship and types of communication parents have with classroom teachers in spite of the format in which the communication takes place.

School Partnerships

Students benefit when schools collaborate with members of the learning community to support academic achievement (Epstein, 2001; Sanders, 2008). School leadership sets the tone for parental involvement and this collaborative attitude encourages teachers and school staff to engage in partnerships (Hoover-Dempsey et al., 2005). School personnel should work to include parents in the learning processes by

providing opportunities to assist students in schoolwork that is completed at home. Partnerships work collaboratively to create positive learning environments for the child (Epstein, 2001). Consistent two-way communications between schools and parents are key components to successful partnerships (Cochran & Dean, 1991; Epstein, 2001; Hayes & Chodkiewicz, 2006; Sanders, 2008).

Epstein (2001) conducted numerous studies on the impact of family, school, and community partnerships, and classified these relationships in her theory of overlapping spheres of influence (see Figure 3). This theory identifies school, family, and community as influencing the student—they all come together and work as partners to interact collaboratively yet separately at different times in a child’s life (Epstein, 2001). It is through the convergence of the spheres that schools and parents can begin to work together to share information and support students’ academic achievements (Epstein, 2001). Each member in the learning community is respected and their opinions about the student valued. Schools have the responsibility to provide the resources necessary to facilitate these partnerships (Cochran & Dean, 1991).

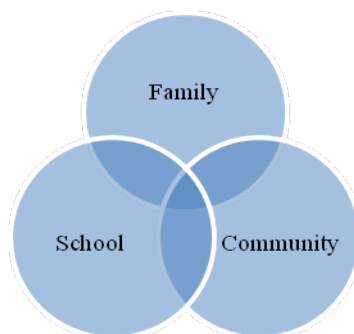


Figure 3. Epstein’s Spheres of Overlapping Influence

Epstein (2001) detailed the type of involvement found in comprehensive partnership programs, suggesting that schools and communities work together to educate parents and establish home environments conducive to learning. Schools should also provide information to households on how to support students in completing homework. Communication practices should be designed and implemented that provide two-way regular communications about school programming and student progress. Schools should build volunteering opportunities for parents and develop parent leaders to include in the school's decision-making processes. To support the whole student, schools should work with organizations in the community to provide resources to school families that are designed to reinforce school programming (Epstein, 2001).

Partnerships between student families and school personnel depend on a collaborative relationship that is built on respect and trust between each party, and is an indicator of school effectiveness (Forsyth et al., 2006; Tschannen-Moran, 2009). Schools have to work to include parents as a partner in the education of students since parents are not an integral part of the school environment in that the school could run without parents present in the building (Forsyth et al., 2006; Tschannen-Moran, 2009). The relationship between school personnel and parents should have clearly communicated expectations for each member of the relationship and should be established to elicit trust from each member of the relationship. In trusting relationships, each participant understands his or her role in the relationship and has the right to expect certain behaviors from the other parties (Bryk & Schneider, 2003). Collaborative trusting relationships

between parents and teachers can have a positive impact on student achievement (Forsyth et al., 2006; Tschannen-Moran, 2009).

Similar to the impact of trust within the relationship between parent and teachers, professionalism in the classroom is directly related to a trusting collaborative orientation of school leadership (Tschannen-Moran, 2009). Trust issues include teachers feeling valued for their beliefs and contributions in the classroom, and parents trusting that the school is committed to working collaboratively to provide appropriate educational opportunities (Forsyth et al., 2006). When trust and expectations are high, partnerships are more collaborative in nature, and academic performance increases as well. When teachers know they are supported by parents, and building leadership, they are more likely to experiment with new instructional practices (Bryk & Schneider, 2003). For trust relationships to flourish, participants need to be empathetic and understand the differences between the parties. School professionals and parents must work together to overcome feelings of distrust and reach out to build collaborative trusting environments that support student academic achievements (Bryk & Schneider, 2003).

Teacher partnerships are influenced by attitudes about how parents can help students (DePlanty et al., 2007). Epstein (2001) outlined three general learning processes that teachers have regarding parent partnerships:

1. Teachers feel parents care about their child's academic success but cannot help them in the learning process.
2. Parents do not care to help their child learn.

3. Parents care and can support their child's learning but need to be taught how they can help.

While teachers currently use report cards and parent-teacher conferences to build relationships between home and school, they can also use other practices to build these collaborative partnerships.

Teachers can begin to involve parents in education by inviting parents into the classroom to understand what is being taught. By including them, parents have a better understanding of how to help their child at home (Epstein, 2001). While teachers communicate with the families of their students about how learning can be supported at home, teachers report they do not know if parents are taking their advice and implementing the school's suggested practices (Izzo, Weissberg, Kasprow, & Fendrich, 1999). Teachers must be careful not to pry into their students' home lives; but they must also know enough to have an understanding of the nature of educational support in the home. Teachers understand the importance of finding ways to engage parents since it is more difficult for teachers to partner with families of students as the students get older (Epstein, 2001; Hayes & Chodkiewicz, 2006). When parents are involved in their child's education, they communicate with the child about their aspirations for their child's academic achievements. This communication positively impacts student academic performance (Hong & Ho, 2005).

Parents become more involved when schools appeal to a parents sense of worth in being able to help their child in school. Personal communications to parents encouraging parents to engage in partnerships are more effective than general communications. When

parents feel their skills and knowledge benefit their child, they are more willing to commit time and energy into school partnerships. To encourage effective partnerships with parents, school personnel must be willing to be flexible regarding how these partnerships evolve. When parents feel schools understand and empathize with diverse home situations, they are more willing to devote time and energy toward developing these partnerships (Hoover-Dempsey et al., 2005).

Personal communications to parents from schools inviting them to become involved in classroom or school activities are the most influential vehicles used to encourage home-school partnerships (Anderson & Minke, 2007). Parents want to receive requests to participate in classroom or school activities as partners with the school. It is the parents' relationships with their child and teacher that drives this involvement and supports a reciprocal partnership between home and school (Green et al., 2007). Since parents become involved in their child's academic life when they believe they can help their child succeed, schools can help parents sense of efficacy by identifying stresses concerning their child's education. With this information, schools can provide supports toward empowering parents in supporting their child's learning (Anderson & Minke, 2007; Cochran & Dean, 1991; Hoover-Dempsey et al., 2001). Most schools issue blanket requests to parents inviting them to become involved in schools. These general requests are not a predictor of parent involvement (Green et al., 2007). When school partnerships are a priority, parental involvement is highest. This fact spans across parents from different socioeconomic backgrounds (Green et al., 2007).

To facilitate strong partnerships, school personnel should endeavor to understand parents' views and needs regarding supporting learning at home (Cochran & Dean, 1991). Parents want to help in the classroom but become discouraged if teachers don't respond to their communications regarding specific concerns (Lawson, 2003). Parents want multiple opportunities to be involved in learning activities, as well as opportunities to be involved in the school community (Hayes & Chodkiewicz, 2006). Teachers should work toward maintaining regular contact with the parents of their students. It is through collaborative reciprocal communications that teachers can work with parents to show them how they can positively impact their child's academic performance (Mapp, 2003). A parent's background influences involvement in schools. Parents' beliefs about school involvement, their life context, the communication they receive from school, and their children influence the way they choose to become involved in school partnership activities (Green et al., 2007). Some parents will choose to support their child from home, others may choose to become involved at school through specific school events. Still others may engage themselves with the school through activities that require regular time commitments at the school (Anderson & Minke, 2007).

Evidence suggests that parent involvement supports increased academic gains in students (Izzo et al., 1999; Warren, Hong, Rubin, & Uy, 2009). Partnerships allow parents and teachers to share responsibilities for students' academic achievements (Warren et al., 2009). Schools should work with community organizations to help the school build relationships with parents over time. Community organizations can help school personnel recognize that parents of different cultures and backgrounds have

different needs and goals for helping their children through school (Sheldon, 2007; Warren et al., 2009).

It is inaccurate to assume that uninvolved parents don't care about their child's academic achievements. Parents from all socioeconomic backgrounds and ethnicities care about their child's academic progress and would like to become involved in their child's education (Mapp, 2003; Walker et al., 2004). The establishment and maintenance of collaborative partnerships is challenged when schools and parents do not share a common language, socioeconomic status, or personal educational experiences (Sanders, 2008). Whenever possible, it is important for schools to communicate about partnerships with both parents in order to build collaborative relationships. Communications does not always have to center around academic achievements. Through consistent communications, parents and teachers develop strong relationships and begin to understand different goals for student academic achievements (Jeynes, 2005). Parents from different cultures view teachers and schools in different cultural contexts than is expected in American public schools. Some of the ways culturally diverse parents choose to become involved are not recognized by school staff and this creates tension when discussing opportunities for parents and teachers to collaborate (Mapp, 2003). The inclusion of school liaisons hired to bridge these gaps alleviates many obstacles that arise from diverse members of partnerships (Sanders, 2008). Parental involvement in educational processes makes significant contributions to student academic achievements that override the effects of parent backgrounds or socioeconomic statuses (Ho Sui-Chu & Willms, 1996). In order for parents and teachers to utilize different methods of

communication to form partnerships that support student learning, schools should establish expectations that encourage parent involvement (Epstein, 2001). The expectation from the school regarding parent and teacher collaborations is a necessary component for any type of communication that may impact student achievement (Green et al., 2007).

Technology Use

Computer technology is perceived to simplify tasks and allow users to finish projects with ease and in less time than when not using it (Wajcman, 2008). Research has shown that computer technology users do not enjoy more free time as a result of using it. Rather, people use computer technology as a way to multitask and complete a greater number of projects in the same amount of time (Wajcman, 2008). This phenomenon is not only seen in the business world, but has also emerged as a tool for task completion in households as well. Computers have become more common in households and are being used to manage household business (Venkatesh, 2006). While household members prefer to communicate with one another face-to-face, a 2007 study by Kennedy and Wellman found that families use IFC to enhance contact with one another. In 2008, the *Pew Internet and American Life Project* reported that 56% of families with children use the internet, cell phones, or email in some way (Kennedy, Smith, Wells, & Wellman, 2008). While people speculated that IFC use would lead to the dismantling of the American family, this has not happened. Families use the internet together and use IFC to coordinate their time and stay connected with one another (Kennedy et al., 2008).

Technology and the Workplace

Technology is a dynamic tool influenced by the individuals using it and the context in which it is used (Bansler & Havn, 2006; Orlikowski, 1992). When technology is brought into an organization, a prerequisite for successful implementation is a perceived need that the technology is filling (Ely, 1990). When new technology is opened, organization mediators step in to conceptualize and modify use of the new technology to ease the organizations' adaptation (Bansler & Havn, 2006; Orlikowski, 1992). When the context and technology use is designated through its introduction, the defined new technology use is predetermined by the consumer. The use of that technology becomes habituated over time. Finite technologies are used to fill specific needs to facilitate the functioning of the organization (Bansler & Havn, 2006; Orlikowski, 1992).

Along with perceived need, Ely (1990) identified conditions that must be met to successfully implement new technologies into an organization. For starters, an organization's leadership must support any new implementation. Second, future users expected to utilize the new technology should have a voice in the selection of the new technology and be committed to its successful implementation. Third, the organization must provide resources to support the new technology that involves training, building support, dedicated personnel, and supporting documentation. Last, new technology users must believe they have the ability to be successful using the new technology (Ely, 1990).

Among many things, computers are used as a vehicle to maintain communication with others. They have become a vehicle for multitasking or simultaneously managing

many activities—both at work and at home (Wajcman, 2008). Managing more than one task at a time may mean the user begins one project and abruptly stops work before completion to work on another. These changes in tasks are usually due to an interruption of some kind such as a phone call, an email alert, or an actual person (Mark, Gonzalez, & Harris, 2005). Email is an IFC that is used as a digital communications tool to support conversations between one person or multiple people. Conversations are two-way exchanges. As a two-way activity, when a user receives an email, undertaking an action in response to the email is an understood expectation (Jackson, Dawson, & Wilson, 2001; Mark et al., 2005; Russell, Purvisa, & Banksa, 2007). Many email programs have a functionality that alerts users when new messages arrive via some sort of sound alert. These alerts can ensure users are immediately alerted to pending messages. Email alerts may act as a vehicle for task interruption for many computer users (Jackson et al., 2001; Mark et al., 2005; Russell et al., 2007). Studies have found that computer email distractions significantly impede task completion (Mark et al., 2005; Russell et al., 2007). Email interruptions can be controlled by the user by altering alerts or only setting the email program to check for new email on an incremental basis instead of constantly (Jackson et al., 2005; Russell et al., 2007). While computer technology is used to facilitate the completion of tasks, technology users have the ability to decide how it will be used to best fit their needs.

Technology and Minorities

Internet facilitated communications use is culturally influenced by statements made by others in the same social element (Leonardi, 2002). Internet facilitated communications users also learn vicariously through their peers and usually are influenced by them on how to incorporate new types of technology into their lives (Schmitz & Fulk, 1991). In a study concentrating on how one culture uses IFCs, researchers found that Latinos are clear about the capabilities of using the internet for communication purposes. Also uncovered was the fact that men and women use computers differently (Leonardi, 2002). Latino men generally operated computers more than Latina women, while Latina women were more likely to identify the internet as dangerous and thought it provided an inadequate communications outlet (Leonardi, 2002).

Ono and Zavodny (2008) found that English language proficiency plays a key role in whether immigrants use IFC. Spanish-speaking immigrants are least likely to use IFC. This could be because their culture does not value internet technology as a social or information tool (Ono & Zavodny, 2008; Selwyn, 2004). In a separate study, Latinos were found to perceive new technologies in terms of how each technology might promote the Latino cultural values of good communication. The difficulties of learning how to use new technologies are thought to be substantial enough that the steep learning curve outweighs any benefits that might come from using it (Leonardi, 2003). Overall Latinos do not see the internet as a communication technology—rather they perceive it as a way to find entertainment (Leonardi, 2003). Latinos value smooth and harmonious

relationships and place value on familial relationships. Computers are seen as an obstacle that is in the way of achieving this (Leonardi, 2003).

Computers and IFC use have increased significantly over the past decade although this increased use has not been consistent throughout American society. There are still households not using computers or IFC as a tool to complete tasks or find information (Cleary, Pierce, & Trauth, 2006; Ono & Zavodny, 2008; Selwyn, 2004). Minorities and low income households are less likely to own a computer or have access to the internet than households with more socioeconomic status (Attewell, 2001). The educational achievements of household members, as well as their finances, impact technology use (Cleary et al., 2006). When households are of higher socioeconomic statuses, computer use is prevalent across all educational levels and ethnicities (Attewell, 2001). The number of middle income households buying computers and utilizing the internet for its information and communication needs continues to increase (Attewell, 2001). However, the number of low income households (that is, those in the lowest quartile of income in the United States) is not growing as quickly as high and middle income households. Attewell asserted that families from low income households also tend to live in areas with schools that do not have the same computer resources for their students as schools from high and middle income communities.

Technology and Culture

Computer use is also dependent on a household's culture. Along with income level and educational backgrounds, individual computer and internet technology use are culturally influenced (Cleary et al., 2006; Ono & Zavodny, 2008). Individual computer

and internet communications usage are influenced by how both have been acculturated and how well the individual has accepted this acculturation (Selwyn, 2004). For instance, in an effort to address the digital divide, the cities of Atlanta and LaGrange, Georgia both provided free internet access and training to low income families. Kvasny and Keil (2006) reported on this effort and found that providing access to computers did not guarantee that the household would use the technology. Training on how to use computers, and the types of information that can be accessed through the internet, was a crucial component for program success (Kvasny & Keil, 2006). New users to computer and internet technologies also needed a tangible reason for accessing the technology. How well new technology users adapted to technology was dependent on how users utilized IFC to access their social network and how much they relied on computer technology as an informational source (Selwyn, 2004). Users in successful training groups were allowed to develop a community to learn collectively and build supportive social networks that supported investigating hardware and software for ways to fill unique community needs (Kvasny & Keil, 2006).

Technology and Socioeconomic Background

School children are potentially exposed to computer use, both at home and school. Students from less educated low income families have less access to computer and internet technologies. Consequently, they use computer technology less (Cleary et al., 2006). If a computer is in the household and a child witnesses an adult using the computer for productivity or communication, these actions can influence the child's use (Cleary et al., 2006). In addition to home, students encounter computer and internet

technologies at school. While computers are not new to the school environment, many teachers are using computers with their students to automate what was previously accomplished using pencils and paper (Attewell, 2001). Schools also must train teachers to use technology to influence learning in the classroom. The digital divide exists in schools and is most evident among schools with students from high or low income homes. Teachers from schools that serve families with high socioeconomic statuses have more opportunities for professional development. Teachers pass on this new knowledge to their students through more innovative classroom practices more so than teachers from schools that serve families and students with low socioeconomic statuses (Valadez & Duran, 2007). Teachers from schools with lower socioeconomic statuses are given fewer opportunities to learn about ways to use the internet that challenges their students (Valadez & Duran, 2007). To acculturate students into the possibilities of computers and internet technology, teachers must be given time to train and practice with integrating technology into lessons and activities geared toward using technology (Valadez & Duran, 2007). It is necessary to understand how families view the use of technology from a cultural as well as socioeconomic aspect when considering IFC as a vehicle for collaboration between a student's home and school.

School Technology Use

Like many business organizations, schools use technology to facilitate operations; teachers and students use technology as an instructional tool in classrooms. Internet communications technology is also being used throughout school communities between administration, teachers, and parents as a communications tool (Anderson & Dexter,

2005). It is through IFC use that schools are working to communicate with school personnel and the community to build communities with shared vision and purpose (Anderson & Dexter, 2005). Since schools typically stress person-to-person interactions, they appear to be slower than other organizations in fully integrating IFC throughout its school practices (Mumtaz, 2000). Additionally, organizations face resistance when introducing new operational procedures (Ely, 1990). Schools are accustomed to communicating with parents through established practices such as classroom handouts in student folders, and school communications mailed directly to parents (Epstein & Center for Research on Elementary and Middle Schools, 1986). When the building administration suggests that teachers do something different, oftentimes there is not enough training or building support for teachers to effectively incorporate these practices into their routine (Anderson & Dexter, 2005; Ely, 1990; Mumtaz, 2000). If the teacher's workload is not positively impacted, the new routine only increases it—which adds stress to the workplace (Timperely & Robinson, 2000). Teachers feel the stress of increased workload through duplication of effort and an unclear vision of how new practices will impact their productivity. This stress can be minimized if support is provided by district and building leadership (Anderson & Dexter, 2005; Timperely & Robinson, 2000).

Informed building leadership plays a key role in establishing new technology practices in instruction and communication (Anderson & Dexter, 2005; Flanagan & Jacobsen, 2003; O'Dwyer, Russell, & Bebell, 2005). Technology is best integrated when the school community has an opportunity to develop a common vision that includes computer technology use and is used throughout the school community (Flanagan &

Jacobsen, 2003). Aside from using technology to educate students, building leadership can encourage building personnel to use computer technology to streamline school procedures (Yuen, Law, & Wong, 2003). For instance, word processing increases the timeliness of project completion, and digital communications facilitates contact with school community members in an expeditious manner (Perez & Uline, 2003). When building leadership uses computer and internet technologies to transform their own professional practices, leaders are better equipped to suggest meaningful ways computer and internet technologies can be integrated throughout the school community to simplify processes and procedures (Perez & Uline, 2003).

The presence of computer and internet technologies is not standard in every school. While the ability to use computer technology as a tool is a skill that enables students to participate in the digital society, many schools are not adequately equipped with computer hardware to educate students (Flanagan & Jacobsen, 2003; Livingstone & Helsper, 2007; Valadez & Duran, 2007). As a result of this inequity, students with less access to computer technology are being left behind by their more privileged peers (Valadez & Duran, 2007). This issue can be mitigated if school leadership provides adequate professional development and support to teachers in developing curriculum designed to develop their students' technology skills. Part of a teacher's professional development should be in allowing him or her to reevaluate beliefs and attitudes about his or her role as classroom teachers. At times, the integration of technology tests the values of classroom teachers (Yuen et al., 2003). Building leaders are school community members who can encourage teachers to investigate ways to integrate computer and

internet technologies into classroom instruction to help students think, solve problems, make decisions, and interact with other computers users (Flanagan & Jacobsen, 2003).

Coupled with an understanding of leadership expectations, teachers' pedagogical beliefs about learning influence their classroom technology use (Windschitl & Sahl, 2002). Despite the amount of technology present for instructional use, teachers rely on their personal beliefs regarding effective teaching strategies and how to best educate students when integrating computer and internet technologies into classroom practices (Mumtaz, 2000; Windschitl & Sahl, 2002). When teachers have a clear understanding of what should change and how that change impacts their professional practices, then they are able to change their teaching practices to integrate technology into their professional procedures (Mumtaz, 2000).

Teachers' personal comfort levels with technology also impact the way computer and internet technologies are used throughout classroom practices (Angeli & Valanides, 2004). While teachers use IFC to plan lessons, grade assignments, and support professional conversations via email, these practices do not always transfer into classroom routines (Bebell, Russell, & O'Dwyer, 2004). Computer technology is utilized through the culture of building teachers (Schlager & Fusco, 2003). Teachers that integrate technology effectively into their professional practices often belong to a larger community of professionals that rely on one another for support in their practices. These teaching communities often establish a set of norms for the use of computer technology instruction in their classrooms. Since the norms are established, teachers who are new to computer technology integration in the classroom use the unstated norms of the larger

social group as a guide for instruction (Schlager & Fusco, 2003). Professional development that focuses on technology integration and how it benefits student achievement increases the value teachers place on instructional technology (O'Dwyer et al., 2005). Integrating computer and internet technologies into a classroom depends on comprehensive professional development that includes supporting teacher's personal technology competencies and understandings as educational professionals (Kirschner & Davis, 2003). It is important to understand technology use in a school as a tool for professional collaboration. This type of collaboration can extend beyond the school building members to technology use as a tool to facilitate communications between parents and teachers.

Technology Facilitated Communications

Technology can be used in schools to streamline processes. Communicating with the school community is one area where technology can play significant roles in facilitating processes (Merkley, Schmidt, & Dirksen, 2006). Partnerships between schools and student's homes are more productive when parents feel included (Epstein, 2001; Hoover-Dempsey et al., 2005; Sheldon, 2007). Teachers use internet communications to contact the student's families—both individually and in groups (Hughes & Greenhough, 2006).

When using IFC to contact families, the school community culture and communication purposes impact technology use decisions (Hughes & Greenhough, 2006). When teachers and parents begin to communicate on a one-to-one basis, they are more able to personalize student learning and capitalize on the input and talents of

student household members (Hughes & Greenhough, 2006). When parents and teachers are both engaged in a student's work, the student becomes more interested in his or her learning, as a byproduct of the adult partnership (Epstein, 2001).

Summary

The literature review specifies that parent communications are designed to aid in student academic achievements, as well as involve parents and the community in activities that support a school's goals (Epstein, 1986; Epstein, 2001; Simon, 2001). The importance of communication is to break down barriers between students' homes and their school environments. Parental involvement during childhood can have beneficial impacts on the conditions that students learn by reducing the impact of socioeconomic disadvantages and improving student attendance (DePlanty et al., 2007; Hango, 2007; Lee & Bowen, 2006; Lee et al., 2009).

Factors that can influence parent communications with schools are a parent's socioeconomic status and family culture. Parents' socioeconomic statuses impacts the way families interact with professionals at their child's school. Parents from lower socioeconomic backgrounds usually don't participate in school activities as much as parents from higher socioeconomic statuses. This can be due to the demands or flexibility in the workplace, or as a result of the amount of education parents have completed.

Culture also plays a role in parent communications at school. It is important that teachers understand the cultural backgrounds of the students (Eberly et al., 2007; Peel, 1995). A primary barrier to effective communications between home and school is a lack of understanding between parents and teachers regarding the purposes and outcomes of

schooling. Schools are finding ways to communicate with parents who cannot physically come to school due to demands on their time, or not being comfortable in participating with the school due to cultural differences (Eberly et al., 2007).

One way schools are communicating individually with parents is through IFC use. Most schools have computer access for the professional community to use as a work tool for task completion, along with as a medium to maintain communications with others. Computers have become a vehicle for multitasking or managing many activities simultaneously—both at work and home (Wajcman, 2008). Internet communications technology allows school personnel to communicate with school district parents regarding school programming or individualized school performance.

The impact of IFC on student achievement was considered in this study. Research questions addressed were:

1. What are the types, frequency, and degree of communications initiated by parents and teachers with the advent of instantaneous communication created by electronic communications technology?
2. When parents initiate electronic communication regarding student academic achievement, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?
3. When teachers initiate electronic communication regarding student academic achievements, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

CHAPTER III

METHODOLOGY

Introduction

The connection between school and home is significant and has been linked to student academic achievements. Successful school partnerships are designed to involve parents in activities that support school goals. Parental involvement with their child's school can have positive impacts on student achievement by reducing the impact of socioeconomic disadvantages, and improving student attendance in schools (DePlanty et al., 2007; Hango, 2007; Hill & Taylor, 2004; Howland et al., 2006; Lee & Bowen, 2006; Sheldon & Epstein, 2004). The 2001 *No Child Left Behind* (NCLB) Act (PL 107-110) recognized the importance of home-school relationships. Included in NCLB is a section that mandates that parents be involved in their child's education (PL 107-110). One way schools are doing this is by communicating with parents regarding their student's achievements in school.

Connections between schools and students' homes can be established and strengthened through different forms of home-school communications. The importance of communications is to break down barriers between a student's home and school environments. The use of different communication methods can be thought of as tools used toward the goal of developing collaborative relationships between parents and teachers (Anderson & Minke, 2007; Epstein, 2001; Green et al., 2007; Howland et al.,

2006; Miretzky, 2004). Parents and teachers benefit from communication systems that are flexible and enable two-way group or individual messaging. Schools also need to consider various communication forms that support a collaborative and personal relationship between the school and home environment. Internet facilitated communications (IFC) allows members of the school community to communicate on interpersonal levels and allow for flexibility in delivery and response by the users (Perez & Uline, 2003; Webber, 2003).

Parents and teachers engage in various communication forms, including formal scheduled communication and informal meetings. One of the ways schools utilize IFC to communicate with parents is to report on student progresses. The use of IFC as an instrument was considered in terms of how it can facilitate formal and informal communication between parents and teachers. It is unclear if IFC has changed communication methods between parents and teachers. Specifically, this study is interested in how schools operate toward the goal of facilitating teacher communication with parents through the use of IFC. Of importance are: the way internet communication tools are used, the rules that govern use, and if the combination of rule-based internet communications facilitates good communications regarding student academic achievement.

Parental involvement in schools is important because it leads to increased success for a student (Anderson & Minke, 2007; De Gaetano, 2007; DePlanty et al., 2007; Epstein, 1986). Factors exist that hinder (or encourage) home-school partnerships. Parents become involved based on the perception of their ability to help their child in

school (Brittingham, 1998; DePlanty et al., 2007; Hoover-Dempsey et al., 2005). Of these perceptions, communication from teachers that encourages parent participation has the most impact on parents' decisions to become involved (Epstein, 1986; Green et al., 2007; Hoover-Dempsey et al., 2005).

Despite these communications, factors still exist that may obstruct parental involvement:

1. Social economic status.
2. Educational status.
3. Cultural background and belief systems.

A parent's social economic status can impact the way the parent interacts with individuals at their child's school. While parents from varied socioeconomic statuses want their children to succeed in school, parents do not participate with teachers the same way across socioeconomic strata (Murray, 2009; Sirin, 2005). This may be due to the demands (or flexibility) in the workplace or can be a result of the amount of education the parent has completed (Auerbach, 2007; Lareau, 2000). Either way, schools should be aware of the impact socioeconomic status has on parent interactions with schools.

A second factor that may obstruct parental involvement is *educational status*, which may impact the way parents interact with teachers. Research suggests that public schools are middle class institutions and parents of higher or lower socioeconomic means must find ways to become involved in a culture different from their own (Auerbach, 2007; Desimone, 1999; Hoover-Dempsey et al., 1987).

A third factor that may impact parental involvement is the *cultural background and belief systems* of families. These beliefs include the perception that parents should be involved in school, and that their involvement will make a difference in helping children learn (Hango, 2007; Lee & Bowen, 2006). Teacher requests to parents to become involved are important factors in a parent's actual decision to become involved.

Communication from schools to become involved in school partnerships is an effective way to combat socioeconomic and cultural barriers. This researcher believes that effective use of IFC can provide a flexible way to develop relationships between schools and a student's home (Cameron & Lee, 1997; Clemente, 2002). Internet communication technology use can be hindered by the experiences parents and teachers have had with previous uses of this type of communication. To clarify parent and teacher perceptions, this study attempted to answer the following research questions:

1. What are the types, frequency, and degree of communications initiated by parents and teachers with the advent of instantaneous communication created by electronic communications technology?
2. When parents initiate electronic communication regarding student academic achievement, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?
3. When teachers initiate electronic communication regarding student academic achievements, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

Partnerships between a student's home and his or her teacher can impact student achievement (DePlanty et al., 2007; Hango, 2007; Hill & Taylor, 2004; Sheldon, 2007; Sheldon & Epstein, 2004). The impact of IFC on home-teacher communications and on these partnerships can impact relationships and student academic achievements (Auerbach, 2007; Becker & Epstein, 1982; Hill & Taylor, 2004).

Research Strategy

This study was designed to find emergent themes that surface from the perceptions of users of this type of communication. Qualitative research provides researchers with in-depth descriptions of the processes, perceptions, and outcomes to make meaning out of a situation (Lodico, Spaulding, & Voegtle, 2006; Marshall & Rossman, 2006). The situation is studied to find how processes occur and outcomes are achieved. Predictions cannot be made about *what might be happening* because the researcher looks at the factors involved to find in-depth understandings by studying a limited group of individuals in a specific location (Marshall & Rossman, 2006). From these understandings, themes are generated that describe the situation at hand. These themes are intended to help the individuals involved in the study make meaning from their situation and to provide one scenario for other communities to learn from (Lodico et al., 2006; Marshall & Rossman, 2006). Finding trends in the experiences of parents and teachers that use technology as a communications tool led this researcher to a qualitative approach.

This study did not use a quantitative or mixed methodology approach because it was not looking at a measurable outcome of communication. The quality (or outcomes)

of communications were not predictive in nature since there was no independent or dependent variable when considering communications between home and school (Lodico et al., 2006). An ethnographic study would describe the experiences of one specific family but may have been too intrusive to write. Also, the researcher believed this study might inform the communications processes of other school districts. Finding emerging themes and trends from a diverse school district might be more beneficial for decision-making than an in-depth understanding of a particular set of participants.

This study attempted to show communication trends between parents and teachers within a school district that had established technology and communications plans in place (see Figure 4). Since this research was conducted via a questionnaire, the validity of the respondent's answers could be assumed (Marshall & Rossman, 2006). Validity was attained by repeating the same questions to individuals who hold the same status in the school community. The researcher looked for emerging trends from these data that appeared in these repeated responses (Lodico et al., 2006; Marshall & Rossman, 2006).

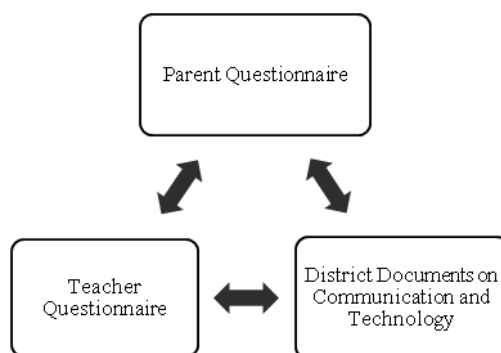


Figure 4. Parent and Teacher Communication Paths

To obtain a clear understanding of how communication actually takes place in the school district, individual feedback from parents and teachers regarding communication

with one another about scholastics was necessary. It was also important to consider communication in light of the school district's communications plan. Of significance was whether or not IFC followed the suggested guidelines in official district documentation. It was essential to understand if communication followed the district guidelines, and if not, what new rules were established for communication. It was necessary to understand what type rules facilitated effective communication between parents and teachers regarding student academic achievements.

The qualitative questionnaire was designed to allow the researcher to understand the quality and frequency of IFC between a student's home and school (Marshall & Rossman, 2006). The outcomes of these communications were important as it added another dimension to emerging themes. The use of online communication as a communications form is not a blanket endorsement. This is specifically true if technology facilitated communications are mandated as part of a school's technology or communications plan. It was imperative that the questionnaire be confidential in nature to ensure honesty on the part of respondents, and to assure teachers and parents that their answers would not impact student or teacher evaluations.

To gain a better understanding of the demographics and rules school community members operate under, additional material was obtained and considered when looking for themes (Lodico et al., 2006; Marshall & Rossman, 2006). The 2009 *Illinois District Report Card* was obtained to better understand the demographics of the school district. The report card was also used to understand the academic annual yearly progress of students in the district. Additionally, school district members operate under the district's

communications plan so a copy of this plan was obtained to better understand how the school district, as a whole, mandated communications between a student's home and their school district. Since this study concentrated on the use of technology facilitated communications, a copy of the district technology plan was also analyzed. This plan provided information on how technology was used throughout the school district. In light of the district's directives regarding communications plans, this documentation helped the researcher understand parent and teacher responses as well.

In qualitative research, it is important to find multiple data sources to use to corroborate or elaborate data results (Marshall & Rossman, 2006). By using multiple sources, other districts looking for policy advice may find these study results useful. Parent and teacher questionnaires were used for this study, along with district documents on technology use and communications forms present throughout the district. The researcher concentrated on trends and relationships that emerged from these independent documents. Using these data allowed the researcher to find patterns that emerged.

Site Selection

This study investigated the impact of IFC on student academic achievements. To understand communication outcomes between parents and teachers, it was beneficial to research teachers that had significant instructional time with their students. Instructional time is greatest in elementary school because students remain in the same classroom for most of the day with instruction from the same teacher (Marks, 2000). In light of this, an elementary district was chosen as the research site.

Because the socioeconomic status of one's home environment can impact the way parents interact with individuals at their child's school, it was necessary to consider a school district that had parents from diverse socioeconomic backgrounds. Additionally, cultural barriers impact partnerships between home and school (Joshi, Eberly, & Konzal, 2005; Lupi & Tong, 2001). This is particularly important since conversation styles between a student's home and school are influenced by the familiarity between the participant's cultural backgrounds and understandings of how different cultures communicate (Howland et al., 2006). To account for cultural impacts on communication, a school district that includes families of more than one cultural background was selected. School districts with a diverse socioeconomic base (but primarily parents of English or Spanish-speaking homes) were invited to participate to facilitate simplicity in language and cultural barriers.

In efforts to have a large sampling of participating schools, the size of the school district was taken into account. This allowed for a large enough number of schools to allow for principals that might not have agreed to participate in this district research project.

Since the research concentrated on technology use as a communications form, the existence of a technology plan throughout a district was important when choosing a potential research site. Additionally, the researcher looked for districts that had a published communications plan in place between a student's home and school. Since the researcher lived in a large suburban metropolitan area, school districts that fulfilled the

socioeconomic, cultural, and documentation requirements for this study were considered first when choosing a research site.

The elementary school district chosen for this study was a large suburban district of a major metropolitan city. The district consisted of eight elementary school buildings that serve Grades K-8. The commitment to student success was evident as the district registers a 96.1% attendance rate for its students. The racial and ethnic diversity within the district was within a measurable range for research with 31.9% of the families from Caucasian homes and 60.3% from Hispanic. Socioeconomic diversity existed in the district with 46.1% of the families registered as low income households. Cultural extremes were present with 23% of the students from families with a limited English proficiency rate.

The researcher called the district superintendent and followed a telephone script to invite him or her to allow the district to participate (see Appendix A). Once the district superintendent gave his or her consent, a confirmation email was sent thanking the district for its participation and confirming the next steps to be taken (see Appendix B for the District Superintendent's Letter of Cooperation). Then, the researcher contacted each school's principal (see Appendix C for the Building Principal's Letter of Cooperation) to explain the research study and timeline. The researcher confirmed with the principal about the delivery and distribution of study questionnaires to the parents and teachers in the district.

Sampling Plan

The questionnaires were given to teachers and parents (see Appendices E and G) in each of the participating elementary schools with students in Grades K-8. Participating teachers received a questionnaire in their district mailbox. Parent questionnaires were given to classroom teachers for distribution in their classrooms via the student's "Friday Folder" folder which traveled to and from school in the student's backpack. To prevent the possibility of parents of multiple children filling out the same questionnaire twice and potentially skewing the results, parent questionnaires were only sent via the youngest child. All questionnaires were returned to the researcher in a self-addressed, stamped envelope via regular U.S. mail to a post office box. Questionnaires were not delivered electronically in any way, shape, or form. To accommodate the cultural diversity throughout the school district, questionnaires were delivered in English on one side and Spanish on the other. Respondents were encouraged to answer questions in the language they felt most comfortable in using.

The average elementary school classroom size was 20 students. Since school partnerships involve parents and teachers, teacher questionnaires were coded to match the corresponding parent questionnaires. Coding did not reveal a specific building or classroom teacher, which enabled the researcher to look for trends in different school buildings as well as in grade level classrooms.

Questionnaire Design

The importance of communication is to collapse barriers between a student's home and school environments (Becker & Epstein, 1982; Epstein, 2001; Hoover-Dempsey et al., 2005). Home-school partnerships promote collaboration, which in turn positively impact student academic outcomes (Bryk & Schneider, 2003). Through these collaborations, parents report they feel they understand their child's academic programs better and are more competent to help their child at home. While all parents express a desire to support their children in school, factors such as socioeconomic status impact how involved parents can become in their child's education (Desimone, 1999; Hoover-Dempsey et al., 1987).

When teachers take the time to understand the differing cultures of their students, communications regarding education and learning are enhanced. Cultural barriers are important to understand and manage in diverse communities because conversation styles are influenced by the familiarity in the participants' cultural backgrounds (Joshi et al., 2005; Lupi & Tong, 2001). Requests to get involved in school have positive impacts on parent participation in their child's schoolwork. Additionally, the content and timeliness of communications between parents and teachers are important points to consider (Becker & Epstein, 1982; Joshi et al., 2005).

Two short and concise questionnaires were developed for this study and completed by respondents. They were the teacher questionnaire and the parent questionnaire. Background, as well as communication information, was gathered for each respondent. Parent gender, number of children, and the child's age enabled an

understanding of a family's communications needs. Teacher's experiences in the classroom, as well as their length of service in the district, offered information about professional longevity and familiarity with educational communications practices.

The first questionnaire consisted of 10 questions that concentrate on teachers' professional backgrounds, classroom demographics, and their communications with parents (see Appendix E). The questions were open-ended, qualitative in nature, focused on the type and frequency of IFC, and initiated by both parents and teachers. Questions also probed for follow-up communication and clarification. One question asked how teachers incorporated knowledge of the cultural diversity of classroom students into their communications practices with the families of their classroom students.

The second questionnaire (the parent questionnaire) consisted of eight questions directed to the parent (see Appendix G). The first question pertained to a respondent's gender because males and females of different cultural backgrounds communicate differently based on family traditions, a fact that was important to this questionnaire (De Gaetano, 2007). Another question focused on whether or not the classroom teacher demonstrated knowledge of the family's cultural background. Parents were asked how often teachers communicate regarding their student's academic achievement, and how often they themselves initiated communication with the classroom teacher to address academic successes or concerns. Additionally, parents were asked how often these communications needed clarification or developed into more thorough conversations that addressed initial concerns. Finally, parents were asked their thoughts and suggestions on how their child's classroom teachers addressed their concerns.

Informal Focus Group for Questionnaire

To gauge the research quality of the questionnaires, a first draft was shared with an informal focus group of educators involved in multicultural classrooms. The focus group, which was a classroom of teachers currently in graduate school, was asked to complete the questionnaire and give their feedback as a teacher and a parent. This group was chosen for their expertise in the field of multicultural education, and with the understanding that their schools and districts would be purposefully excluded from the study. The informal respondents used a rating form to make suggestions for clarification in questions and suggestions in breaking down longer questions. They were asked to comment on the time needed to complete the questionnaire as well. Data from the informal group's rating sheets were used to make the following changes:

1. Clarification on the definition and use of the word *invitation*.
2. In one question pertaining to communication methods, extra columns were added to include one that could be marked if the respondent never used a particular communications form.
3. The teacher's question regarding classroom size was reworded to *average classroom size* to account for teachers who may teach multiple sections of a grade level or subject.
4. A likert scale delineating how often clarification is needed for ICF was added.

Data Collection

Data collection occurred at each selected school district site using stated criteria regarding diversity and school composition. Permission to use the district as the research subject was first sought from the researcher via a telephone call to the district superintendent. Permission was also confirmed via a subsequent email to the district superintendent. Permission to use each school was sought by the researcher from the principal of each school building via a telephone call and a subsequent follow-up electronic letter. All study information was provided to parent and teacher respondents in both English and Spanish formats. Because of the diverse cultural backgrounds of the school community members, respondents were encouraged to complete the questionnaire in their native language.

A packet of information was provided to each study participant that included:

1. A letter explaining the nature and purpose of the research.
2. Information on the researcher.
3. Research procedures.
4. Study risks and benefits.
5. Confidentiality and anonymity assurances.
6. Consent information.
7. The appropriate parent or teacher questionnaire.
8. A self-addressed, stamped envelope addressed to a private post office box known only to the researcher and used for the return of all completed studies.

Questionnaires were completed privately by each respondent, who were encouraged to complete questionnaires within a two-week time period. After a specific allotted period of time, the researcher returned to each school with thank you letters for distribution to each teacher's district mailbox. These letters were written in English and Spanish. Thank you letters to parents were distributed in the same manner the questionnaires were—in the teacher's classroom and sent home to parents via the student's communications folder. Upon receipt, all questionnaires were kept in a locked and secured box that was only accessible to the researcher, and eventually destroyed upon completion of the study.

In addition to the questionnaires, student data on annual yearly progress was collected on ISAT data from the 2009 *Illinois District Report Card*. This report allowed the researcher to see differences in student academic progress throughout the district. Additionally, a copy of the district technology and communications plans was obtained from the school district's central office. These reports provided the researcher with official operational procedures regarding communication with parents throughout the district, as well as how technology was used for communication in this district.

Data Analysis

In qualitative research, it is the responsibility of the researcher to obtain data from respondents and code it to find emergent themes or trends that may reveal themselves as constants in the situation (Lodico et al., 2006; Marshall & Rossman, 2006). Similar respondent's answers were grouped together and analyzed to look for trends in these data.

Responses from teachers and parents were analyzed to look for themes that might emerge from different school community members.

The use of the district technology and communications plans provided for triangulation of ideas or themes. Student academic performance was analyzed to look for trends in how communication might impact student academic progress. The district technology and communications plans were also analyzed to look for trends in communication and rules for how and when communication takes place between a student's home and school. The analysis of district documentation provided a third outlet to analyze the development of emergent themes for this study.

After themes were identified, data was coded into categories to reflect developing themes. By coding these data, the researcher could begin to look for common words and phrases that helped describe how communications were used between parents and teachers throughout the district (Marshall & Rossman, 2006). In light of the literature review completed for this study, themes and trends were considered.

To represent the analysis data in this qualitative study, the researcher's goal was to use the responses to provide a very detailed and thick description of internet communications between parents and teachers in this district (Marshall & Rossman, 2006). Use of parent responses, teacher responses, and district documentation expanded any themes that emerged from the data collected. By using thick and detailed descriptions, the researcher intended to represent the perceptions and experiences of parents and teachers as they used IFC to collaborate with one another regarding student academic progresses.

Ethical and Validity Considerations

To ensure the validity of this study, the researcher was careful to maintain the confidentiality of all respondents. Codes were used for building classrooms and to link parent responses to classroom teacher responses. Respondents were reassured that their anonymity would be maintained throughout the study and responses would not be seen by any school administrator. By giving participants these assurances, the intention was to elicit honest responses. The participation letter for respondents explained the anonymity of the study and how these data contributed to deciphering how communications are used throughout the district.

Limitations

The following limitations were considered in this study:

1. The school district used for this study consisted primarily of Caucasian and Hispanic families. Therefore, it was the researcher's hope that the ethnic themes that appeared translated across to other ethnic groups.
2. The school district used for this study was an elementary district. It is the researcher's hope that the themes that emerge would also be present in similar future studies conducted in high schools or private schools. Questionnaires were placed in the mailboxes of teachers, and parent questionnaires were sent home in student folders. The purpose of this mass distribution was to encourage a large enough sampling size to ensure the emergence of trends that appropriately reflected the situation in the sample school district.

3. The school district used in this study consisted of a quarter of the respondents who reported they have a limited English proficiency rate. Therefore, the study was available in English and translated to Spanish to provide respondents with a way to participate, despite language-limitations.
4. Respondents may not have been asked their opinions on IFC between home and school. Therefore, a follow-up to the questionnaire might be considered to look for themes that may arise from the original study.
5. The qualitative nature of this study depended on participants self-reporting on their actions and motivations. Participants are not always objective about what motivates their actions, so participants might have been reticent to admit their motivation for their communication practices. Use of multiple data sources attempted to account for this trend.
6. Qualitative studies depend on the data interpretation by a subjective reporter. The intent of this study was to inform school district communications practices. Researcher bias may have limited the ability of this study to be generalized.

Minimization of Bias

The researcher attempted to limit the possibility of bias in this study by adhering to the following:

1. *Not conducting the study in a school district where the researcher lives or works.* By using a school district that has no personal ties to the researcher, the development of themes and trends were impartial and without bias.

2. *Keeping a journal to address any personal concerns or biases that arise.*

Throughout this study, the researcher had to personally interact with the school district. For instance, district personnel were contacted for permission to complete the study for the initial distribution, the distribution of follow-up thank-you letters, and for the accumulation of district documentation. The journal was used to counteract the personal experiences of the researcher with those of the school district members by recording school district members' experiences throughout the research process.

Schools are investing in outfitting school staff and classrooms with technology (Flanagan & Jacobsen, 2003). The use of computers to access IFC has been suggested as one implementation of computers in schools (Flanagan & Jacobsen, 2003; Owen & Demb, 2004; Webber, 2003; Yuen et al., 2003). It is important for teachers to communicate with the parents of their students to gain the parent's cooperation for the academic achievements of students (Brittingham, 1998; De Gaetano, 2007; Trumbull & Rothstein-Fish, 2001). This study will be important to school administrators as they develop and implement district communications plans in their districts. It highlights teacher practices and attitudes that facilitate effective communications. Additionally, this study provides school administrators and teachers with insight into a parent's preferences for the communication methods used as they strive to ensure the child receives the best education possible.

Summary of Methodology

This study was conducted with a qualitative approach to gather information and decipher how internet communications are used between parents and teachers, as well as how this communication impacts student academic achievements. With permission from the superintendent of a large, multiethnic school district, questionnaires were distributed to parents and teachers of participating elementary schools to find answers to the research questions. To minimize bias in this study, the researcher did not use schools with professional or personal connection to the researcher. District documentation regarding parent technology and communications use was also analyzed to uncover communication themes that emerged.

The questionnaires were designed to uncover demographic data about respondents. Open-ended questions were used to ask respondents for answers to their perceptions and IFC use. Questionnaires, along with data on student progresses and district documentation on technology and communications use, were used to answer the following research questions:

1. What are the types, frequency, and degree of communications initiated by parents and teachers with the advent of instantaneous communication created by electronic communications technology?
2. When parents initiate electronic communication regarding student academic achievement, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

3. When teachers initiate electronic communication regarding student academic achievements, does the initial communication facilitate more communication?
How often is clarification needed in these electronic communications?

CHAPTER IV

PRESENTATION OF DATA

The purpose of this qualitative study is to examine the ways parents and teachers utilize electronic communications to invite one another to participate in activities designed for student academic achievements (Anderson & Minke, 2007). This study concentrated on the ways parents and teachers communicate with each other, and, the frequency of internet facilitated communication (IFC); and identifies how parents and teachers communicate in a school district that has provided the necessary technology to facilitate electronic communication by the teachers in the district.

The primary research question is: *How does electronic communication impact parent-teacher communications regarding student academic achievements?*

Specifically, the fundamental research questions are:

1. What are the types, frequency, and degree of communications initiated by parents and teachers with the advent of instantaneous communication created by electronic communications technology?
2. When parents initiate electronic communication regarding student academic achievement, does the initial communication facilitate more communication?
How often is clarification needed in these electronic communications?

3. When teachers initiate electronic communication regarding student academic achievements, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

Chapter IV is intended to display these data gathered from a qualitative analysis of responses to the Teacher Questionnaire (see Appendix E), which were distributed simultaneously to 211 teachers in a large culturally diverse school district, and the Parent Questionnaire (see Appendix G), which were distributed to 3,906 families in the school district.

Review of the Procedure

Permission to use the district was granted from the school superintendent. Subsequently, the researcher requested permission via telephone and electronic letter from the principals of the eight schools in the district. Permission was eventually received to include seven schools: six elementary schools and one district junior high school. The questionnaires were given to teachers and parents in each of the participating schools. Participating teachers received a questionnaire in their district mailbox. The parent questionnaires were given to classroom teachers for distribution in their classrooms via the student's communications folder, which travels to and from school in the student's backpack. To prevent the possibility of parents of multiple children filling out the same questionnaire twice and potentially skewing the results, parent questionnaires were sent via the youngest child only. Information regarding the number of packets to include for classroom teachers was obtained through the school principal. Since school partnerships involve parents and teachers, teacher questionnaires were coded to match the

corresponding parent questionnaires. Coding revealed a specific building but not a specific classroom teacher. Therefore, this enabled the researcher to look for trends in different school buildings as well as in grade level classrooms.

To accommodate the cultural diversity throughout the school district, questionnaires were delivered with English printed on one side and Spanish on the other. Respondents were encouraged to answer questions in the language they felt most comfortable in using. A translator was used to translate the Spanish answers into English for the researcher's analysis.

Classroom sets each contained one research packet for the classroom teacher. The teacher questionnaire included the following materials:

1. Letter explaining the nature and purpose of the research.
2. Information about the researcher.
3. Research procedures.
4. Study risks and benefits.
5. Confidentiality and anonymity assurances.
6. Consent information.
7. Teacher questionnaire.
8. Self-addressed stamped envelope addressed to a private post office box known only to the researcher and used for the return of all completed studies.

The parent questionnaire included the following materials:

1. Letter explaining the nature and purpose of the research.
2. Information about the researcher.

3. Research procedures.
4. Study risks and benefits.
5. Confidentiality and anonymity assurances.
6. Consent information.
7. Parent questionnaire.
8. Self-addressed stamped envelope addressed to a private post office box known only to the researcher and used for the return of all completed studies.

Questionnaires were completed privately by each respondent, who were encouraged to complete questionnaires within a two-week time period. School surveys were distributed prior to the last weekend of the school year. Upon receipt, all questionnaires were kept in a locked and secured box accessible only to the researcher. All questionnaires will be destroyed upon completion of this study. The researcher collected completed surveys for a two-month period of time prior to compiling the results of the study data.

Site Description

The elementary school district chosen for this study is a large, culturally diverse district in a major suburban metropolitan city. The district consists of eight elementary school buildings that serve Grades K-8. The following demographic information was compiled from the 2009 *Interactive Illinois Report Card* (Smith, 2010).

The commitment to student success is evident as the district registers a 96.1% attendance rate for its students. The racial and ethnic diversity within the district is within a measurable range for research with 31.9% of the families from Caucasian homes and

60.3% from Hispanic. Socioeconomic diversity exists in the district with 46.1% of the families registered as low income households. Cultural extremes are present with 23% of the students from families with a limited English proficiency rate. According to student data on annual yearly progress collected on ISAT data from the 2009 *Illinois District Report Card*, students in three of the eight schools in this district did not make annual yearly progress. The district has one junior high school with an enrollment of 1305 students. Six of the seven elementary schools participated in this research; enrollment numbers follow:

School 1 Enrollment	474 students
School 2 Enrollment	582 students
School 3 Enrollment	348 students
School 4 Enrollment	423 students
School 5 Enrollment	434 students
School 6 Enrollment	340 students

By the conclusion of the allotted window of time, 85 of the 3,906 parent questionnaires were completed and returned. This was a 2.17% return rate for parents. While this was low, percentage wise, of the 85 parent surveys 34 respondents indicated they spoke Spanish at home. Seventy-two percent ($n = 62$) surveys were returned in English and 28% ($n = 24$) were returned in Spanish. District demographic information indicates 64% of the district population is Hispanic.

By the conclusion of the allotted window of time, 64 of the 211 teacher questionnaires were completed and returned. The research data represents 30.33% of the teachers in the

seven schools that participated in this research. It was impossible to send reminders to parents asking them to respond to the survey, as responses were returned after school adjourned for the summer break. For the purposes of this study, the perceptions of 85 parents and 64 teachers are displayed and analyzed. All percentages displayed come from the parent total ($n = 85$) and teacher total ($n = 64$) respondents except when noted otherwise.

Teacher Demographic Data

The first part of the Teacher Questionnaire (see Appendix E) was designed to collect demographic data from the respondents. Items 1–2 asked the teachers to provide their gender, how long they'd been teaching, how long they'd been teaching in the district, and how long they'd taught in the particular building. Items 3–4 asked the current grade they were responsible for teaching and the number of students enrolled in their classroom (or average class size).

As seen in Figure 5, the largest number of respondents were female ($n = 59$); the smallest number of respondents were male ($n = 5$).

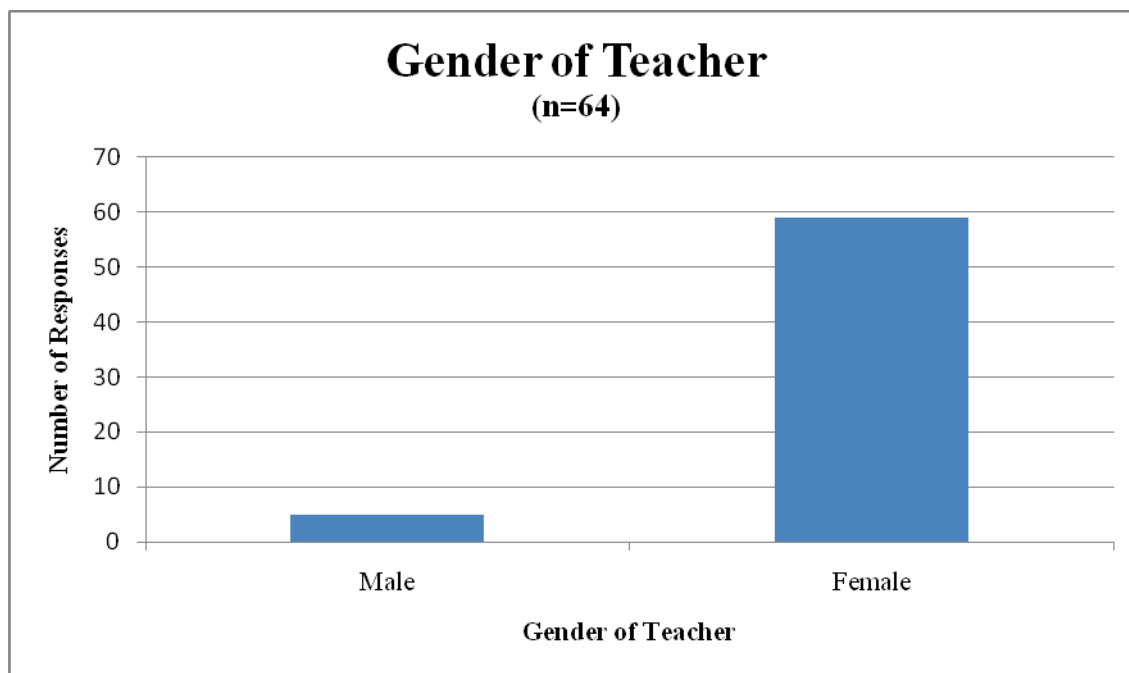


Figure 5. Gender of Teacher

Experience

Of the respondents to the teacher questionnaire, 41%, or 26, of the 64 respondents have taught for five years or less (see Figures 6-8). Nine of those teachers spent part of their professional teaching career in another district. Of the teachers who have taught for five years or less, 17 have been teaching for their entire professional career in the same building within the district. Of the 64 respondents, 16%, or 10, of the 64 respondents have been teaching for 10 years or less. Four of these teachers have experience teaching outside the district; two with 6-9 years experience have taught in at least two different schools within the district. Sixteen of the teachers who responded to the survey have taught for 10-19 years. Of these, 10 have taught in schools outside the district; four have taught in more than one school in the district. Eight of the respondents to the teacher survey have 20-29 years of teaching experience. Seven of these teachers have taught

outside the district; one has experience in more than one school in the district. Four of the respondents have 30-38 years of teaching experience. Three of the four teachers have taught outside the district; two have experience in more than one school in the district.

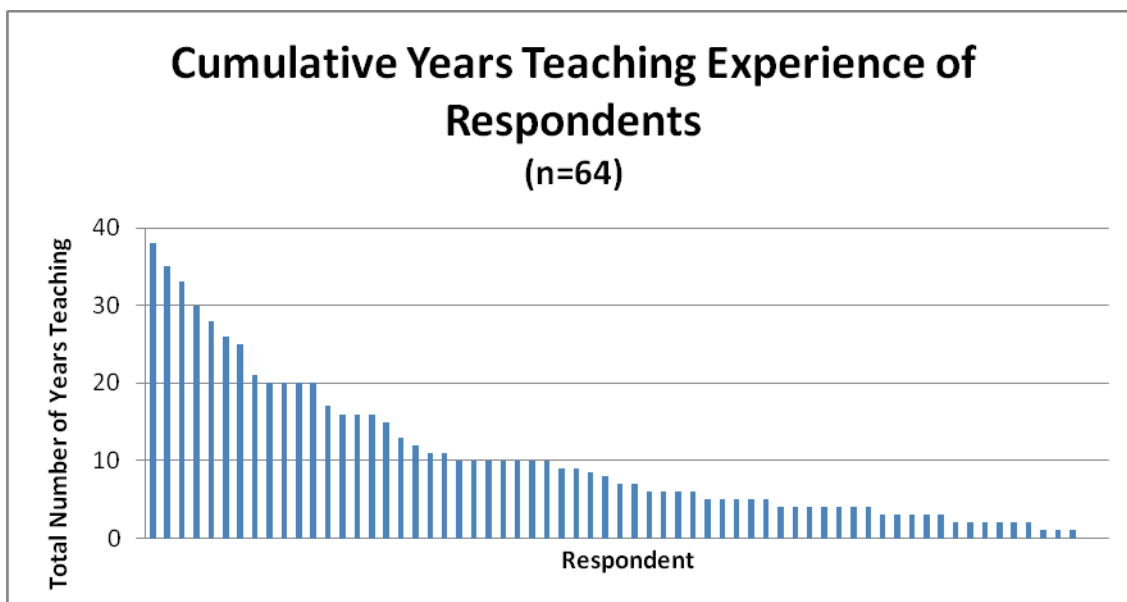


Figure 6. Cumulative Years Teaching Experience of Respondents

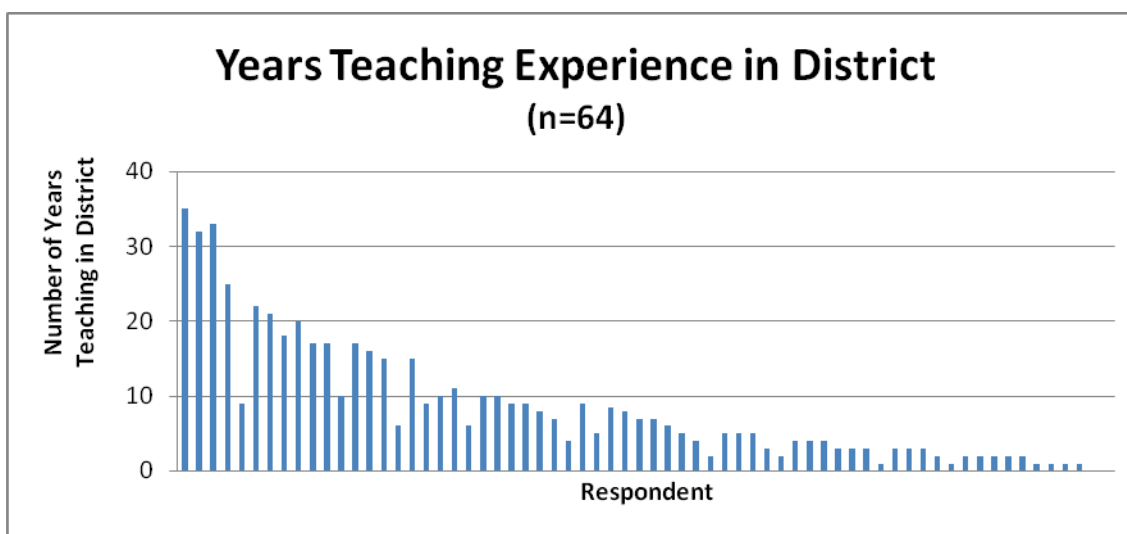


Figure 7. Years Teaching Experience in District

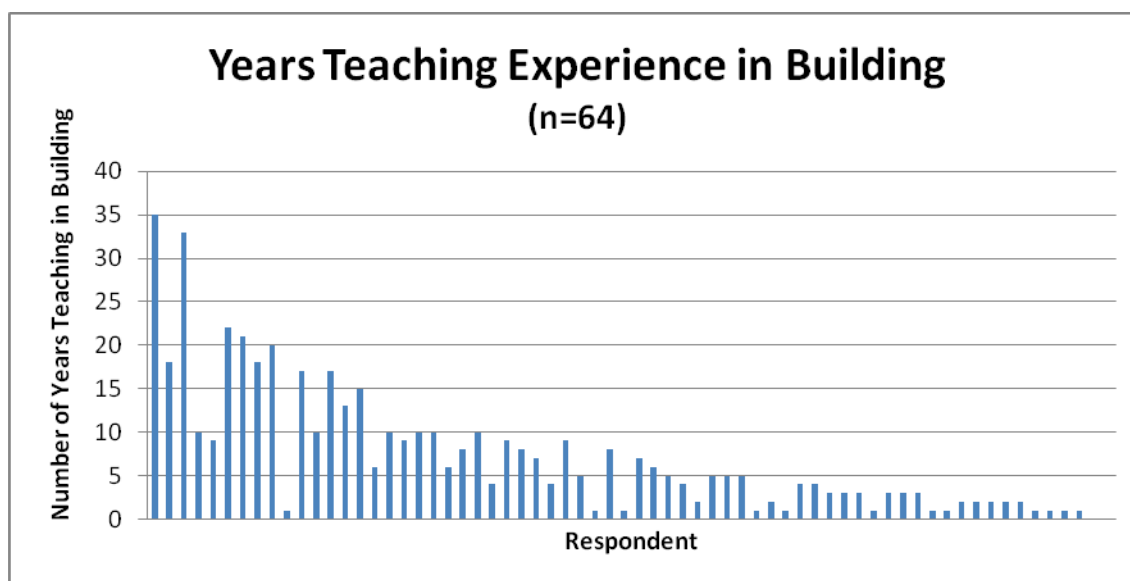


Figure 8. Years Teaching Experience in Building

Class Size

Figure 9 shows that of the respondents, the majority came from teachers in the sixth grade—14 teach sixth grade. Eight teachers from each seventh and eighth grade responded as well. In total, 47%, or 30 of the teachers who responded, teach in the district middle school. The remaining 53% teach in one of the six, kindergarten through fifth grade buildings in the district that participated in this study: eight teach fifth grade, five teach fourth grade, eight teach third grade, seven teach second grade, and four teach first grade. Two respondents teach in the pre-primary grades of the schools.

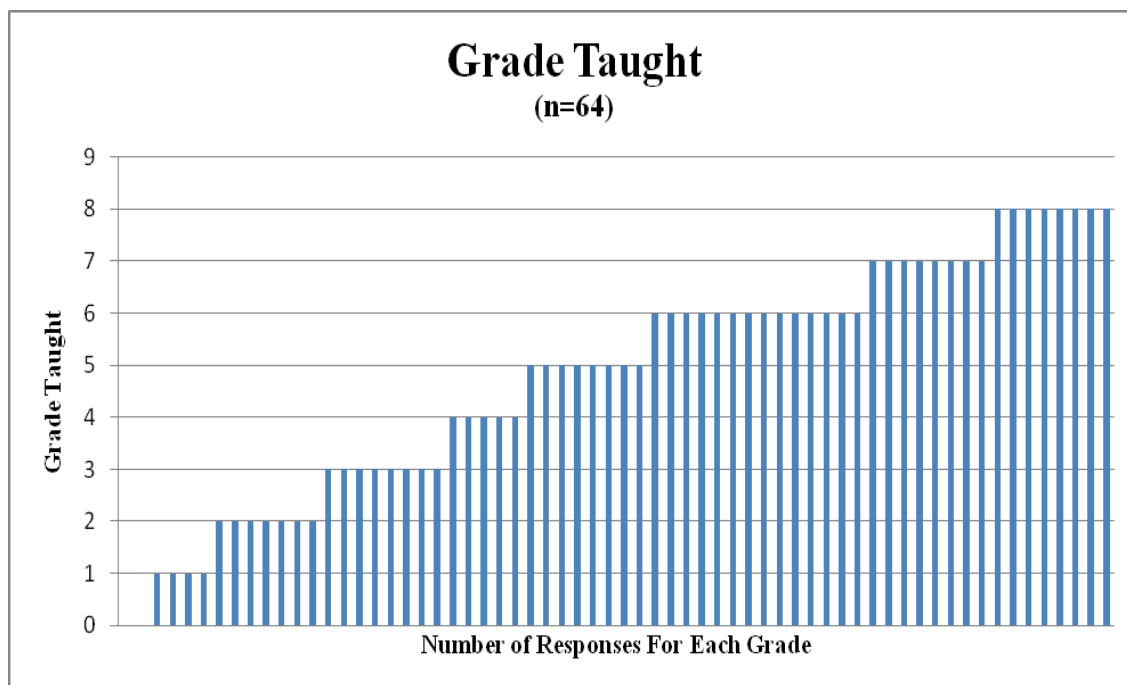


Figure 9. Grades Taught

Students per Classroom

Question number four of the teacher survey asked how many students are enrolled in their average classroom. The majority of respondents ($n = 32$) have classroom sizes with 20-29 enrolled students (see Figure 10). Thirty-six percent ($n = 23$) of the respondents have 25-29 students enrolled in their classroom. These students range in grade level from Grades 1-8. Three respondents reported their classrooms contain both sixth and seventh grade students; one reported both seventh and eighth grade students in the classroom; and one reported sixth, seventh, and eighth grade students in the classroom. None of the teachers reported that these classes were designated as a special education class. Of the respondents, 30% ($n = 19$) have 20-24 students in their classroom.

These classes range from Grades 1-8. Three respondents reported that they teach in a bilingual classroom.

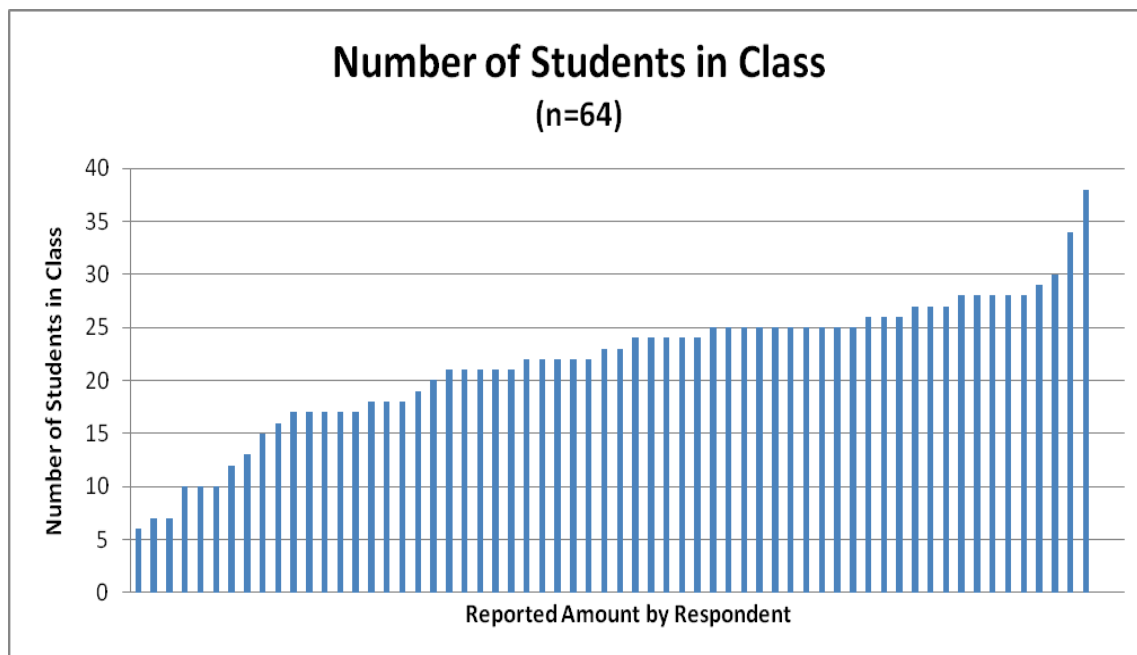


Figure 10. Number of Students in Class

Ten respondents reported class sizes ranging from 16-19 students. Four of these reported their classrooms to be bilingual classrooms. Six respondents have average class sizes from 10-15 students—five of which are categorized as special education. One respondent specifically indicated a cross-categorical classroom of Grades 1-3. One respondent reported a classroom with 15 students with no special education designation.

Three of the respondents teach in classrooms with five to nine students enrolled—which are all designated as special education classrooms for middle school students. As reported, two classrooms contain students with emotional disorders and one classroom contains special education students in Grades 6-8. Three of the respondents teach in the largest size classrooms with 30-39 students. Two of the respondents reported their

courses as either sixth, seventh, and eighth grade choir; another reported their classroom as a physical education class.

Communication Methods

Question number five of the Teacher Questionnaire asked respondents to list how frequently they use the following communication methods with their students' parents:

1. District Website.
2. Classroom Website.
3. Classroom Newsletter (paper).
4. Classroom Newsletter via the Internet.
5. Individualized Student Reports.
6. Personal Communications Individualized to Parents Regarding Student (paper).
7. Email Communications to Individual Parents Regarding Specific Subject Matter About Student.
8. Face-to-Face Meetings Regarding Student Progress.
9. Informal Face-to-Face Interactions with Parents.
10. Homework Help Page.
11. Online Grade Book.

Teachers were asked to rate the frequency of these communications methods as either "*Never,*" "*Daily,*" "*Weekly,*" "*Monthly,*" "*Quarterly,*" or "*Annually.*" While teacher questionnaires were blindly distributed, coding was placed on the back of surveys to support the development of trends regarding communication by building. No trends

appeared regarding the type of communications used from this data. The most frequent communications method between respondents and parents of the students in their classroom was face-to-face meetings regarding student progress (see Figure 11).

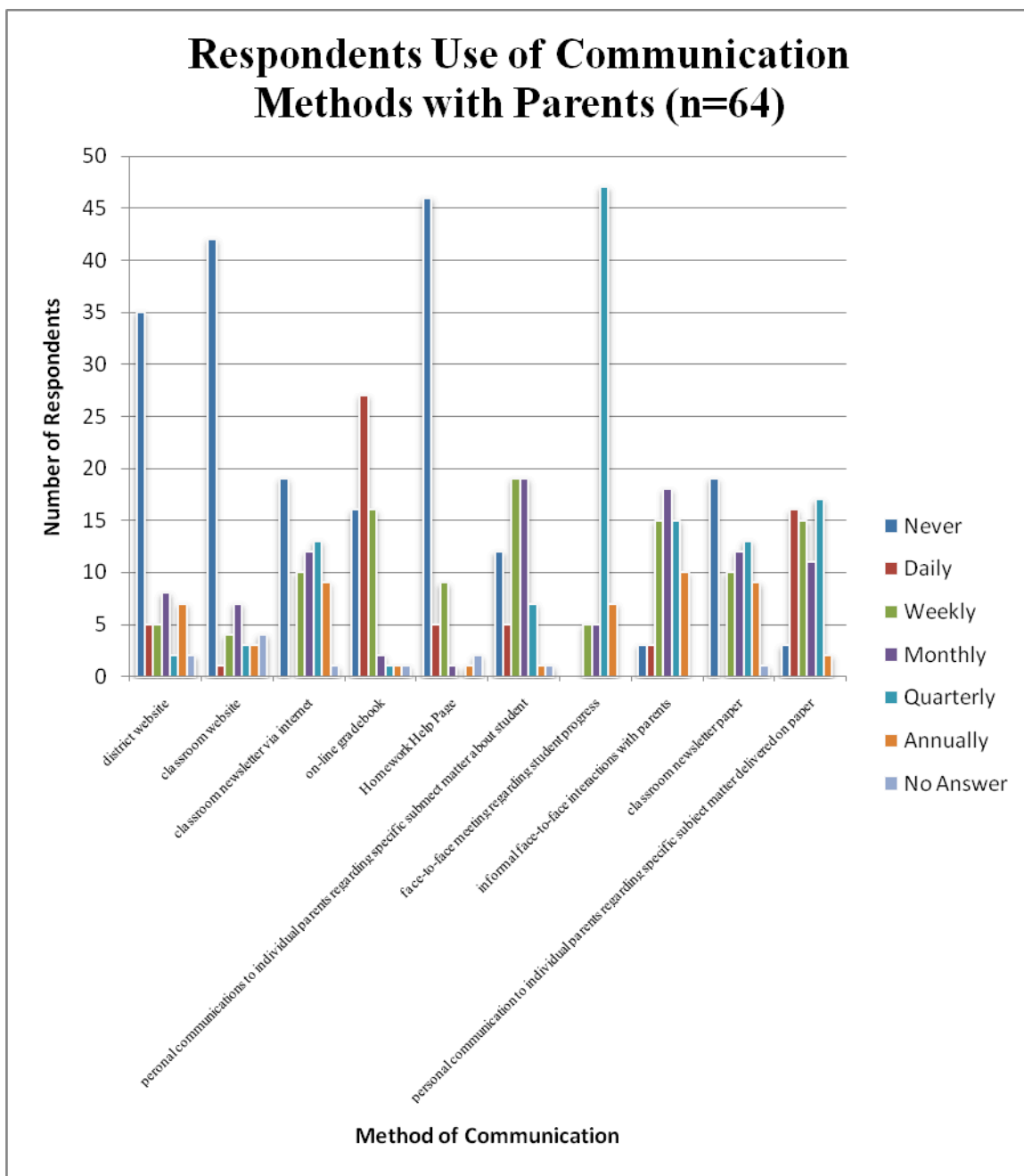


Figure 11. Respondents’ Use of Communication Methods With Parents

Of respondents, 92% ($n = 58$) indicated they communicated with parents regarding specific subject matter through some form of paper communication on a *daily*, *weekly*, *monthly*, or *quarterly basis*. Seventy-five percent ($n = 48$) of respondents communicate with parents through informal, face-to-face interactions on a *weekly*, *monthly*, or *quarterly basis*. Seventy-three percent ($n = 47$) of respondents communicate with parents via face-to-face meetings on a *quarterly basis*. Sixty percent ($n = 38$) of respondents use email to personally communicate with individual parents regarding specific subject matter about their students on either a *weekly* ($n = 19$) or *monthly* basis ($n = 19$). Fifty-two percent who communicate with parents regarding specific subject matter through paper communication teach at the elementary schools in pre-primary through fifth grade. Forty-seven percent ($n = 30$) of the respondents who communicate with parents through informal, face-to-face meetings have students in pre-primary through fifth grade. Forty-two percent ($n = 27$) of respondents communicate with parents of their students through an online grade book on a *daily basis*. Thirty-four percent ($n = 22$) of the respondents who email parents to communicate regarding specific subject matter teach at the junior high in either sixth, seventh, or eighth grades.

Of the communication forms, a majority of respondents indicated they *never* use certain methods of communication between themselves and parents of the student in the classroom. For instance, 72% ($n = 46$) *never* use the homework help page; 66% ($n = 42$) *never* use the classroom website, and 55% ($n = 35$) *never* use the district website as a tool to communicate with parents. (Note that totals are more than 100% since respondents could mark more than one form of communication.)

District Website

The first communications method teachers use is the District Website. The largest number of teachers ($n = 37$) reported *never* using the district website to communicate with parents, five use the district website on a *daily basis*, five use the district website on a *weekly basis*, eight use the district website on a *monthly basis*, two use the district website on a *quarterly basis*, and seven use the district website on an *annual basis*.

Of the 64 respondents, 58% ($n = 37$) *never* use the district website as a communications method to parents. Of these respondents, two teach first grade, four teach second grade, five teach third grade, two teach fourth grade, four teach fifth grade, five teach sixth grade, four teach seventh grade, and four teach eighth grade. Fifteen of the respondents have been teaching for 10 years or more; 20 have been teaching for 10 years or less. Of the respondents who never use the district website, three have fewer than 10 students in their classrooms, 12 have 10-20 students, and 20 have 21-30 students. Five respondents who never use the district website to communicate with parents teach in special education classrooms; two teach in special education classrooms for Grades 1-5, three teach middle school special education classes with students ranging in age from Grades 6-8, six of the seven respondents who teach in bilingual classrooms never use the district website to communicate with the parents of their students.

Five respondents use the district website to communicate with students' parents on a *daily basis*. One respondent has 38 years teaching experience with 35 years in the district, one has 16 years, and three have less than 10 years. All of these teachers have more than 20 students in their classrooms. One respondent is a bilingual teacher, one

respondent teaches eighth grade, and one respondent teaches physical education. Two respondents teach students in both sixth and seventh grades.

Five respondents use the district website to communicate with the parents of their students on a *weekly basis*. One respondent has 10 years experience teaching, the rest ($n = 4$) have 2-7 years. All of these teachers have 22-28 students in their classrooms.

Eight respondents use the district website to communicate with the parents of their students on a *monthly basis*. Three respondents have 15-21 years of teaching experience; five of the respondents have six years or fewer of teaching experience. Seven of the respondents teach in classrooms ranging from Grades 1-8 with 17-30 students. One respondent teaches in an eighth grade special education classroom with 12 students.

Two respondents use the district website to communicate with the parents of their students on a *quarterly basis*. One respondent has 11 years experience teaching, all within the same district. The other respondent has spent their two-year career teaching in the district. Both teachers have 20-35 students in their classrooms and both teach fifth and sixth grade students.

Seven respondents use the district website to communicate with the parents of their students on an *annual basis*. One respondent has 35 years teaching experience, with 32 years in the district and 18 years in their current building. Two respondents have 10-20 years teaching experience. Two teachers have less than 10 years teaching experience in the district. Two respondents have 10 students in their classroom; five have 20-30 students in their classroom. Two teachers teach fourth and fifth grade students. Three respondents indicated they teach students in more than one grade, but all teach at the

junior high level. Two respondents teach special education students at the pre-primary grade level.

Two respondents *did not answer* this question in the teacher questionnaire (see Figures 12-14 for a breakdown of the information presented in this section).

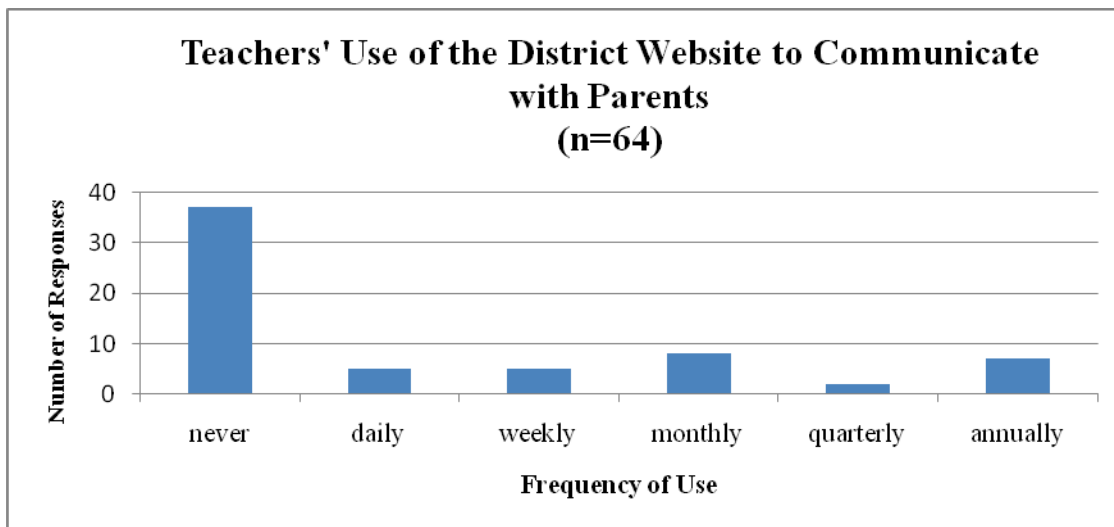


Figure 12. Teachers' Use of District Website to Communicate With Parents

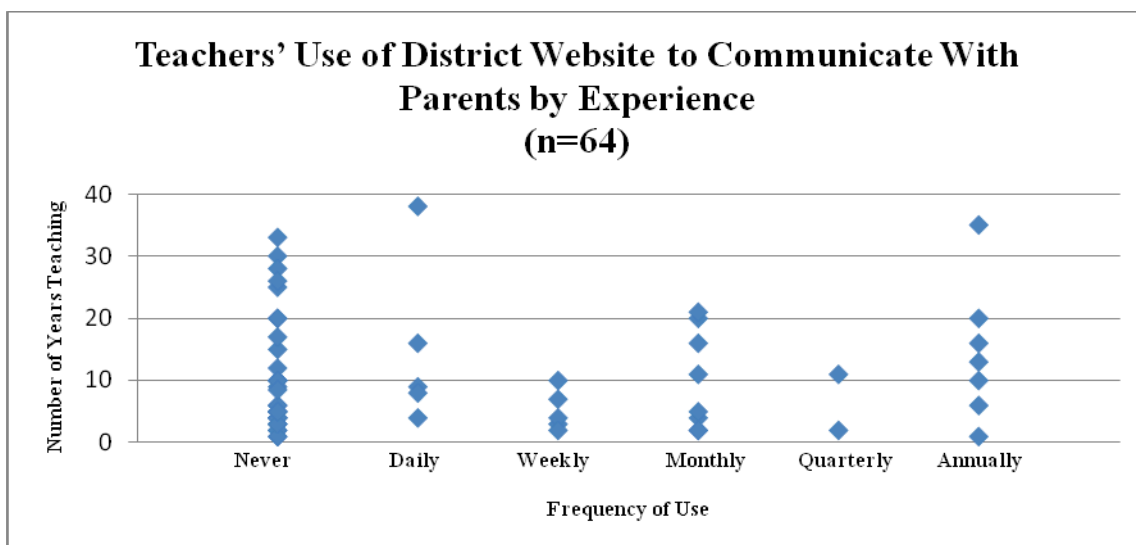


Figure 13. Teachers' Use of District Website to Communicate With Parents by Experience

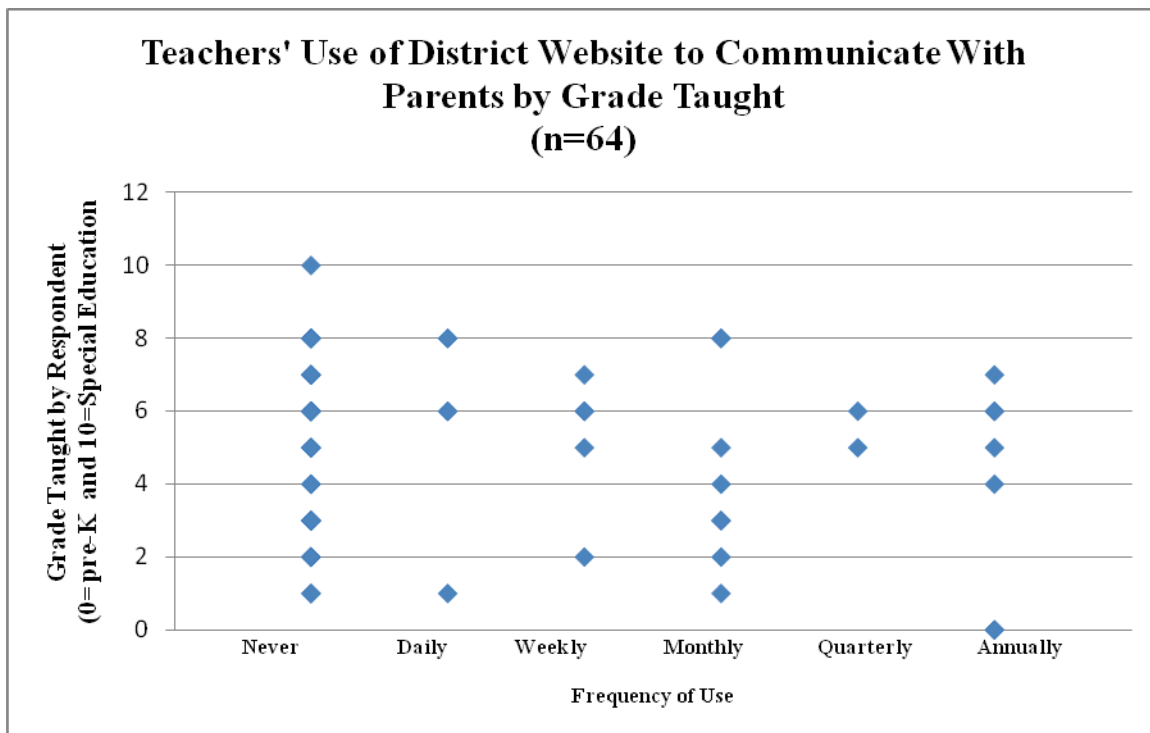


Figure 14. Teachers' Use of District Website to Communicate with Parents by Grade Taught

Classroom Website

The second communications method is Classroom Website. Of the 64 respondents, 66% ($n = 42$) never use the classroom website as a communications method to parents, 16 have been teaching for 10 years or more and 26 have been teaching for 10 years or less. Of the respondents who never use the classroom website, three have fewer than 10 students in their classrooms, 13 have 10-20 students, and 26 have 21-38 students. Of the respondents, one teaches first grade, three teach second grade, four teach third grade, three teach fourth grade, seven teach fifth grade, five teach sixth grade, three teach seventh grade, and three teach eighth grade. Of the respondents who never use the classroom website to communicate with parents, one teaches eighth grade physical

education, five teach in special education classrooms, two teach in special education classrooms for Grades 1-5, and three teach middle school special education classes with student ranging from Grades 6-8. Five of seven respondents who teach in bilingual classrooms never use the classroom website to communicate with the parents of their students.

Two percent ($n = 1$) of the respondents use the classroom website to communicate with the parents of their students on a *daily basis*. This respondent teaches at the junior high school and has been teaching in the building for over 30 years and indicated there are 25 students in the classroom.

Four respondents use the classroom website to communicate with the parents of their students on a *weekly basis*. One respondent has 15 years teaching experience; the rest ($n = 4$) have 4-9 years teaching experience. All of these teachers have 17-28 students in their classrooms with students ranging from Grades 1-8.

Eleven percent ($n = 7$) of the respondents use the classroom website to communicate with the students' parents on a *monthly basis*. Three respondents have 10-20 years of teaching experience and four have three years or fewer of teaching experience. Seven of the respondents teach in classrooms ranging from Grades 1-7 with 22-30 students. Two respondents teach in early elementary bilingual classrooms; one teaches in a combined seventh and eighth grade classroom with 25 students.

Five percent ($n = 3$) of the respondents use the classroom website to communicate with the parents of their students on a *quarterly basis*. One respondent has 10 years teaching experience with nine of them being in this district. Two respondents have spent

their two-year career teaching in the district. All three teachers have 24-34 students in their classrooms. Teachers have students ranging from Grades 4-8. One respondent teaches the sixth through eighth grade choir.

Five percent ($n = 3$) of the respondents use the classroom website to communicate with the parents of their students on an *annual basis*. Two respondents have over 30 years teaching experience and one has one year. Two respondents have 24-29 students in their classroom—both of them have students in the sixth grade. One respondent teaches pre-primary special education and has 10 students in the classroom.

Four respondents *did not answer* this question in the teacher questionnaire. Of these, one teaches special education and the rest teach at the junior high level (see Figures 15-17 for a breakdown of the information presented in this section).

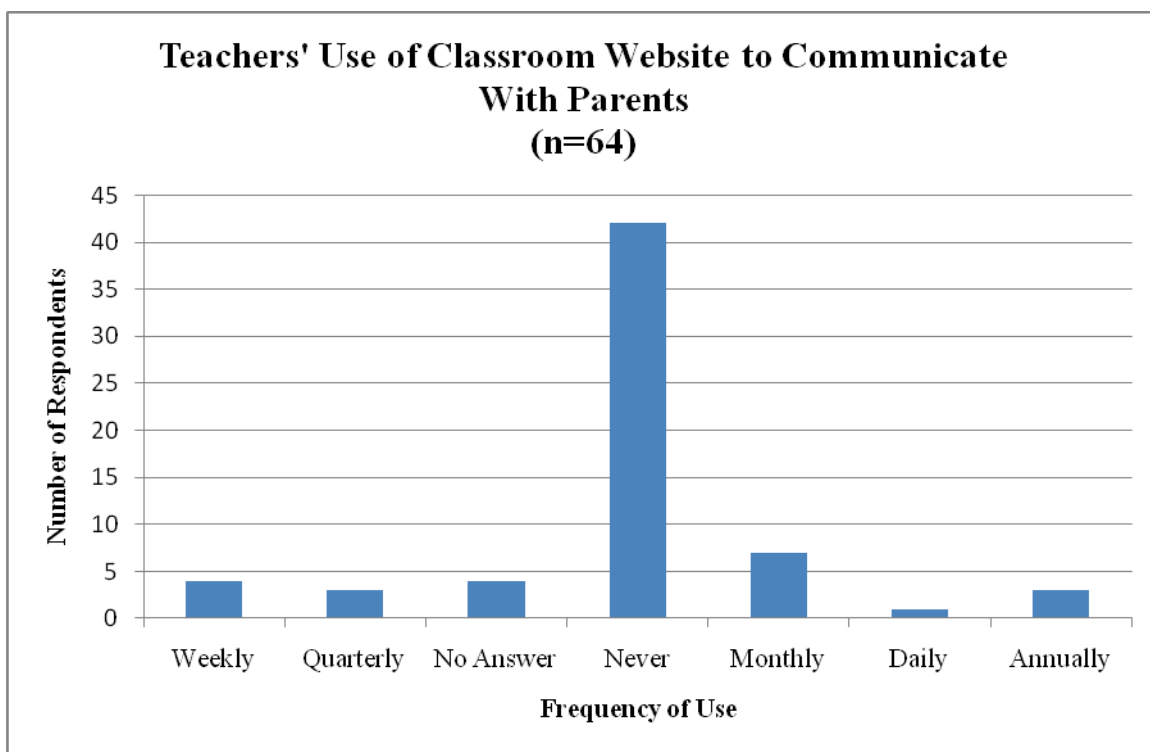


Figure 15. Teachers' Use of the Classroom Website to Communicate With Parents

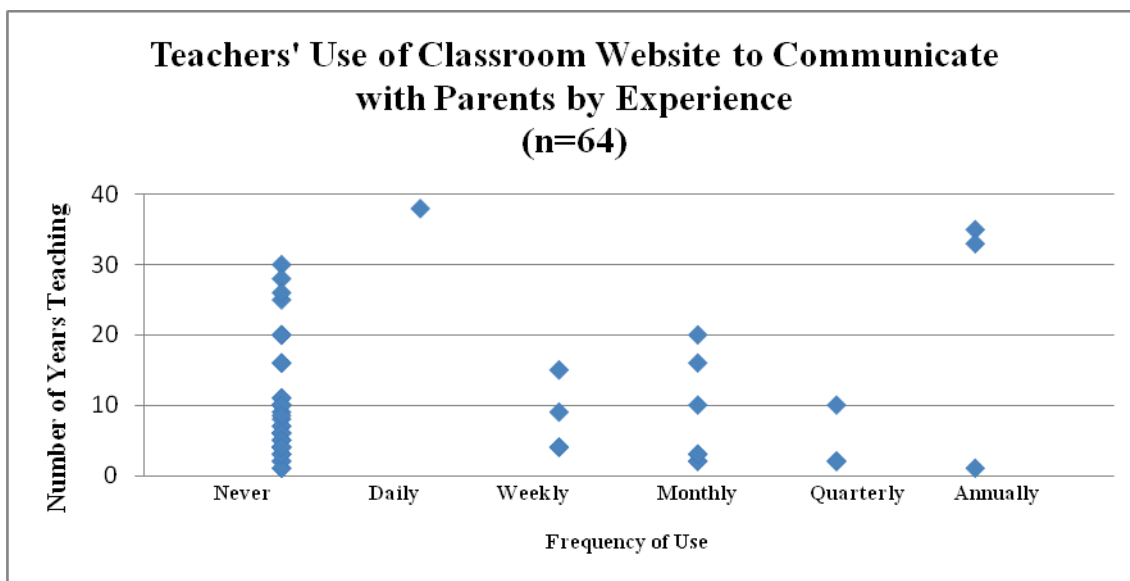


Figure 16. Teachers' Use of Classroom Website to Communicate with Parents by Experience

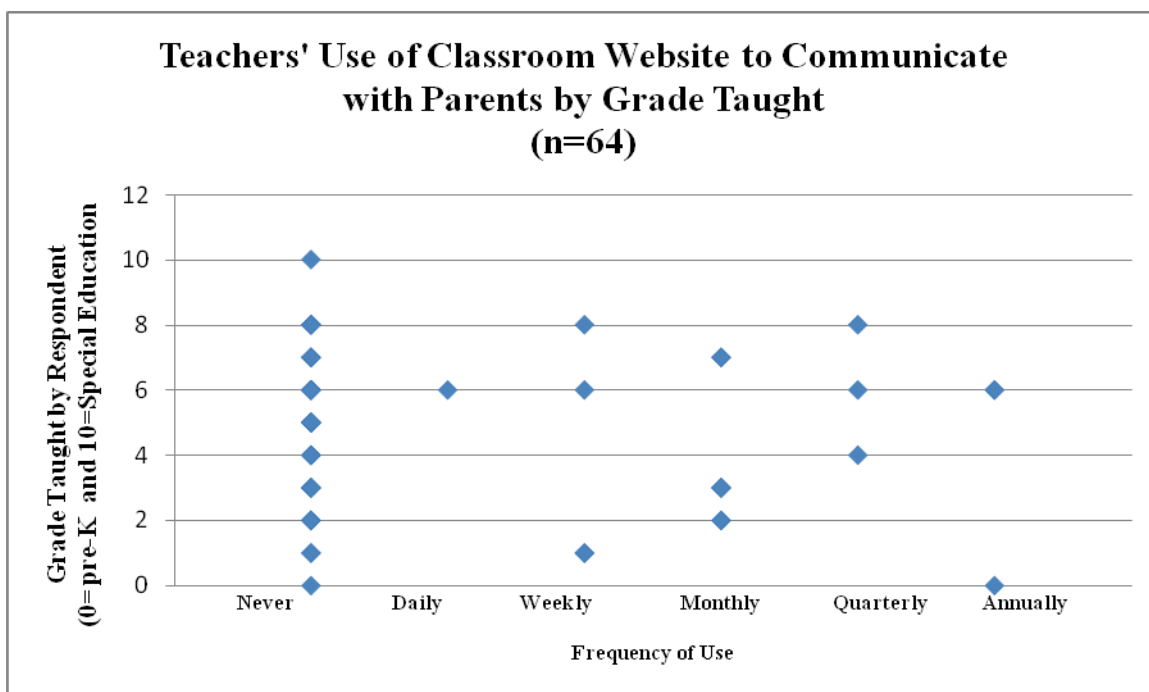


Figure 17. Teachers' Use of Classroom Website to Communicate with Parents by Grade Taught

Classroom Newsletter (Paper)

The third communications method is Classroom Newsletter (paper). Of the 64 respondents, 19 *never* use the classroom newsletter as a communications method to parents (see Figure 18). Eight of these respondents have been teaching for 10 years or more, 11 have been teaching for 10 years or less. Of the respondents who never use a classroom newsletter, two have fewer than 10 students in their classrooms, six have 10-20 students, and 11 have 21-28 students in their classroom. Of the respondents, two are second grade teachers, two teach third grade, two teach fourth grade, two teach fifth grade, four teach sixth grade, two teach seventh grade, and one teaches eighth grade. Three respondents teach in special education classrooms, two teach in special education classrooms for Grades 1-5 grade, and one teaches middle school special education classes with student ranging in age from Grades 7-8. Two respondents who teach in bilingual classrooms *never* use a classroom newsletter to communicate with the parents of their students.

None of the respondents to this teacher questionnaire use a classroom newsletter to communicate with their students' parents on a *daily basis*.

Sixteen percent ($n = 10$) of the respondents use a classroom newsletter to communicate with students' parents on a *weekly basis*. Five respondents have 10-20 years of teaching experience and five have 10 years or less. Nine respondents who use a classroom newsletter on a weekly basis have 10-30 students in the classroom with students ranging from Grades 1-5. Two of these classrooms are bilingual classrooms. One respondent is a special education teacher for 10, pre-elementary students.

Nineteen percent ($n = 12$) of the respondents use a classroom newsletter to communicate with students' parents on a *monthly basis*. Three respondents have 10-20 years of teaching experience; nine have seven years or fewer. Eleven of the respondents teach in classrooms ranging from Grades 1-5 with 17-28 students—three of these teach in second or third grade bilingual classrooms and two teach in special education classrooms. One special education classroom serves sixth and seventh grade students while the other serves pre-primary grade students.

Twenty percent ($n = 13$) of the respondents use a classroom newsletter to communicate with the parents of their students on a *quarterly basis*. Respondents' teaching experience ranges from 1-20 years and have 17-34 students in the classroom, with students ranging from Grades 1-8. One respondent teaches the sixth to eighth grade choir.

Fourteen percent ($n = 9$) of the respondents use a classroom newsletter to communicate with the parents of their students on an *annual basis*. Respondents' teaching experience ranges from 3-38 years and have 15-38 students in the classroom. Respondents all have junior high students ranging from Grades 6-8. One respondent teaches sixth through eighth grade physical education.

One respondent *did not answer* this question in the teacher questionnaire (see Figures 18-20 for a breakdown of the information presented in this section).

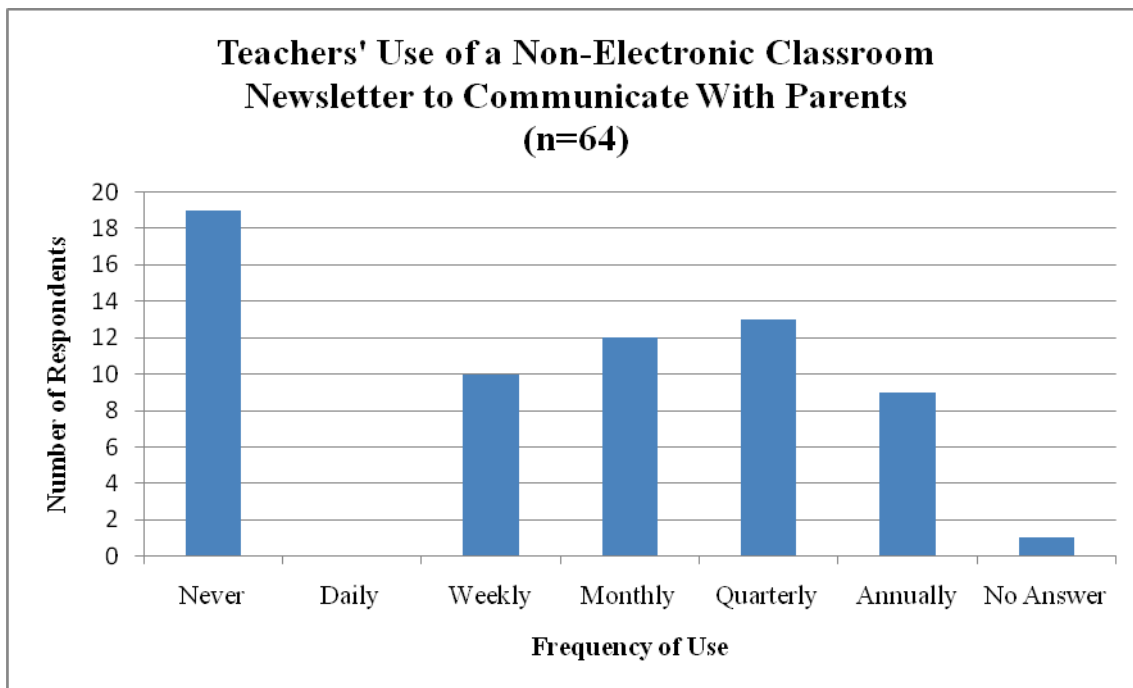


Figure 18. Teachers' Use of a Non-Electronic Classroom Newsletter to Communicate With Parents

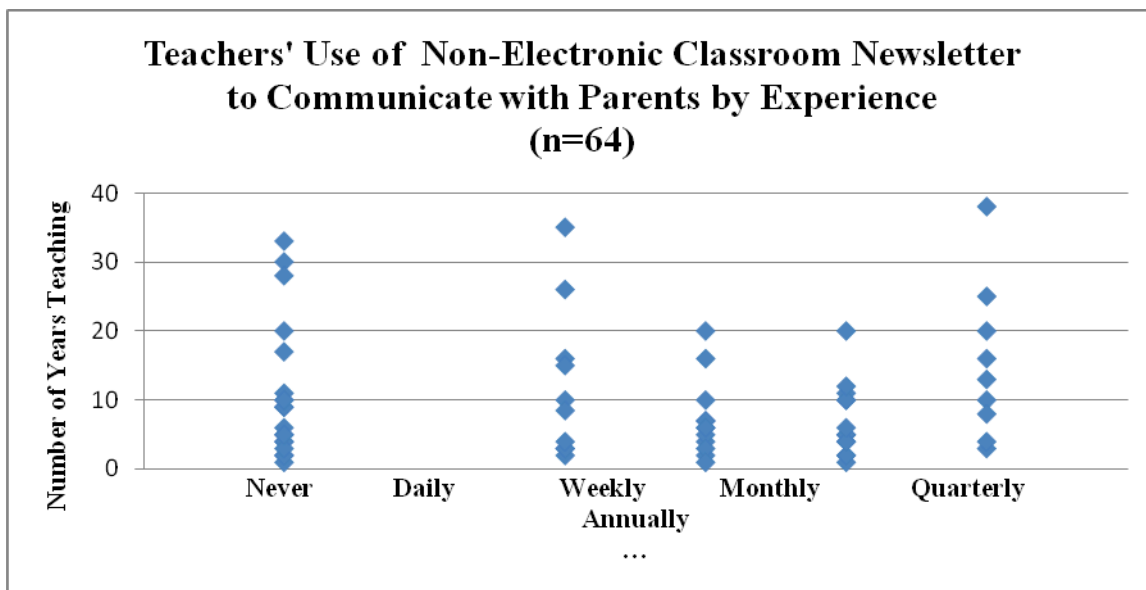


Figure 19. Teachers' Use of a Non-Electronic Classroom Newsletter to Communicate With Parents by Experience

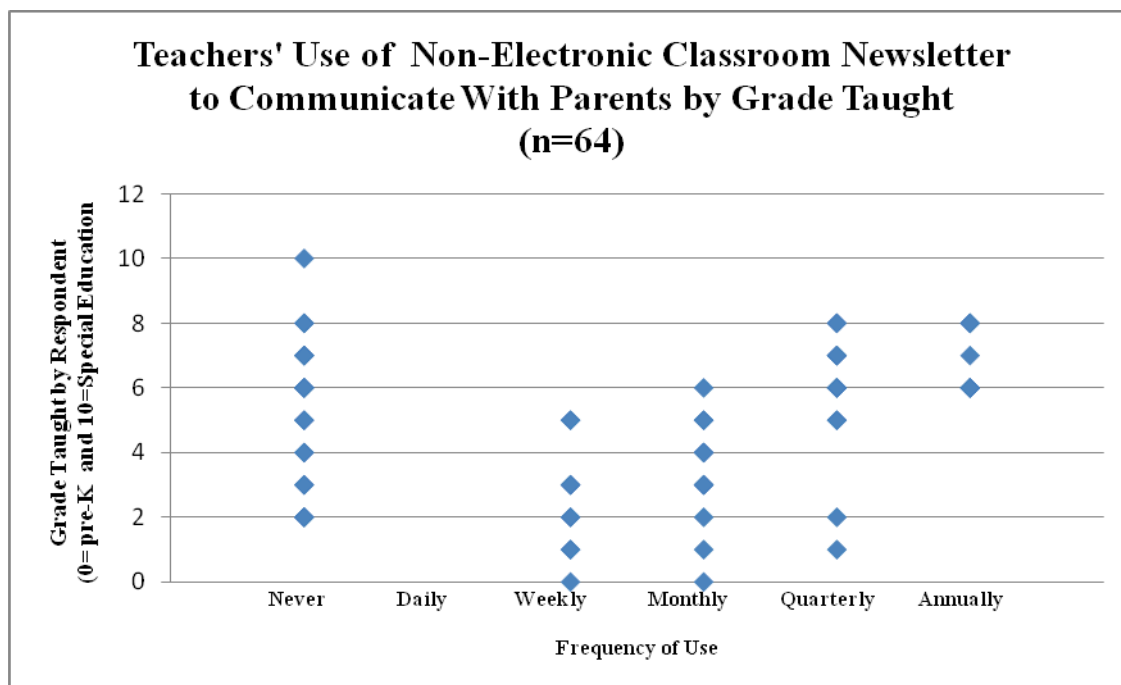


Figure 20. Teachers' Use of a Non-Electronic Classroom Newsletter to Communicate With Parents by Grade Taught

Classroom Newsletter via Internet

The fourth communications method is Classroom Newsletter via Internet. Of the 64 respondents, 78% ($n = 50$) never use a classroom newsletter that is accessible via the Internet as a communications method to parents. The 50 who do not range in experience from 1-38 years in the classrooms have 6-38 students in their classrooms. Of the respondents, two teach first grade, five teach second grade, seven teach third grade, four teach fourth grade, eight teach fifth grade, ten teach sixth grade, four teach seventh grade, and four teach eighth grade. One respondent teaches eighth grade physical education and five teach in special education classrooms. Three teach in special education classrooms for Grades 1-5 students and two teach middle school special education classes with students ranging from Grades 6-8. Seven respondents who teach in bilingual classrooms

never use a classroom newsletter accessible via the Internet to communicate with the parents of their students.

None of the respondents to this teacher questionnaire use a classroom newsletter via the Internet to communicate with their students' parents on a *daily basis*. Two respondents use a classroom newsletter accessible through the Internet to communicate with students' parents on a *weekly basis*. These respondents have 4-15 years of experience. One respondent teaches first grade while the other teaches sixth grade.

Eight percent ($n = 5$) of the respondents use a classroom newsletter accessible via the Internet to communicate with the students' parents on a *monthly basis*. Respondents have 3-20 years of experience. Respondents' classroom sizes range from 17-28 students and range from Grades 1-7.

Two respondents use a classroom newsletter accessible via the Internet to communicate with the parents of their students on a *quarterly basis*; both have less than five years teaching experience, have students in middle school, and have 25-35 students in the classroom.

Two percent ($n = 1$) of the respondents use a classroom newsletter accessible via the Internet to communicate with the parents of their students on an *annual basis*. The respondent teaches at the junior high level, has 26 students in the classroom, and over 10 years teaching experience.

Three respondents *did not answer* this question in the teacher questionnaire. Of these respondents, one teaches special education and the rest teach at the junior high level (see Figures 21-23 for a breakdown of the information presented in this section).

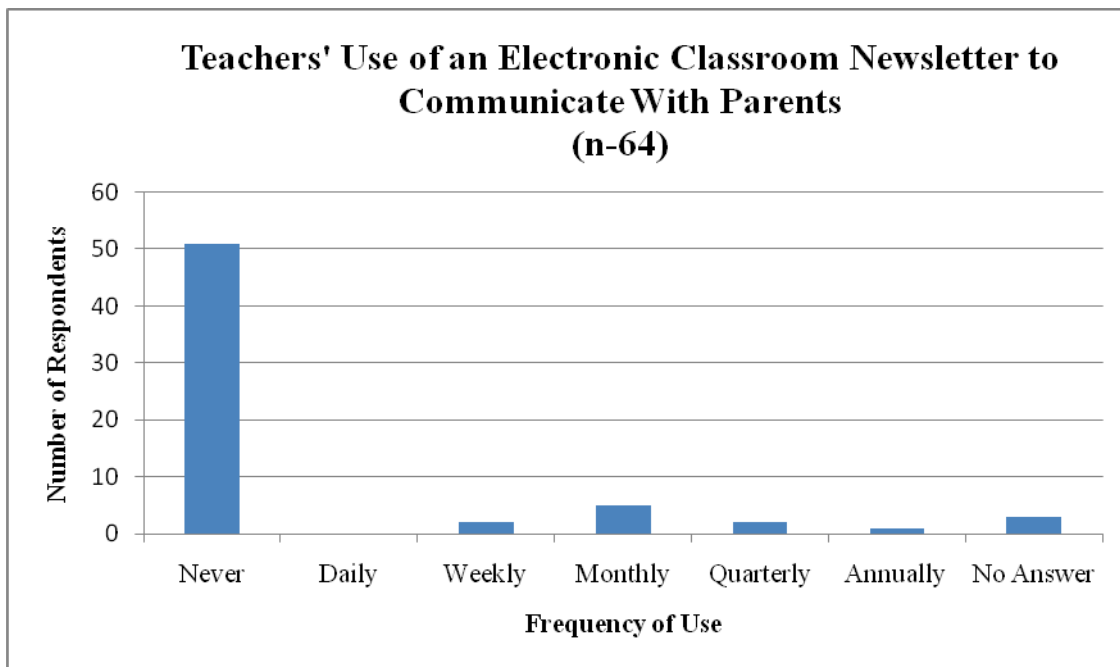


Figure 21. Teachers' Use of an Electronic Classroom Newsletter to Communicate With Parents

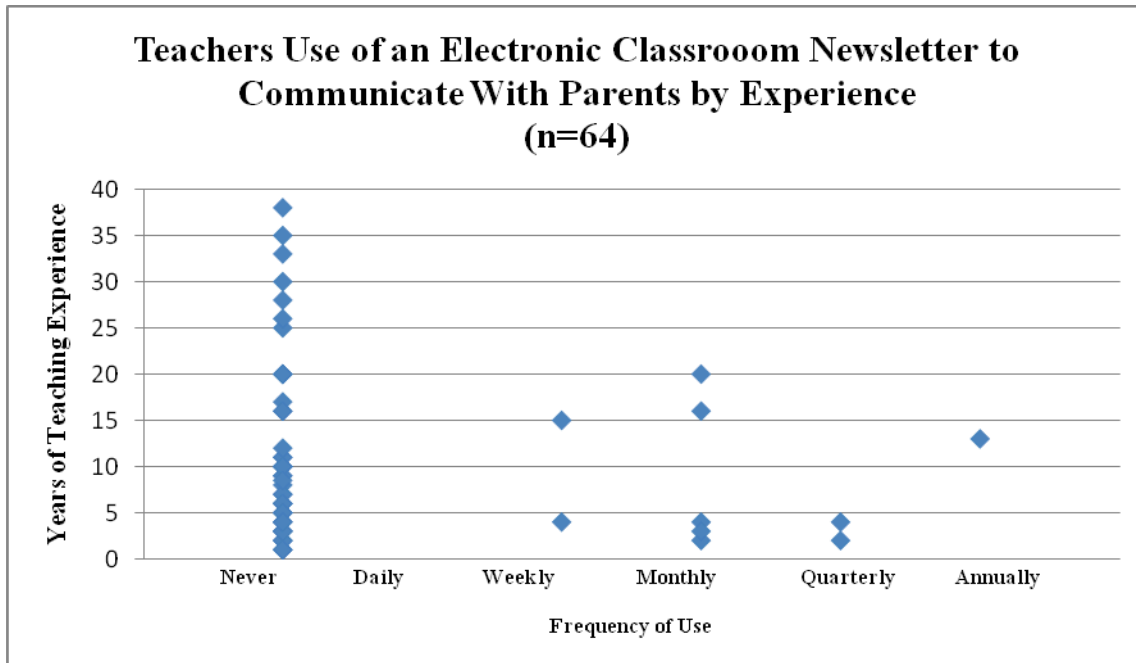


Figure 22. Teachers' Use of an Electronic Classroom Newsletter to Communicate With Parents by Experience

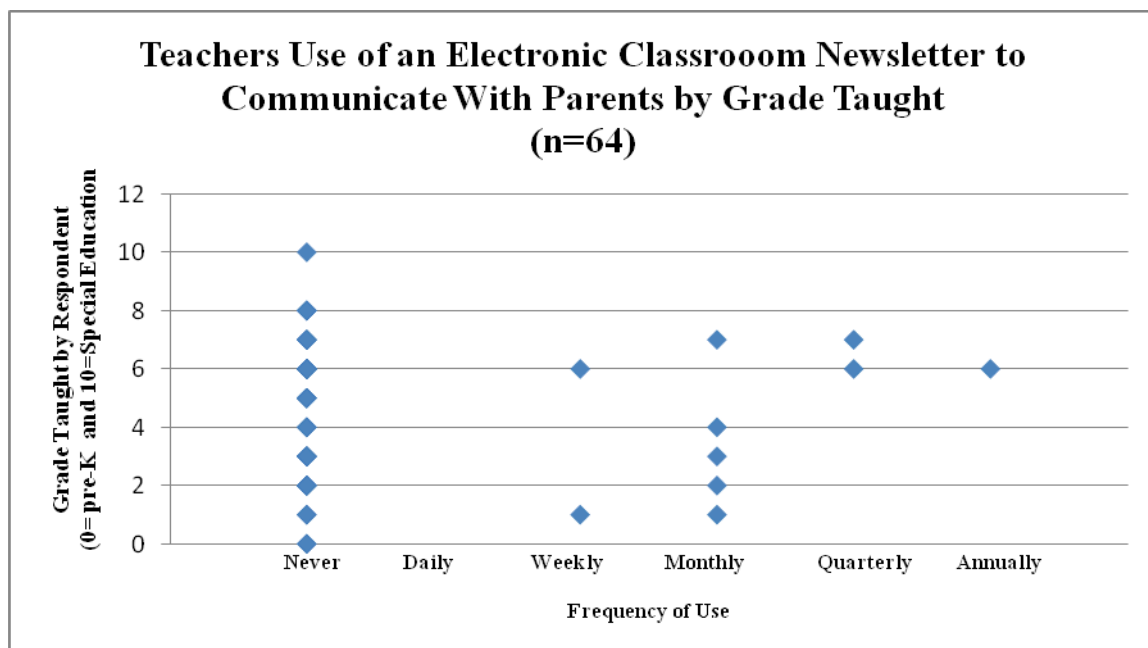


Figure 23. Teachers' Use of an Electronic Classroom Newsletter to Communicate With Parents by Grade Taught

Individualized Student Reports

The fifth communications method is Individualized Student Reports. Five percent ($n = 3$) of the respondents to this teacher questionnaire *never* use individualized student reports to communicate with their students' parents. These respondents have 10-16 years experience with students in Grades 2, 4, and 7, and have class sizes ranging from 18-24 students.

Eight of the respondents to this teacher questionnaire communicate with students' parents through individualized student reports on a *daily basis* with class sizes ranging from 6-38 students. Three of these respondents teach in special education classrooms and have students ranging from pre-primary to eighth grade. One respondent teaches in a bilingual second grade classroom.

Sixteen percent ($n = 10$) of the 64 respondents use individualized student reports as a communications form with students' parents on a *weekly basis*. Respondents have 2-38 years of experience. Class sizes of these respondents range from 12-30 students, with students ranging from Grades 2-8. One respondent teaches in an eighth grade special education classroom.

Nine respondents use individualized student reports to communicate with the students' parents on a *monthly basis*. Respondents have 2-33 years of experience with classroom sizes ranging from 17-27 students and students ranging from Grades 1-8. Two respondents teach in bilingual classrooms for first and fifth grade students.

Of the 64 respondents, 53% ($n = 34$) use individualized student reports as a communications method to parents on a *quarterly basis*. Respondents range in experience from 1-35 years in the classroom, have 15-34 students in their classrooms, and students ranging from Grades 1-8. Four respondents teach in bilingual classrooms; one teaches in a pre-primary special education classroom.

None of the respondents to the teacher questionnaire use individualized student reports to communicate with the parents of their students on an *annual basis* (see Figures 24-26 for a breakdown of the information presented in this section).

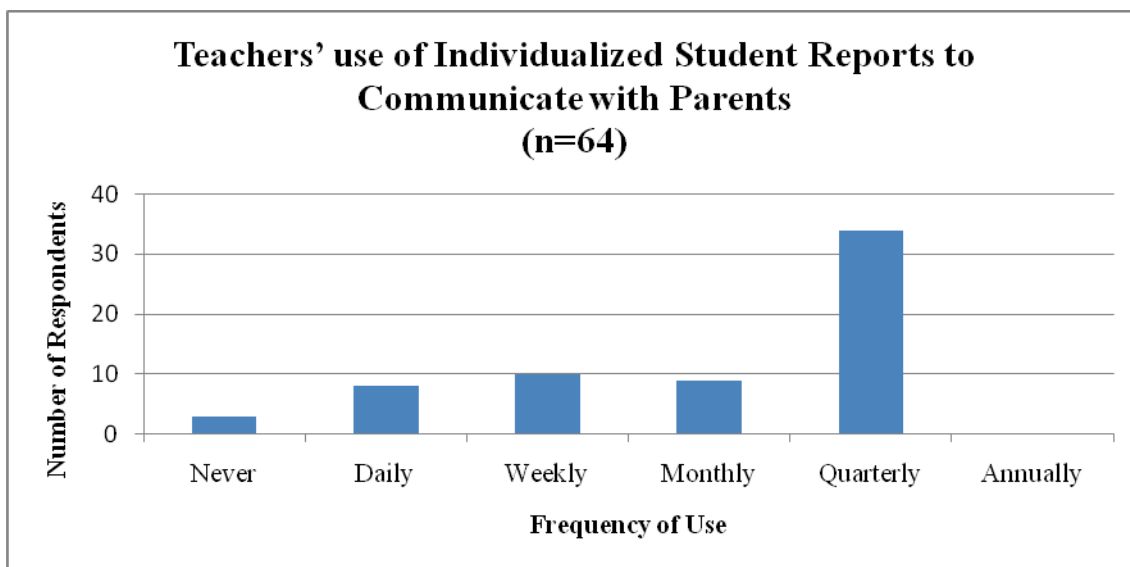


Figure 24. Teachers' Use of Individualized Student Reports to Communicate With Parents

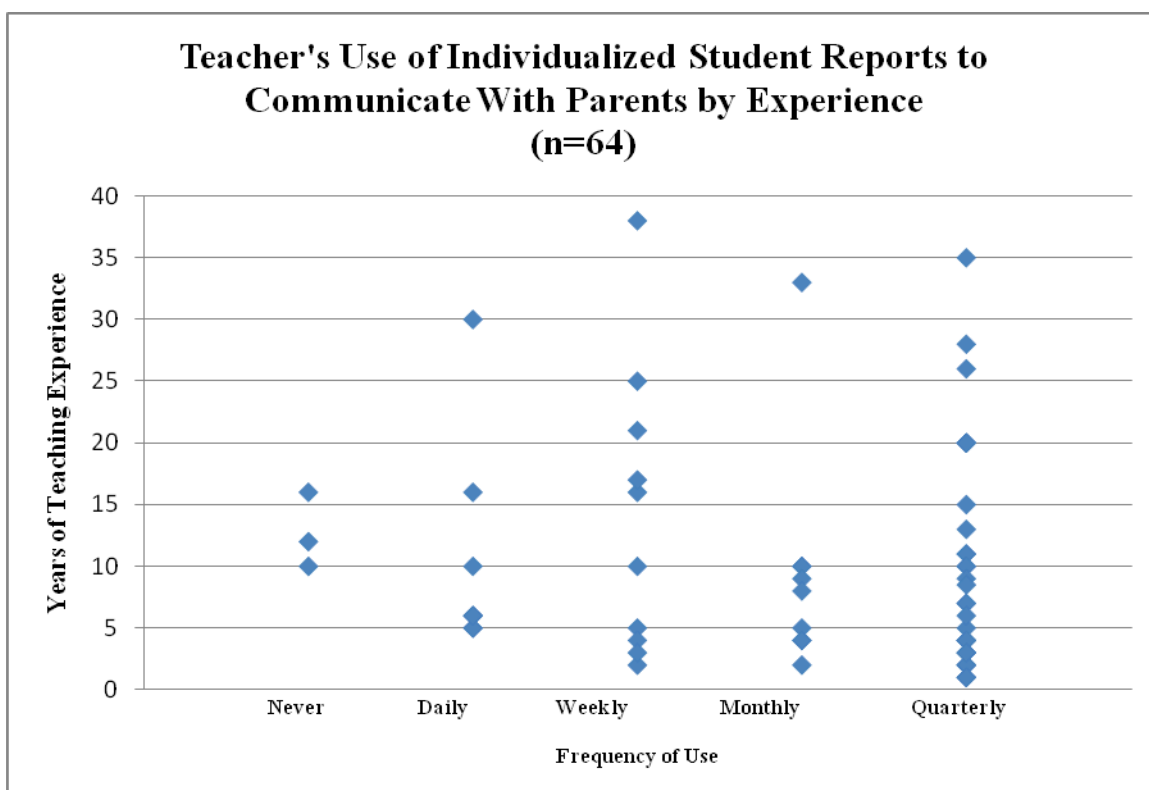


Figure 25. Teachers' Use of Individualized Student Reports to Communicate With Parents by Experience

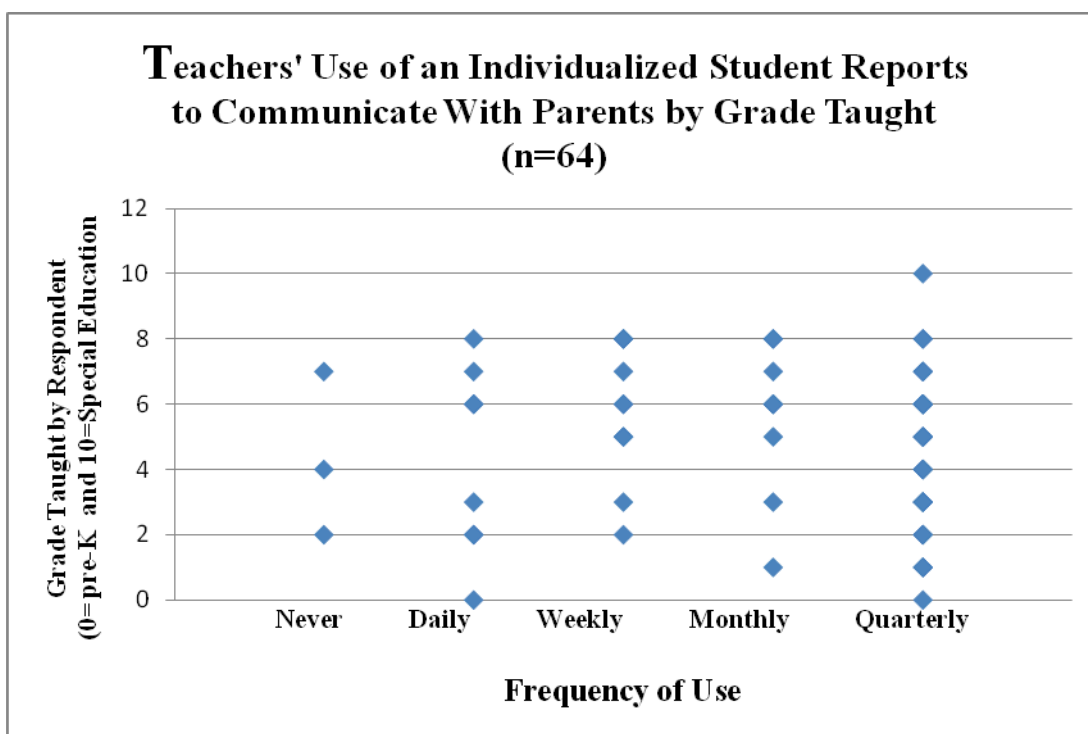


Figure 26. Teachers' Use of Individualized Student Reports to Communicate With Parents by Grade Taught

Personal Communications Individualized to Parents Regarding Student (Paper)

The sixth communications method is Personal Communications Individualized to Parents Regarding Student (Paper). Five percent ($n = 3$) of the respondents *never* use personalized communications to parents regarding their student to communicate with their students' parents. These respondents have 4-16 years experience have students in Grades 4-7, and class sizes ranging from 16-24 students. One classroom is a bilingual classroom.

Sixteen of the respondents to this teacher questionnaire communicate with students' parents through personalized communications to parents regarding their student

on paper on a *daily basis*. Respondents' classroom experience ranges from 1-35 years, with class sizes ranging from 7-30 students. Three of these respondents teach in special education classrooms with students ranging from pre-primary to eighth grade. Two respondents teach in bilingual second and third grade classrooms.

Twenty-three percent ($n = 15$) of the 64 respondents use personalized communications to parents regarding their student on paper as a communications form with students' parents on a *weekly basis*. Respondents have 2-20 years of experience, with class sizes ranging from 6-28 students, and students ranging from Grades 1-8. One respondent teaches in an eighth grade special education classroom and two teach in bilingual classrooms for Grades 1 and 3.

Eleven respondents use personalized communications to parents regarding their student on paper to communicate with parents on a *monthly basis*. Respondents have 2-25 years of experience, classroom sizes ranging from 19-28 students, and are in Grades 1-8. One respondent teaches in a bilingual classroom for second grade students.

Twenty-seven percent ($n = 17$) of the respondents use personalized communications to parents regarding their student on paper as a communications method to parents on a *quarterly basis*. Respondents range in experience from 1-33 years in the classroom, have 12-34 students in their classrooms, and who range from Grades 1-8. One respondent teaches in a bilingual classroom for fifth grade students and one teaches eighth grade special education students.

Three percent ($n = 2$) of the respondents who teach seventh and eighth grade use personalized communications to parents regarding their student on paper as a

communications method to parents on an *annual basis*. These respondents have 10-12 years of experience and 24-25 students in their classrooms (see Figures 27-29 for a breakdown of the information presented in this section).

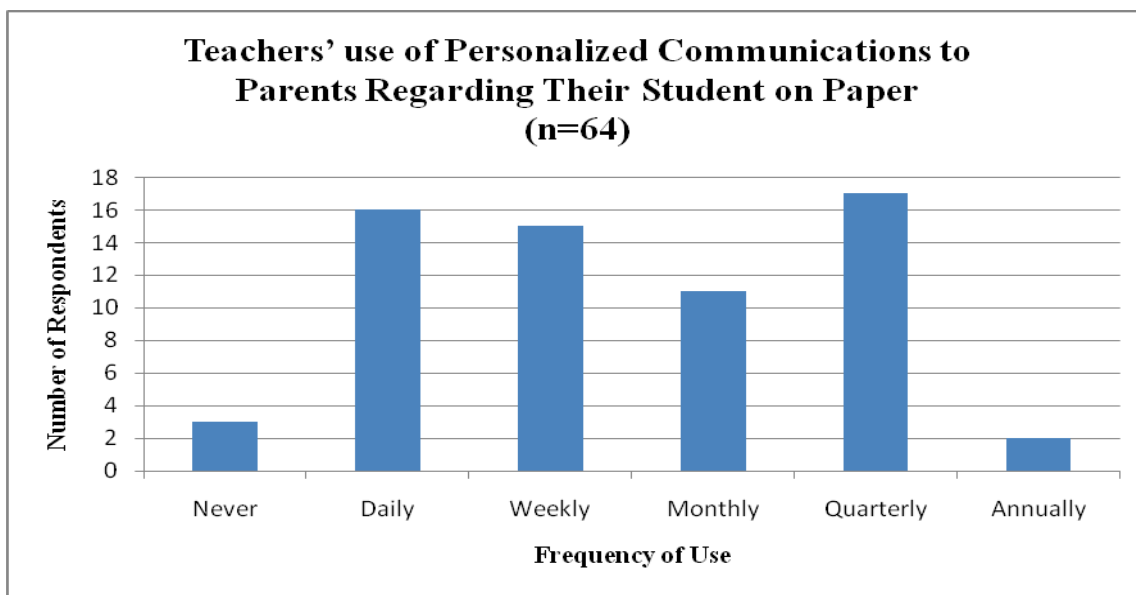


Figure 27. Teachers' Use of Personalized Communications to Parents Regarding Their Student on Paper

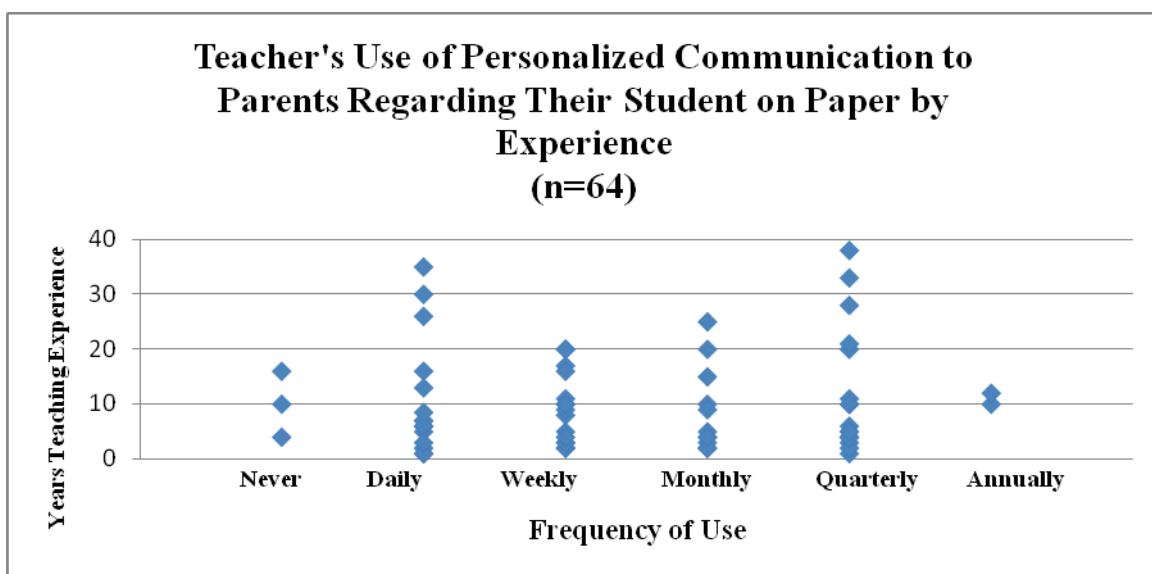


Figure 28. Teachers' Use of Personalized Communications to Parents Regarding Their Student on Paper by Experience

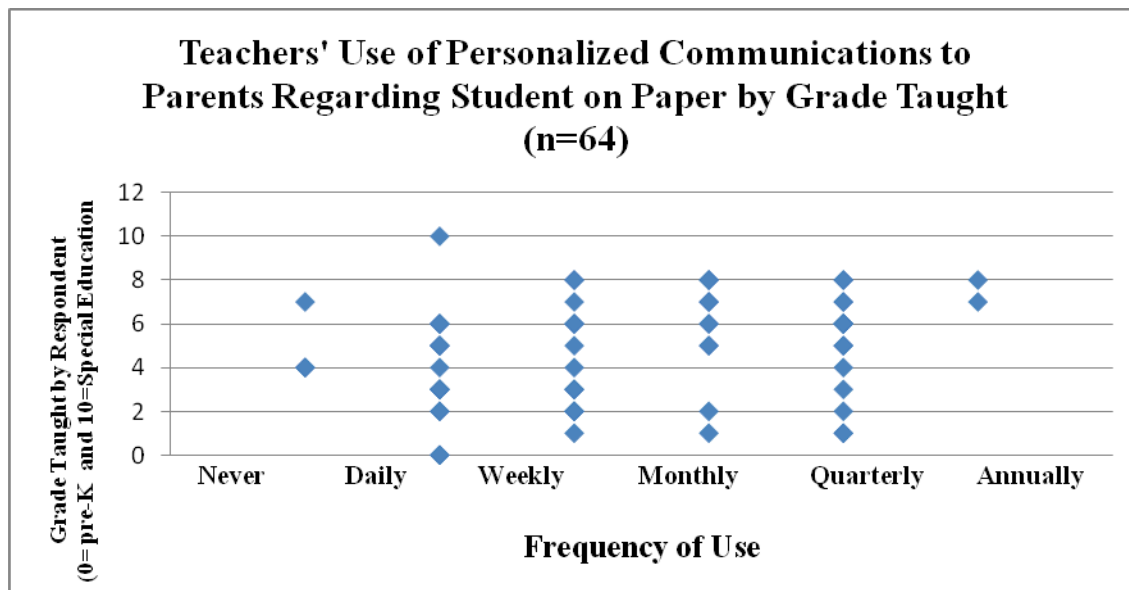


Figure 29. Teachers' Use of Personalized Communications to Parents Regarding Their Student on Paper by Grade Taught

Email Communications to Individual Parents Regarding Specific Subject Matter About Student

The seventh communications method is Email Communications to Individual Parents Regarding Specific Subject Matter About Student. Of the 64 respondents, 19% ($n = 12$) never use personalized email communication with parents. Seven of these respondents teach in bilingual classrooms, one teaches in a first grade bilingual classroom, two teach in a second grade bilingual classroom, two respondents teach in a third grade bilingual classroom, one teaches in a fourth grade bilingual classroom, and one teaches in a fifth grade bilingual classroom. One respondent teaches in a second grade general education classroom, one teaches in a fourth grade general education classroom, one teaches in a fifth grade general education classroom, and two teach sixth grade general education students.

Eight percent ($n = 5$) of respondents have communicated with individual parents via email on a *daily basis*. These respondents all have over 20 students in their classrooms, have 2-12 years teaching experience, and teach in third, fourth, fifth, seventh, and eighth grade general education classrooms.

Thirty percent ($n = 19$) of respondents have communicate with individual parents via email on a *weekly basis*. Teachers' experiences range from 2-32 years, they teach Grades 2-8, and have 7-28 students in the classroom. Four respondents teach in special education classrooms and have 7-12 students in their classrooms.

Of the 64 respondents, 30% ($n = 19$) use individualized email communication with parents on a *monthly basis*. Respondents who use this communications form range in experience from 1-35 years in the classroom, have 6-38 students in their classrooms, and have students ranging from Grades 1-8.

Seven respondents communicate with parents through individualized email communication on a *quarterly basis*. These respondents' experience ranges from 1-21 years, have 10-29 students enrolled in class, and teach Grades 1-8. One respondent teaches in a primary grade special education classroom.

One respondent communicates with parents via personalized email on an *annual basis*. This respondent reported they teach first grade and have less than five years teaching experience (see Figures 30-32 for a breakdown of the information presented in this section).

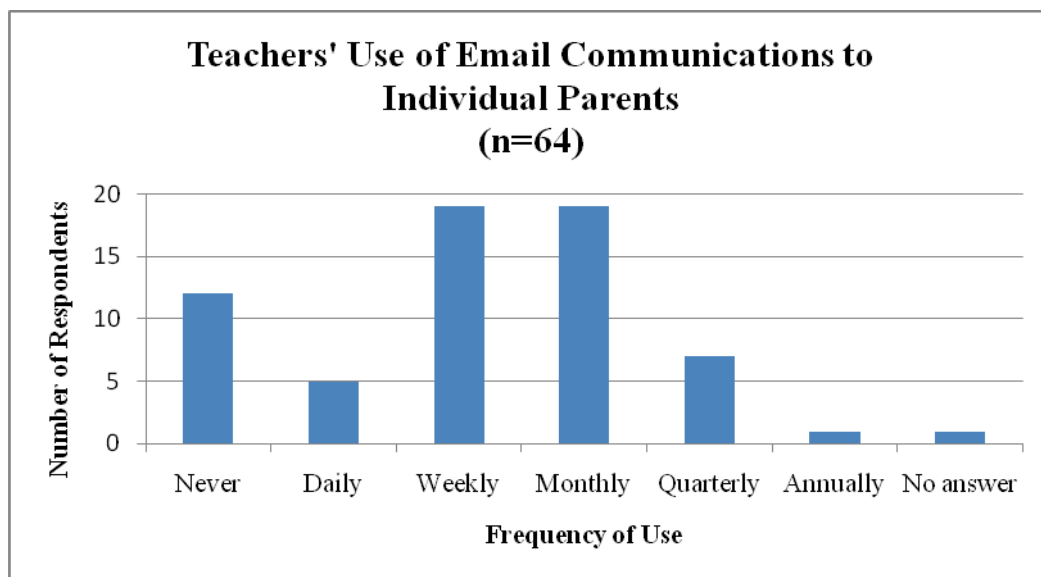


Figure 30. Teachers' Use of Email Communications to Individual Parents

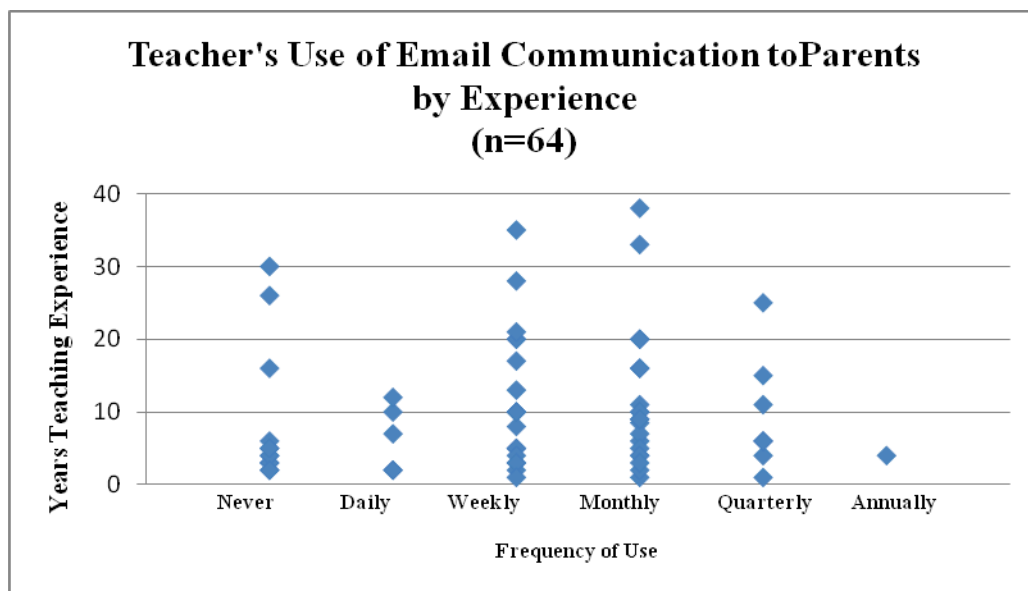


Figure 31. Teachers' Use of Email Communication to Parents by Experience

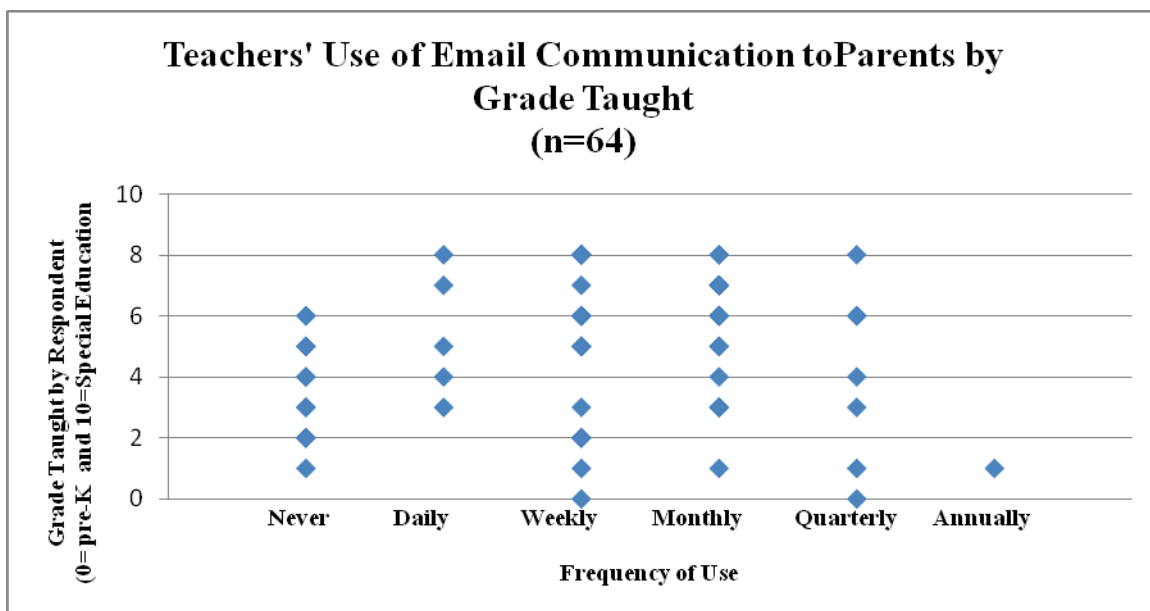


Figure 32. Teachers' Use of Email Communication to Parents by Grade Taught

Face-to-Face Meetings Regarding Student Progress

The eighth communications method is Face-to-Face Meetings Regarding Student Progress. None of the respondents indicated they speak to parents in face-to-face meetings regarding student progress on a *daily basis*. One hundred percent ($n = 64$) of the respondents have face-to-face meetings with students' parents regarding student progress at some point in time during the school year.

Five respondents have face-to-face meetings with parents regarding student progress on a *weekly basis*. These respondents' teaching experiences range from 4-24 years and they teach Grades 3-6 with classrooms of 18-25 students.

Five respondents meet with parents in face-to-face meetings regarding student progress on a *monthly basis*. Teachers' experiences range from 5-16 years, they teach

Grades 2-6, and have 7-25 students in the classroom. The respondent who has seven students in their classroom teaches in a middle school special education classroom.

Of the 64 respondents, 73% ($n = 47$) use face-to-face meetings regarding student progress as one communications method to parents on a *quarterly basis*. Respondents who use this communications form range in experience from 1-38 years in the classroom, have 6-38 students in their classrooms, and have students ranging from Grades 1-8. Six respondents teach in bilingual classrooms and six teach in special education classrooms.

Seven respondents have face-to-face meetings with parents regarding student progress on an *annual basis*. These respondents' experience ranges from 2-30 years, have 17-28 students enrolled in class, and teach Grades 1-7. One respondent teaches in a bilingual classroom (see Figures 33-35 for a breakdown of the information presented in this section).

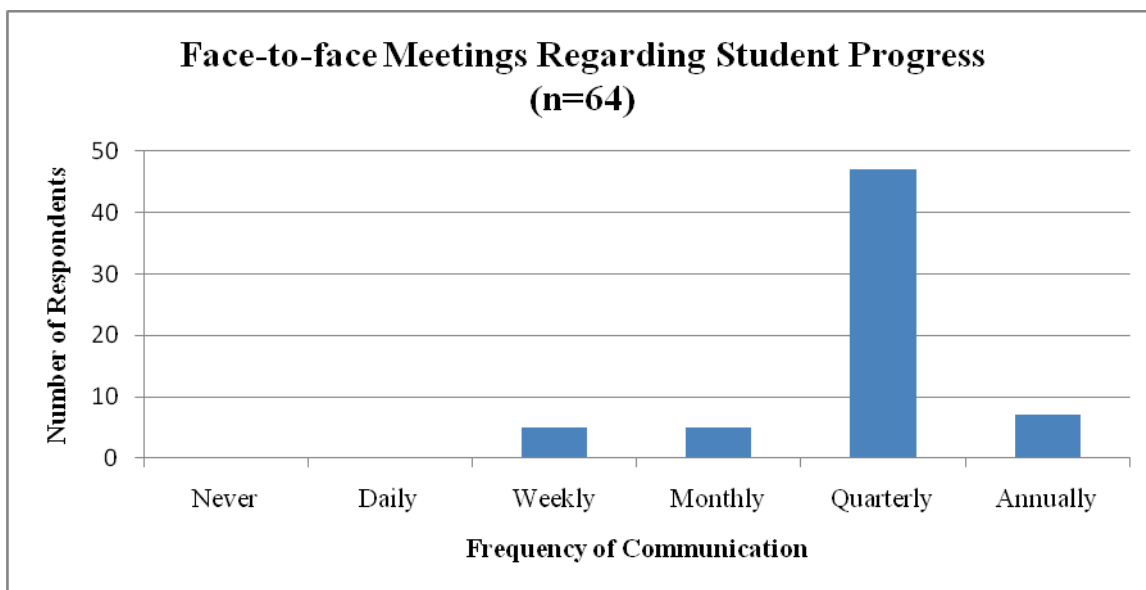


Figure 33. Face-to-Face Meetings Regarding Student Progress

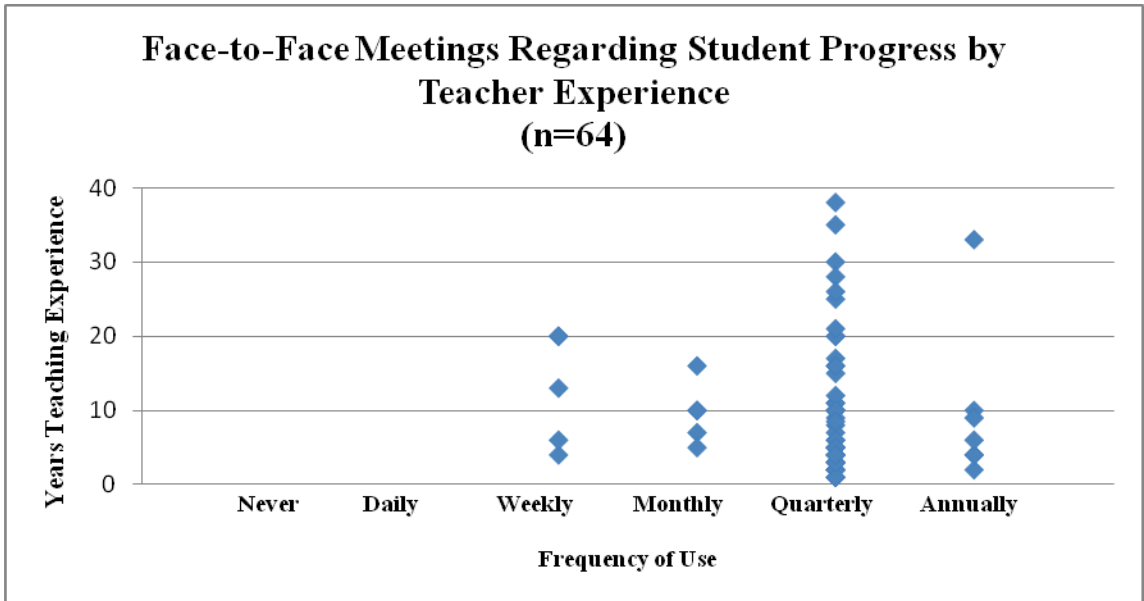


Figure 34. Face-to-Face Meetings Regarding Student Progress by Teacher Experience

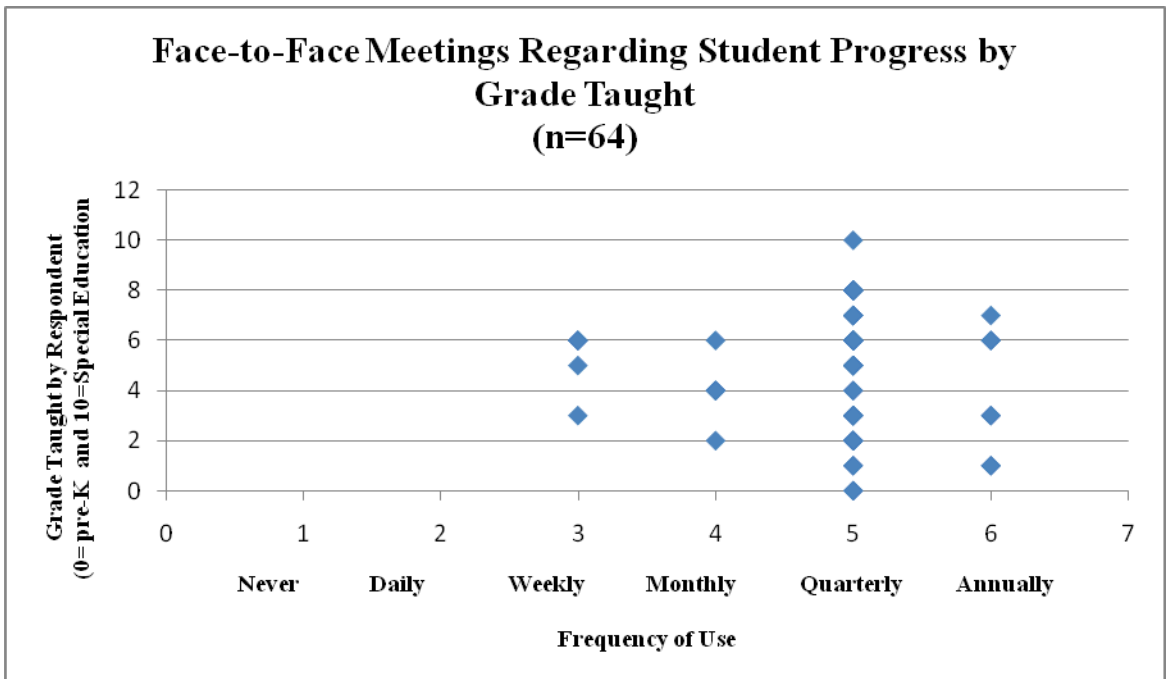


Figure 35. Face-to-Face Meetings Regarding Student Progress by Grade Taught

Teachers' Informal Face-to-Face Interactions With Parents

The ninth communications method is Informal Face-to-Face Interactions With Parents. Five percent ($n = 3$) of the respondents reported they *never* have informal face-to-face meetings regarding student progress. All of these respondents teach at the junior high school with students in Grades 6-8.

Three respondents reported they never have informal face-to-face meetings regarding student progress on a *daily basis*. Of these respondents, one teaches in a bilingual classroom, one teaches fifth grade, and one teaches middle school physical education.

Twenty-three percent ($n = 15$) of the respondents have informal face-to-face meetings with parents regarding student progress on a *weekly basis*. These respondents' experiences range from 2-35 years. These respondents teach in pre-primary through seventh grades, and include two special education teachers and two teachers of bilingual students.

Eighteen respondents meet with parents in informal face-to-face meetings regarding student progress on a *monthly basis*. Teacher experience ranges from 4-30 years. Four respondents teach in bilingual classrooms. Respondents who meet with parents in informal face-to-face meetings regarding student progress teach in classrooms that range from Grades 1-7 with from 7-30 students in the classroom.

Twenty-three percent ($n = 15$) of the respondents have informal face-to-face meetings with parents regarding student progress on a *quarterly basis*. These

respondents' experiences range from 1-38 years, teach in pre-primary through eighth grades, and include five special education teachers.

Ten respondents meet with parents in informal face-to-face meetings regarding student progress on an *annual basis*. Teacher experiences ranges from 3-28 years, have classroom size of 15-26 students, and teach in classrooms ranging from Grades 5-8 (see Figures 36-38 for a breakdown of the information presented in this section).

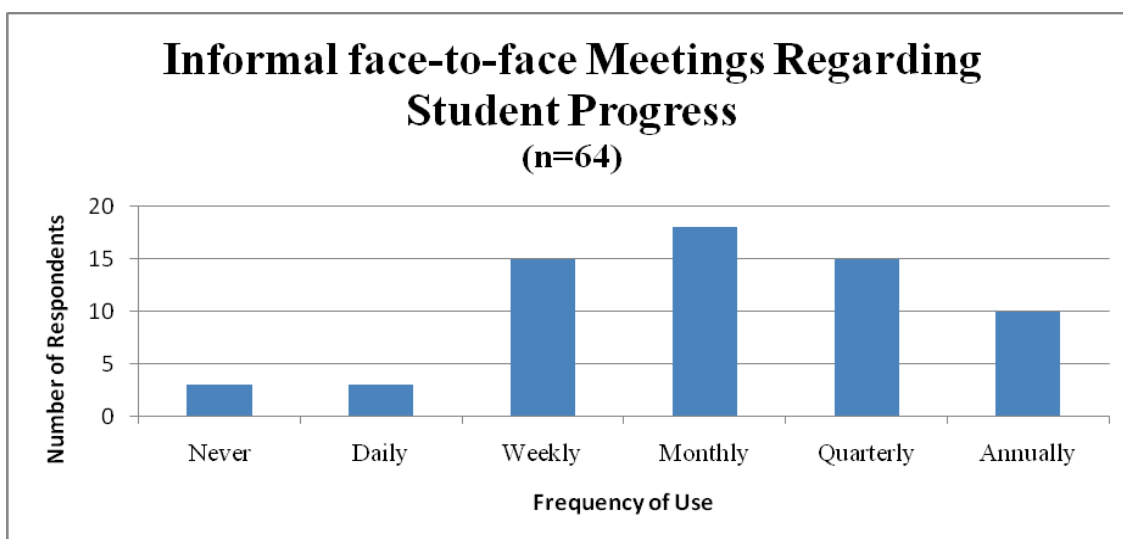


Figure 36. Informal Face-to-Face Meetings Regarding Student Progress

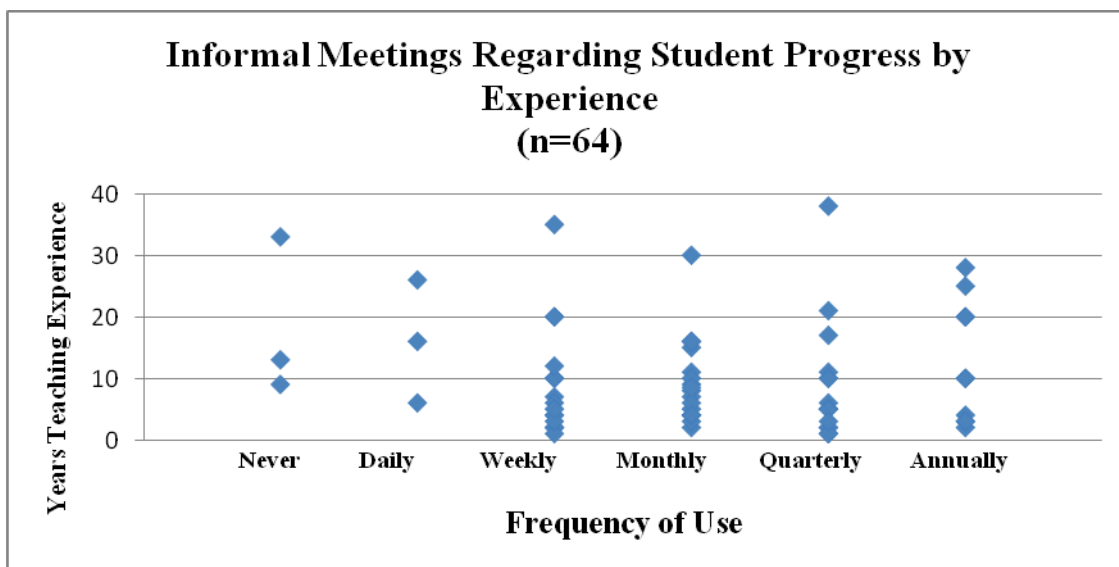


Figure 37. Informal Face-to-Face Meetings Regarding Student Progress by Experience

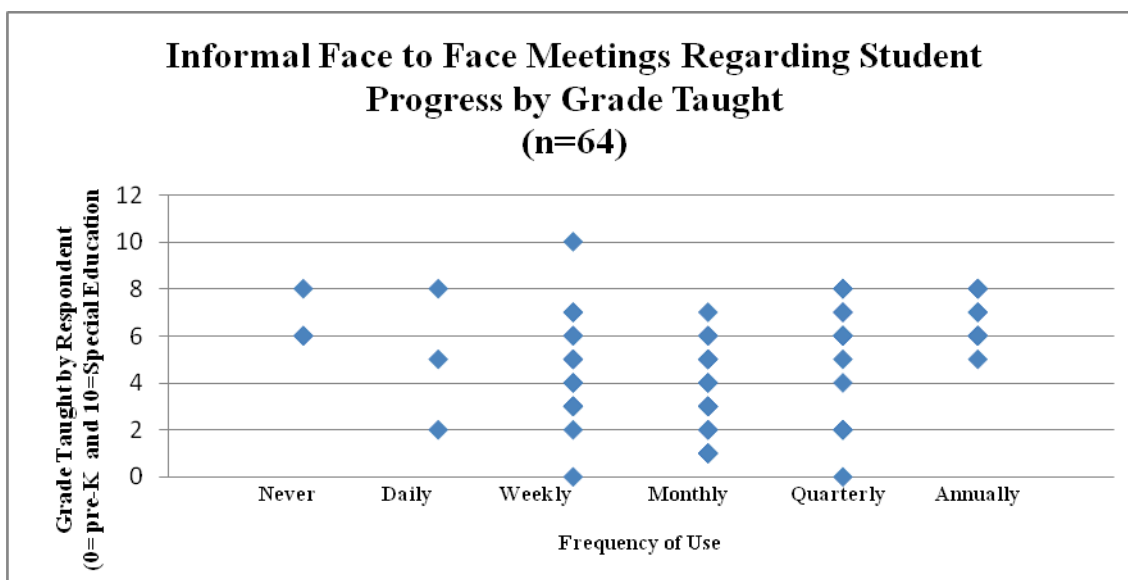


Figure 38. Informal Face-to-Face Meetings Regarding Student Progress by Grade Taught

Homework Help Page

The tenth communications method is Homework Help Page. A homework help page is *never* used by 72% ($n = 46$) of the study respondents to the teacher questionnaire. Respondents range from 1-38 years experience and teach in pre-primary classrooms through an eighth grade physical education classroom. Six of these respondents teach in special education classes and seven teach in bilingual classrooms. All of these respondents reported teaching in Grades 6-8 classrooms with 20-26 students in class.

Six percent ($n = 5$) of respondents use a homework help page on a *daily basis*. All of the respondents teach Grades 6-8 with three of the junior high respondents teaching sixth grade. One respondent teaches seventh grade and one respondent teaches eighth grade. All respondents teach general education classes.

Fourteen percent ($n = 9$) of the respondents use a homework help page to communicate with parents on a *weekly basis*. These respondents have 1-21 years of experience and teach Grades 1-8.

Two percent ($n = 1$) of the respondents uses a homework help page to communicate with parents on a *monthly basis*. This respondent teaches 27, fourth grade students.

No teachers report to using a homework help page to communicate with parents on a *quarterly basis*.

One fourth grade teacher reported use of a homework help page on an *annual basis* to communicate with parents.

Two respondents *did not answer* this question (see Figures 39-41 for a breakdown of the information presented in this section).

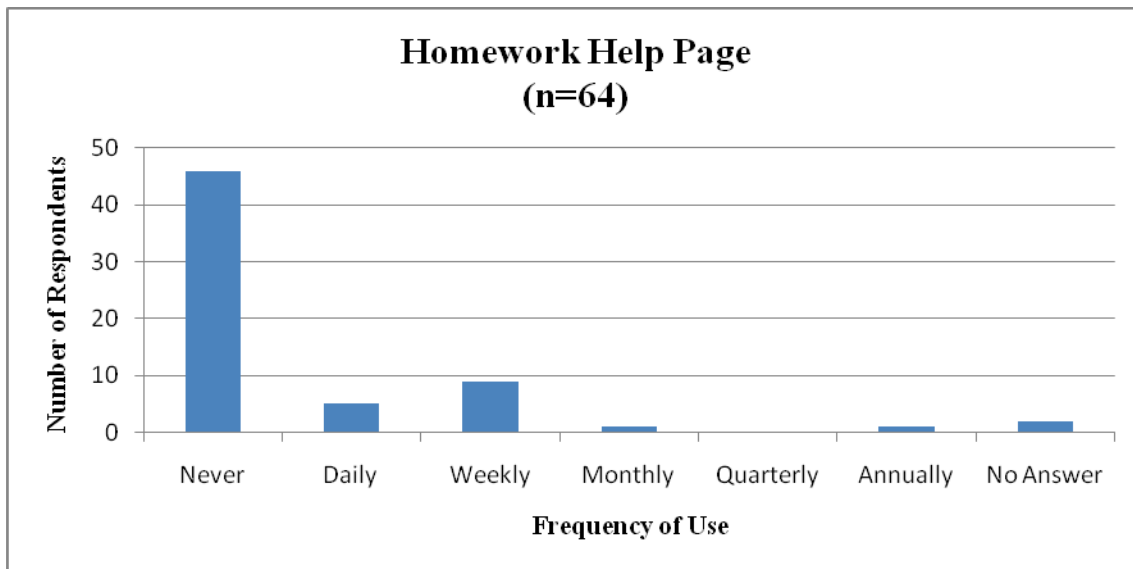


Figure 39. Homework Help Page

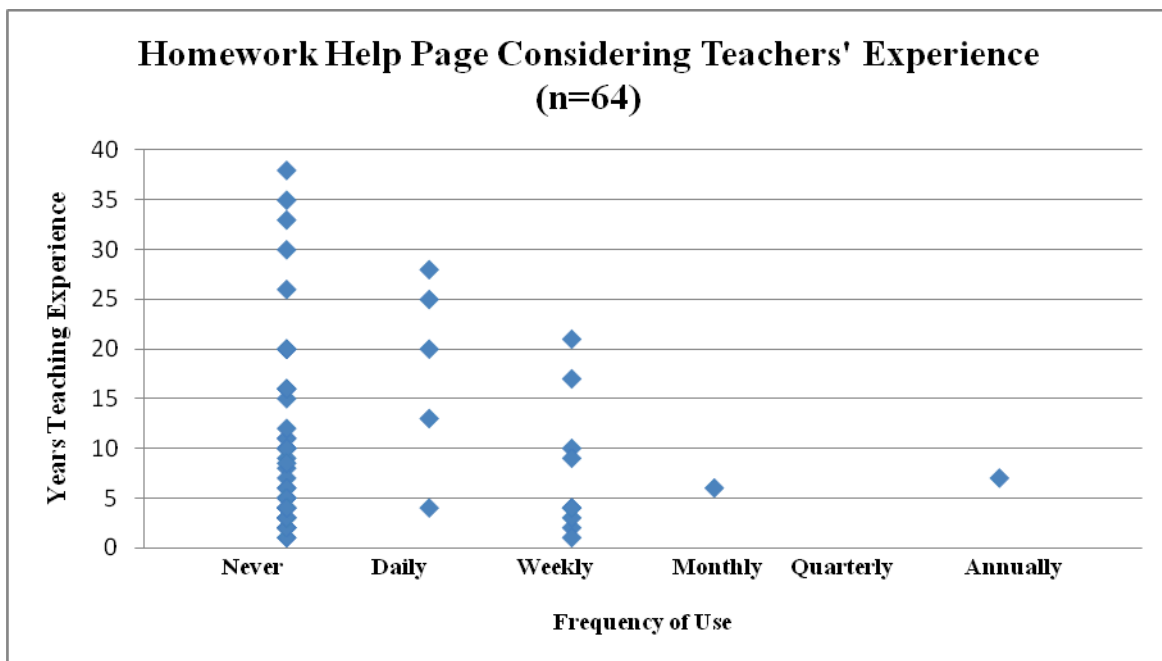


Figure 40. Homework Help Page Considering Teachers' Experience

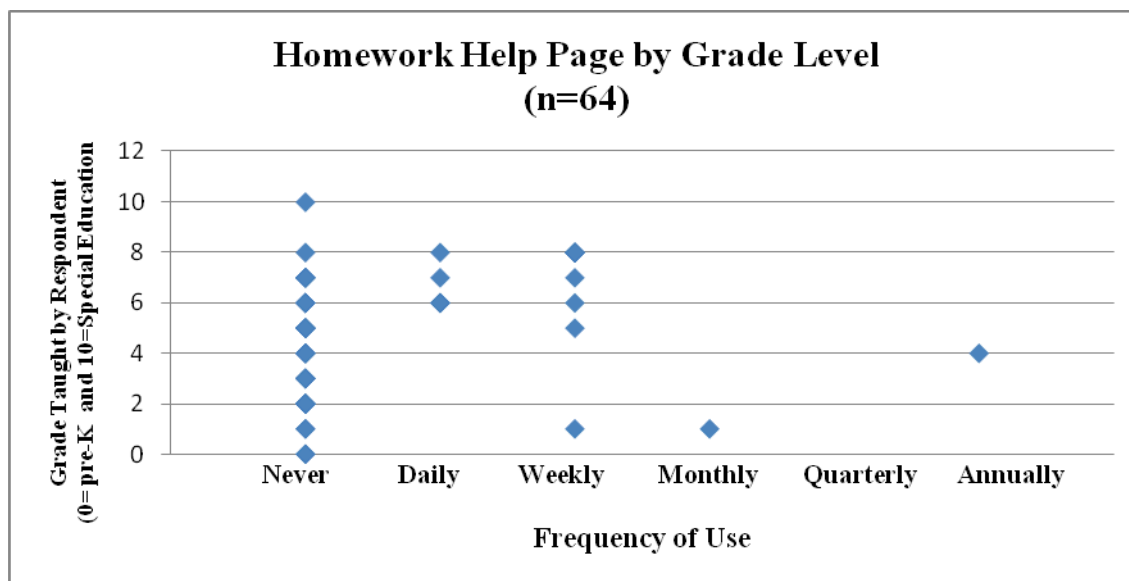


Figure 41. Homework Help Page by Grade Level

Online Grade Book

The eleventh and final communications method is Online Grade Book. Twenty-five percent ($n = 16$) of the respondents *never* use an online grade book to communicate with their students' parents. Respondents' experiences range from 3-35 years, and they teach in classrooms for pre-primary to sixth grade, and have class sizes from 7-27 students. Two respondents teach in pre-primary, special education classrooms and five teach in bilingual classrooms.

Twenty-seven of the respondents use an online grade book to communicate with parents on a *daily basis*. Respondents range in teaching experience from 2-33 years and teach in classrooms for Grades 1-8. Sixty-three percent ($n = 17$) of the respondents teach at the junior high level with students in Grades 6-8. Two of these teach junior high special education students. One respondent teaches fifth grade.

Twenty-five percent ($n = 16$) of the respondents use an online grade book to communicate with their students' parents on a *weekly basis*. Respondent's experience ranges from 1-21 years. Respondents teach Grades 1-8 with class sizes of 12-28 students. One respondent teaches in a third grade bilingual classroom and one teaches in an eighth grade special education classroom.

Two respondents use an online grade book to communicate with their students' parents on a *monthly basis*. These respondents have over 15 years experience and teach Grades 3 and 8 with 25-30 students in their classrooms.

One respondent, who has over 30 years experience, uses an online grade book to communicate with parents on a *quarterly basis*. This respondent teaches sixth grade students.

One respondent uses an online grade book to communicate with parents on an *annual basis*. This respondent teaches 24 seventh grade students.

One respondent *did not answer* this question on the teacher questionnaire (see Figures 42-44 for a breakdown of the information presented in this section).

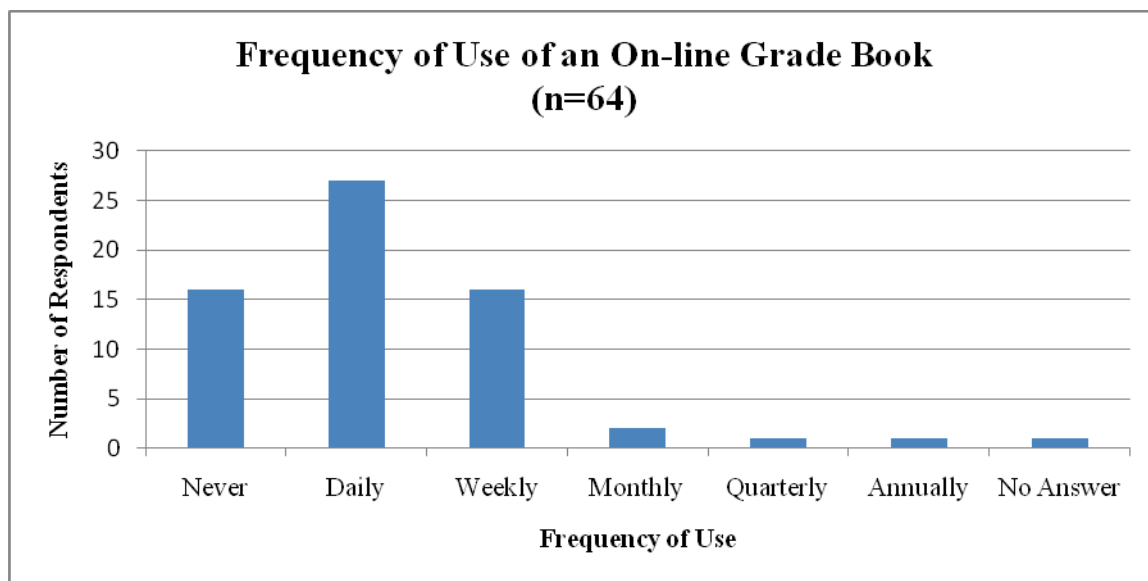


Figure 42. Frequency of Use of an Online Grade Book

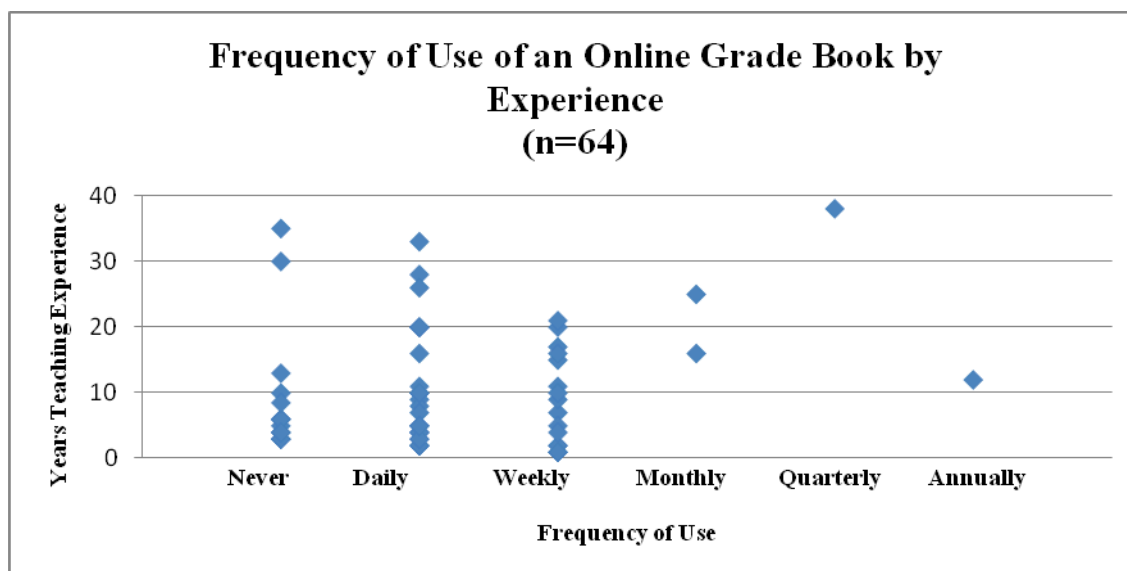


Figure 43. Frequency of Use of an Online Grade Book by Experience

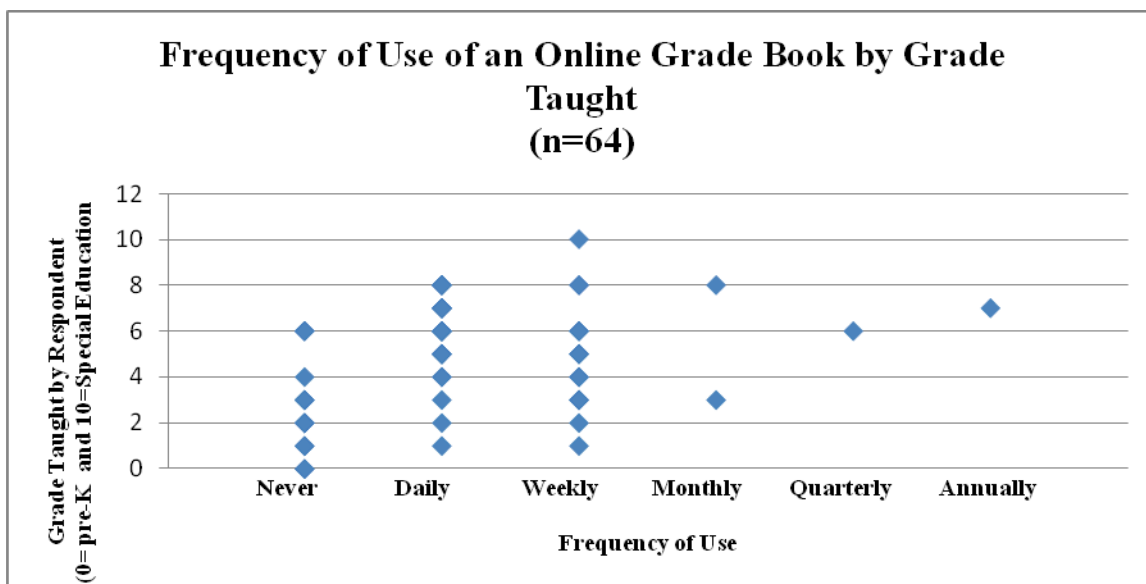


Figure 44. Frequency of Use of an Online Grade Book by Grade Taught

Open-Ended Responses

An open-ended question asked teachers how they address a student's parents regarding the student's successes or concerns following the matrix regarding frequency of use of the various communications form.

Question: *How do you and your students' parents communicate to address student successes or concerns?* Teachers were asked to rate the frequency as either "Very Often," "Often," "Sometimes," "Almost Never," "Never."

Teachers listed the forms of communication between themselves and students' parents instead of describing a specific communication plan. Instead of presenting all 64 responses to this open-ended question, the researcher provided a sampling of responses to reflect the statements offered by participants. In many instances, responses were very similar, so these responses are presented only once:

Phone Calls to the Home

(n = 50)

Email	<i>(n = 35)</i>
Use Notes	<i>(n = 26)</i>
Friday Folder	<i>(n = 1)</i>
Have Parents Sign student Tests	<i>(n = 3)</i>
Utilize Some Sort of Log Book	<i>(n = 11)</i>
Specifically Identified Parent-teacher Conferences	<i>(n = 12)</i>
Some Sort of Behavior Sheet	<i>(n = 3)</i>
Use Meetings	<i>(n = 9)</i>
Trimester Grade Periods	<i>(n = 12)</i>
Specifically Mentioned Asking Parents to Come for a Face-to-Face Meeting	<i>(n = 9)</i>

Many respondents cited more than one communications form to address successes or concerns with parents, “Assignment notebook sent home daily, weekly behavior notes, trimester conferences, notes/phone calls, emails home when necessary.” One respondent specifically addressed their perception of the use of email to communicate with parents, “Not often, we tend to get emails only when we first email parents. Teachers usually email when there is a problem.” Another respondent also indicated their perception of parents’ use of technology as a communications tool, “Notes on daily homework, notes in the daily assignment notebook, phone calls for behavior issues. Only one parent in my class uses the Internet or email. Online grade book is available in real time but most of my parents don’t check it.”

Emails from Parents to Teachers

Question: *How often do you receive email from parents as an offer to participate in an activity specifically designed to impact student achievement?* Teachers were asked to rate the frequency as either “*Very Often*,” “*Often*,” “*Sometimes*,” “*Almost Never*,” “*Never*.”

Fifty-six percent ($n = 36$) of respondents report that parents use email as an offer to participate in an activity to impact student achievement: one indicated that parents *Often* use this communications form, 15 report parents *Sometimes* use this communications form, and 28 reported that while email is used, it is almost *Never* used as an offer from parents to teachers to participate in an activity to impact student achievement (see Figure 45).

Question: *How often does the initial email communication facilitate more communication when receiving email from parents as an offer to participate in an activity specifically designed to impact student achievement?* Teachers were asked to rate the frequency as either “*Very Often*,” “*Often*,” “*Sometimes*,” “*Almost Never*,” “*Never*.”

Of the respondents, seven indicated that parents’ emailed communications *Very Often* led to additional communication, 16 reported that *Often* an initial email communication from parents led to more communication, and 21 indicated that *Sometimes* the parents’ initial communication facilitates more communication. Eight respondents report that parents’ email *Almost Never* requires additional communication and 10 report it *Never* requires follow up communication. These respondents who *Never*

need to follow-up with parents teach Grades 1-8, five teach in bilingual classrooms, and one teaches a special education classroom (see Figure 45).

Question: *How often is clarification needed when receiving email from parents as an offer to participate in an activity specifically designed to impact student achievement?* Teachers were asked to rate the frequency as either “*Very Often,*” “*Often,*” “*Sometimes,*” “*Almost Never,*” “*Never.*”

Forty-five percent ($n = 29$) report that clarification is needed *Sometimes*, six report *Often* needing clarification, 16 *Almost Never* need clarification, and 11 *Often* need clarification (see Figure 45).

Question: *How often is a personal email needed for follow-up when receiving email from parents as an offer to participate in an activity specifically designed to impact student achievement?* Teachers were asked to rate the frequency as either “*Very Often,*” “*Often,*” “*Sometimes,*” “*Almost Never,*” “*Never.*”

Twenty-four respondents report that *Sometimes* a follow-up email is required, four indicated *Very Often*, 12 *Almost Never*, and 13 reported *Never*.

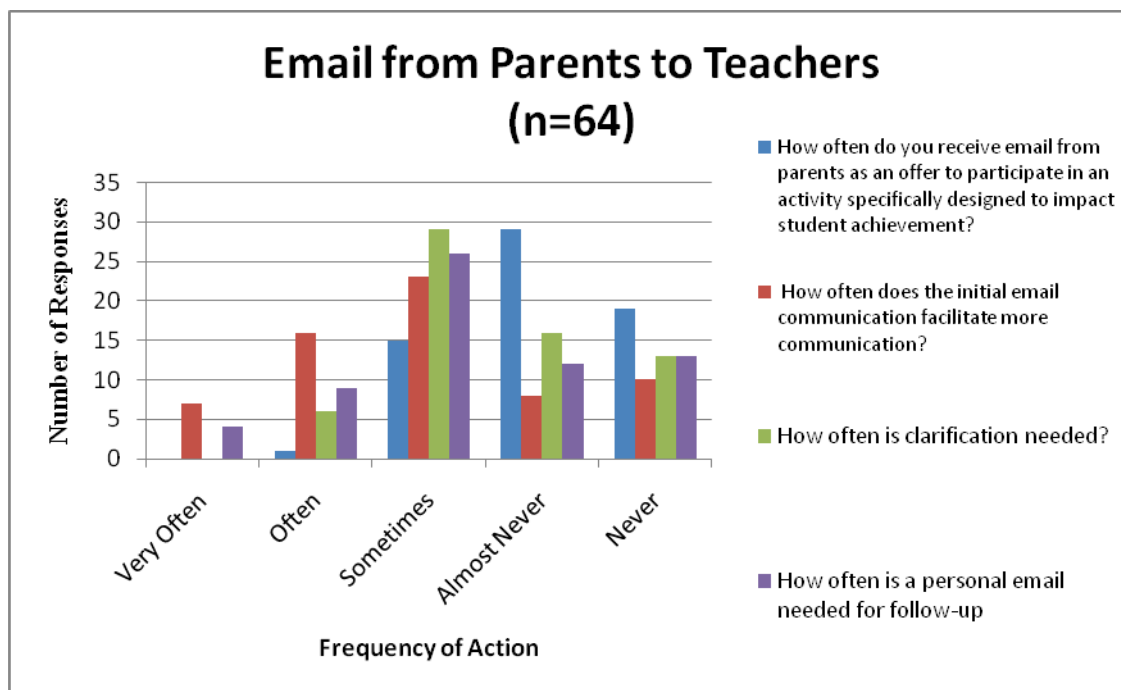


Figure 45. Email from Parents to Teachers

Outcomes of Conversations

Question: *To what extent do the conversations between yourself and your students' parents accomplish the outcome you intend to achieve toward addressing your concern regarding student successes or concerns? Teachers were asked to rate as either "Very Effective," "Somewhat Effective," "Effective," "Somewhat Ineffective," "Completely Ineffective."*

Fifty-three percent of respondents report the conversations between themselves and their students' parents accomplish the intent they intend to achieve toward addressing their opinions regarding the students' successes or concerns. These respondents teach Grades 1-8 and include parents with students from special education and bilingual classrooms. Specifically, 17 respondents find these conversations to be *Very Effective*, 17

find these conversations to be *Effective*, 24 find conversations *Somewhat Effective*, and four find conversations between themselves and their students' parents *Somewhat Ineffective* (see Figure 46).

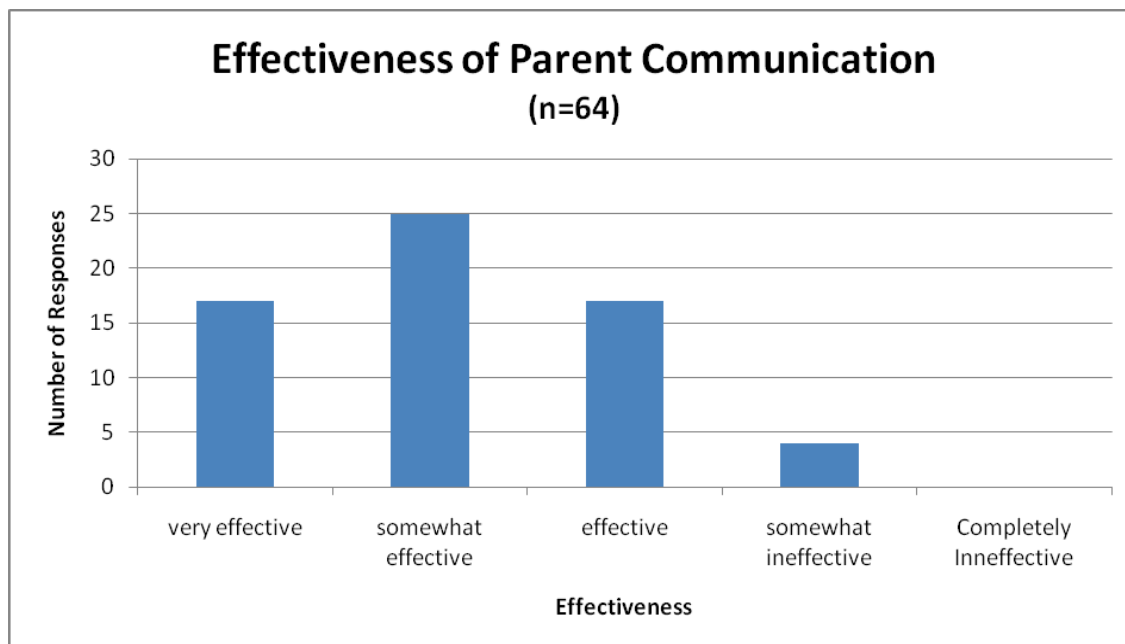


Figure 46. Effectiveness of Parent Communication

Electronic Communication Facilitating Trust

Question: *How has electronic communication facilitated trust in your culturally diverse community?*

The following themes emerged in reviewing responses to this item:

- Electronic communication is a good tool ($n = 21$)
- Parents don't have enough background knowledge or resources to have electronic communication ($n = 22$)
- Bilingual parents do not use electronic communication ($n = 5$)

- There are no trust issues in this district, or this is not applicable to our community ($n = 7$)

One third ($n = 21$) of the respondents indicated the belief that electronic communication facilitates trust in the community. These respondents cited the convenience of electronic communication, as well its ease of use. One respondent indicated that the use of electronic communication helps culturally diverse parents spend more time on communication in order to better understand the message being conveyed by the school or teacher, “It allows for parents who are not native to the English language to take time to understand the message being conveyed.” Respondents who feel electronic communication can facilitate trust in the community responded with the following statements:

- “Parents can trust that there is always a way to communicate with me 24 hrs a day. I think that this gives many parents with Internet service a piece of mind.”
- “It helps parents and teachers to feel more connected and ensures communications are had in a timely manner.”
- “Communication is easier via the computer, so parents are probably more willing to contact the teachers.”
- “I think parents are confident that through an email, they will typically get a response that day.”
- “Parents are willing to communicate by email.”

- “Parents have commented that they like having access to homework online and having updates to what we are doing in class.
- “It allows for parents who are not native to the English language to take time to understand the message being conveyed.”
- “Ease of sending messages and information home to parents.”
- “It allows them to look at grades on a regular basis.”
- “It’s more secure at times and ensures the parent and teacher will receive it and allows/encourages more communication—especially if parents are in contact through their work email.”
- “Several parents have communicated behavior concerns, clarification requests regarding activities, and offers to help out with projects and field trips. I feel that since many parents work and don’t see me face-to-face; we can have clear communication that can even be referred to again. It is very effective.”
- “Gives parents the opportunity to communicate with me when a concern arises.”
- “Some parents have been more willing to contact me via email and check student progress on line, skyward, parent access.”
- “Being able to email with a parent has certainly made life easier and more ‘detailed.’ It’s easier to *show* parents and explain a grade when all the info is written out. You’re able to get a message to them without playing phone tag.”

- “Information is readily accessed. Parents know what is going on and are more involved. It doesn’t help families without computer or Internet access or those not computer literate.”
- “Parents can check student’s grades, contact teachers, get information back easier.”
- “I am available 24 hours a day by electronic communication, which I feel helps parents better communicate and feel secure.”
- “I think that electronic communication is a really good way to facilitate initial contact within cultural diversity.”
- “This is an easy way to communicate and I think trust is built from the beginning.”

Thirty-one percent ($n = 31$) of respondents do not feel electronic communication facilitates trust in this community due to either the financial constraints of the parents, or the fact that families do not have Internet access in their homes. Six respondents teach in bilingual classrooms and cited financial or hardware constraints as an inhibitor toward using electronic communication with their students’ parents. Respondents who feel electronic communications do not facilitate trust in the community because of the lack of resources responded with the following statements:

- “I don’t think it has. Many do not have Internet access.”
- “99% of my students do not own computers and the 1% of students who do do not have Internet access.”

- “It hasn’t happened this year—most of my parents haven’t provided me with their email addresses.”
- “Many families prefer phone calls/letters as they have limited access to Internet.”
- “Does not work; only one student has a computer.”
- “Most families do not have Internet. For the few that do, I would say about 50% of the time this communication facilitates trust.”
- “The parents of my students have shared with me that they are very interested in learning how to use the computer but many, due to long work hours, do not have time to take a computer class.”
- “I don’t have electronic communication with my parents.”
- “Not much different because many parents don’t have Internet access.”
- “Minimal, many parents don’t use it.”
- “I’m not sure it has—many do not have working emails.”
- “No difference. They cannot afford computers, or think it’s too complicated to learn.”
- “Actually, the phone is still a more effective tool for us. We all have phones in our classrooms. Not all of our parents have phones however. It is sometimes hard to contact some of our parents.”
- “It really depends on the socioeconomic level of the family. Many do not have computers or Internet access, which makes electronic communication difficult.”

Eight percent ($n = 5$) of respondents do not feel electronic communication facilitates trust in the community because of the cultural diversity found in the community. Responses from these individuals follow:

- “The parent population in this school is in large, afraid of using technology or are unaware of how to use it, especially when having first grade students because parents aren’t used to it.”
- “Rarely do I receive an email from a Hispanic family.”
- “It’s a great tool, but most Hispanic parents don’t have the resources, which is frustrating. Trust is built by phone, not with this method.”
- “I’m not sure that it’s had an effect. Many of our bilingual families don’t have Internet access.”
- “Many do *not* have Internet access. Many do not speak English.”

Eight respondents indicated either the question was *Not Applicable* or were *Not Sure/Unsure* of the impact of electronic communication on trust in the district. One respondent felt it has an impact because electronic communication is used for another purpose in their district, saying it is, “seldom used for communication . . . more so for research and educational programming.”

Electronic Communication and Collaboration Within the Community

Question: *How has electronic communication facilitated collaboration in your culturally diverse community?*

Forty-five percent ($n = 29$) of respondents felt electronic communication helped facilitate collaboration within this particular school district. Thirty-four percent ($n = 22$)

felt electronic communication has not facilitated collaboration in this culturally diverse community, 14 respondents specifically cited families lack of computer technology or Internet access as the reason, 10 did not give a reason but indicated that computer technology has not facilitated collaboration within the school community, 13 either indicated this question was *Not Applicable* or left this question blank.

Two percent ($n = 1$) respondent indicated electronic communication can help parents with information regarding events at the school. One respondent commented that, “Sometimes a few parents become more aware of the school activities. A letter is sent home the last week of each month . . . student and parent return a portion they earn project pride money bucks. It helps a lot.”

Eleven percent ($n = 17$) of the respondents indicated that electronic communication assists directly with communication between parents and teachers regarding student progress in the classroom. The responses from these respondents who felt it assists directly with communication between parents and teachers follow:

- “For the parents that utilize electronic communication, we are able to collaborate more often and more thoroughly.”
- “Communication is easier via the computer, so parents are probably more willing to contact the teachers.”
- “Phone calls, meetings.”
- “It allows parents to monitor their student’s work completion.”

- “Email has made communication fast. I prefer phone calls when students are struggling to be sure the parents and I are working together. Right now [summer] there is no homework posted.”
- “It allows for increased communication between teachers and parents to work towards the betterment of the students.”
- “Ease of sending messages and information home to parents.”
- “Students email me with questions on homework, grades, and projects and ask for help early the next day or at lunch. It’s easily accessible to them.”
- “It has helped to address issues on an as needed basis. Mainly for convenience.”
- “Gives parents the opportunity to communicate with me when a concern arises.”
- “Some parents have been more willing to contact me via email and check student progress online, skyward, parent.”
- “Electronic communication is much easier and a more time efficient way of contacting and working with parents.”
- “Many parents and teachers find it easier than calling or meeting.”
- “Ease of communication—increased team work with parents. Gets parents more involved in school.”
- “It has become easier to reach a parent by email. Parents will tell us to use their email rather than phone calls.”
- “It allows parent-teacher communication, which aids in collaboration.”

- “I collaborate not only with teacher and staff but parents too!”

The following seven respondents indicated electronic communication facilitates collaboration in the community. Additionally, they cited reasons why electronic communication is not helpful for all members of the school community.

- “Parents are able to understand what the facts are in a problem situation and can ask questions, share ideas, etc. by email with ease. Parents who do not write in English are not able to use this format of communication though.”
- “I think it has just begun, so very little.”
- “I feel that about 1/2 the time after I send an email, a parent will reply or show concern.”
- “It’s easier to communicate with parents if they have Internet access—not all do.”
- “Somewhat—a lot of parents do not have email.”
- “A little bit. Many families do not own computers in this community.”
- “I think it has helped some people but we will have very weak parent involvement.”

Twenty-two percent ($n = 14$) of the respondents indicated electronic communication does not facilitate collaboration within the school community.

Respondents cited families’ lack of resources in the home or cultural barriers to the use of technology as the rationale for this answer. These respondents’ answers follow:

- “Only among the bilingual and monolingual teachers, but NOT as a community? Again, lots of parents can’t afford the luxury.”

- “Most parents do not use email.”
- “It is helpful only with families who have the technology accessible.”
- “Does not work; only one student has a computer.”
- “I communicate more with parents face-to-face; many do not own a computer or have access to Internet.”
- “Unfortunately, many families in our school don’t have computer and email access—so we’re not able to utilize it as much as we’d like to.”
- “Not much different because many parents don’t have Internet access.”
- “Minimal, many parents don’t use it.”
- “No difference—they cannot afford computers or think it’s too complicated to learn.”
- “Not all of our students/parents have computers let alone access to the Internet, not matter what’s their cultural background. It is not a reliable way to communicate.”
- “I cannot get in touch with many of my parents electronically.”

Of the 22% ($n = 14$) of respondents who feel electronic communication does not facilitate collaboration among the school community, one respondent felt it does help facilitate collaboration among the professionals in the building, “Electronic communication is great with my peers but not with my parents.”

Parent Demographic Data

The first part of the Parent Questionnaire was designed to collect demographic data from the respondents. As seen in Figure 47, the largest number of respondents were female ($n = 70$) and the smallest number of respondents were male ($n = 15$).

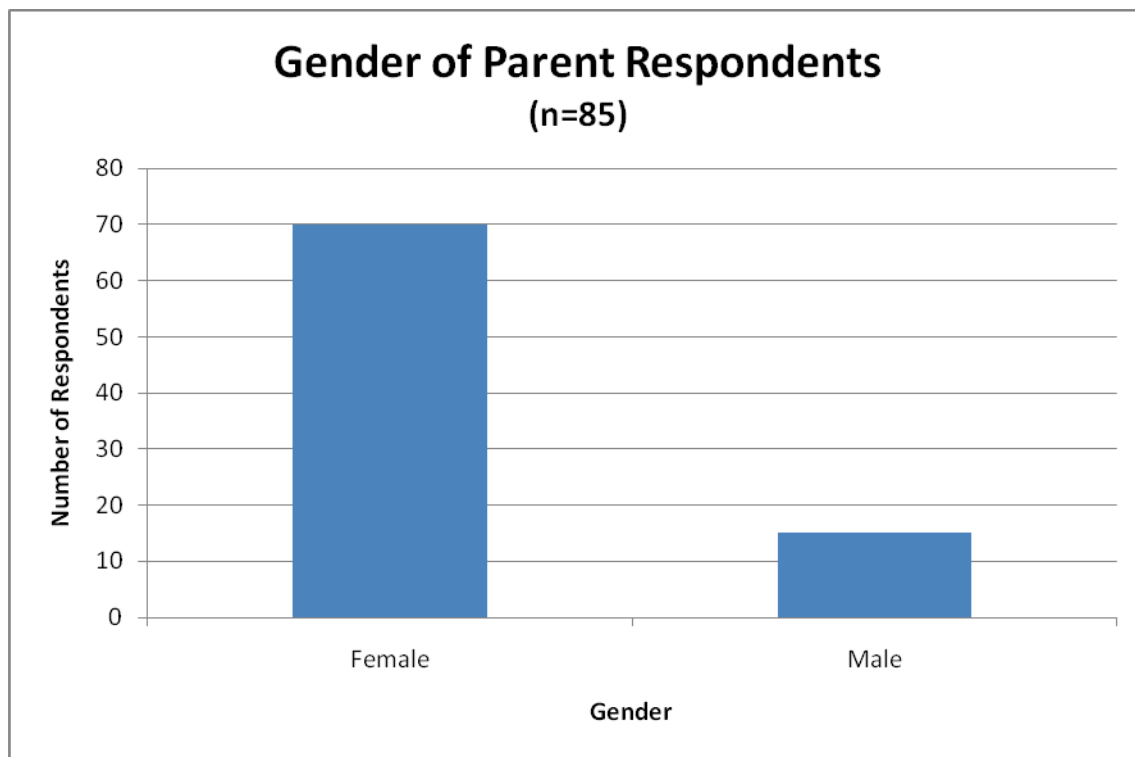


Figure 47. Gender of Parent Respondents

Home Language

Question: *What is your home language?*

Of the respondents, 51% ($n = 43$) speak English. Forty-two of the respondents who cited English as the home language were female. One of the respondents who cited English as the home language was male. Thirty-four percent ($n = 29$) of the respondents speak Spanish in the home. Eighteen of the respondents who cited Spanish as the

language spoken in the home were female; eleven were male. As Figure 48 depicts, 8% ($n = 7$) of the respondents indicated both English and Spanish are spoken in the home; five were female and two were male. Seven percent ($n = 6$) of the respondents indicated speaking English and one other language in the home. One male cited speaking English and Albanian, one male cited speaking English and Arabic, one male cited speaking English and “British English,” one female cited speaking English and Greek, one female cited speaking English and Polish, and one female cited speaking English and Tagalog in the home. (Tagalog is an Austronesian language spoken as a first language by a third of the population of the Philippines, and as a second language by most of the rest.)

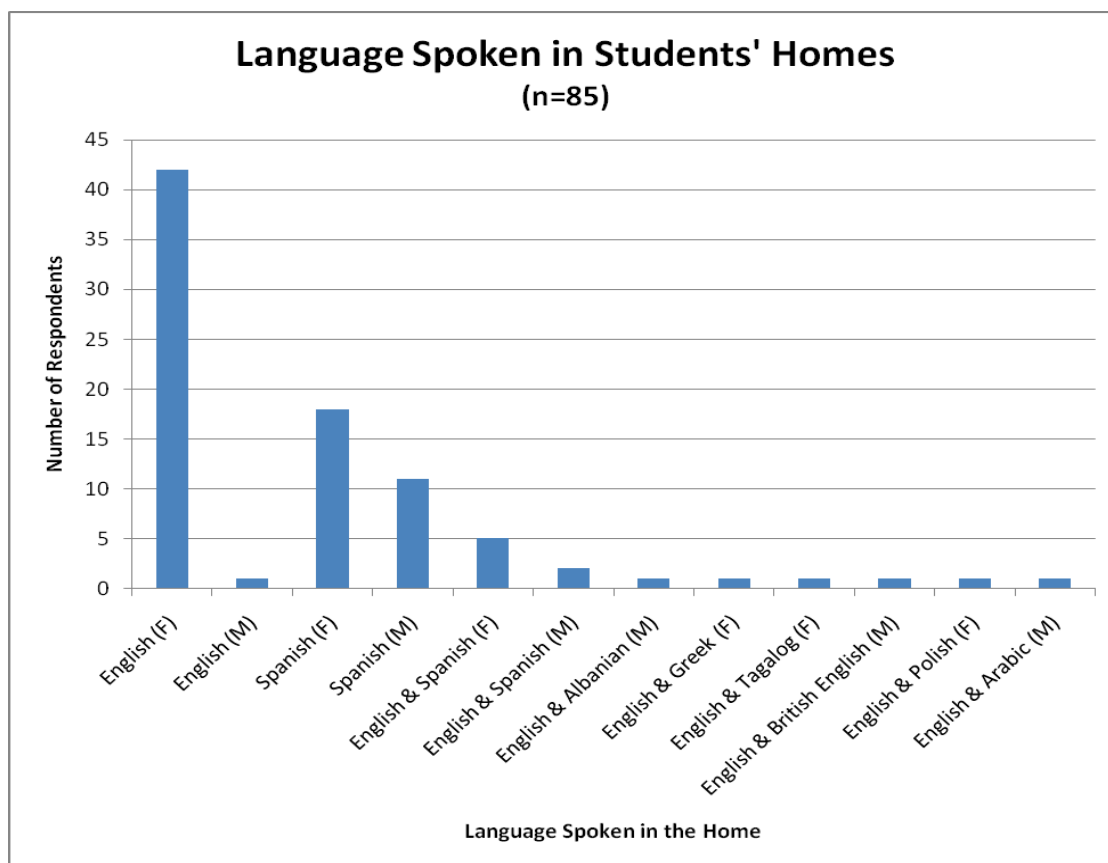


Figure 48. Language Spoken in Students' Homes as Reported by Parent Respondents

Ages of Children in the Home

Question: *What is/are the age/ages of your child/children?*

Parents were asked to list the ages and grades of any child/children in their home. As Figure 49 shows, 50% ($n = 43$) of the respondents have only one child enrolled in the district, 49% ($n = 42$) of the respondents have more than one child currently attending school in the district, and 13% ($n = 11$) reported their youngest child in the district attends kindergarten. Of these respondents, eight also have older children in the district. Thirteen of the respondents' youngest children attend first grade, six have older students in the district, and eleven reported their youngest child in the district attends second grade. Of these respondents, seven also have older children in the district, six of the respondents' youngest children attend third grade, four have older students in the district, and eighteen reported their youngest child in the district attends fourth grade. Of these respondents, seven also have older children in the district, nine of the respondents' youngest children attend fifth grade, and four have older students in the district. Twenty percent ($n = 17$) of the respondents reported their youngest students attend the district junior high school and seven reported their youngest child in the district attends sixth grade. Of these respondents, three respondents also have older children in the district. Seven of the respondents' youngest children attend seventh grade. Three respondents have older students in the district. Three respondents have students in eighth grade. These respondents do not have older students in the district.

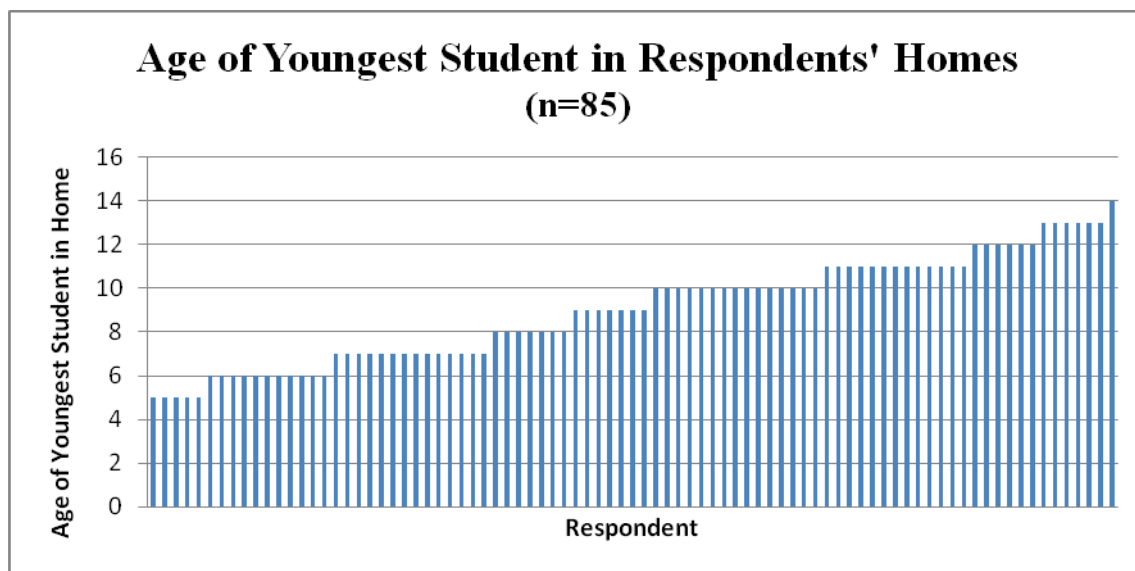


Figure 49. Age of Youngest Student in Respondents' Homes

Parents' Methods to Gather Information About the Academic Achievement of Children

Question number four of the Parent Questionnaire asked respondents to list the ways they gather information about the academic achievements of their child/children. Parents were asked to rate the frequency of the following communications methods as either "Never," "Daily," "Weekly," "Monthly," "Quarterly," or "Annually."

1. District Website.
2. Classroom Website.
3. Classroom Newsletter (paper).
4. Classroom Newsletter via the Internet.
5. Individualized Student Reports.
6. Personal Communications Individualized to Parents Regarding Student (paper).

7. Email Communications to Individual Parents Regarding Specific Subject Matter About Student.
8. Face-to-Face Meetings Regarding Student Progress.
9. Informal Face-to-Face Interactions with Parents.
10. Homework Help Page.
11. Online Grade Book.

District Website to Gather Information about Student Achievement

Fourteen percent ($n = 12$) use the district website on a *daily basis*. Two respondents have their youngest student in first grade, one has their youngest child in second grade, one has a child in third grade, one has a child in fourth grade, two have their youngest child in fifth grade, one has a child in sixth grade, three have their youngest child in seventh grade, and one has their youngest child in eighth grade (see Figures 50-51).

Seven respondents use the district website on a *weekly basis*. Of these respondents, one reports having their youngest student enrolled in kindergarten, one has a first grade student, two have their youngest child in second grade, one is in fourth grade, one is in sixth grade, and one is in seventh grade.

Twenty-six percent ($n = 22$) respondents use the district website to gather information about their child on a *monthly basis*. Four of these respondents have their youngest student in kindergarten, four respondents' youngest student is in first grade, two respondents' youngest student is in second grade, two respondents' youngest student are

in third grade. Three respondents have their youngest child in fourth grade, six have their youngest student in fifth grade, and one respondent's youngest student is in eighth grade.

Nine respondents use the district website to gather information about their child on a *quarterly basis*. Of the respondents, two have a youngest student in second grade, four respondents' youngest student is in fourth grade, two respondents' youngest student are in sixth grade, and one respondent has their youngest student in seventh grade.

Two respondents use the district website to gather information on an *annual basis*. The two respondents who use the district website to gather information on an annual basis have their youngest students in kindergarten and first grade.

Twenty-five percent ($n = 21$) of the respondents to this survey *did not answer* this question in the survey. Of the 25 respondents who did not answer, five reported they live in homes where English is the primary language spoken, or English is spoken with another language. Twenty respondents who did not answer this question live in home where Spanish is the primary language spoken. Of these respondents, one of the youngest students is in kindergarten, three are in first grade, four are in second grade, and one is in third grade. Nine respondents have a youngest student in fourth grade, one respondent's youngest student is in fifth grade, one respondent's youngest student is in seventh grade and one respondent's youngest student is in eighth grade (see Figures 50-51 for a breakdown of the information presented in this section).

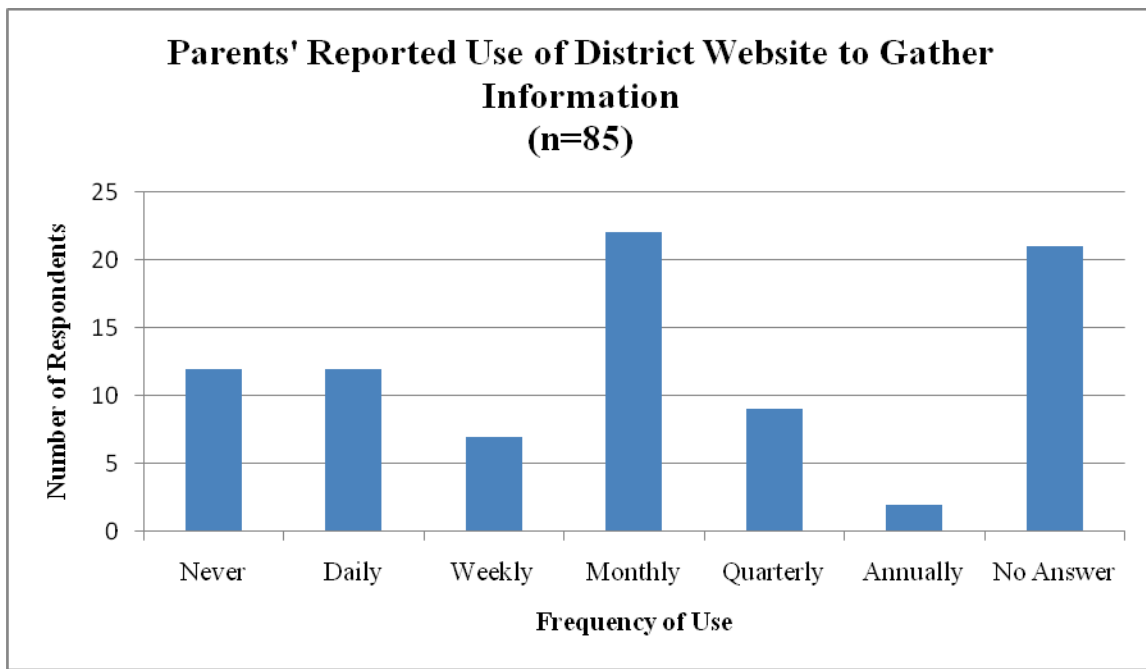


Figure 50. Parents' Reported Use of the District Website to Gather Information

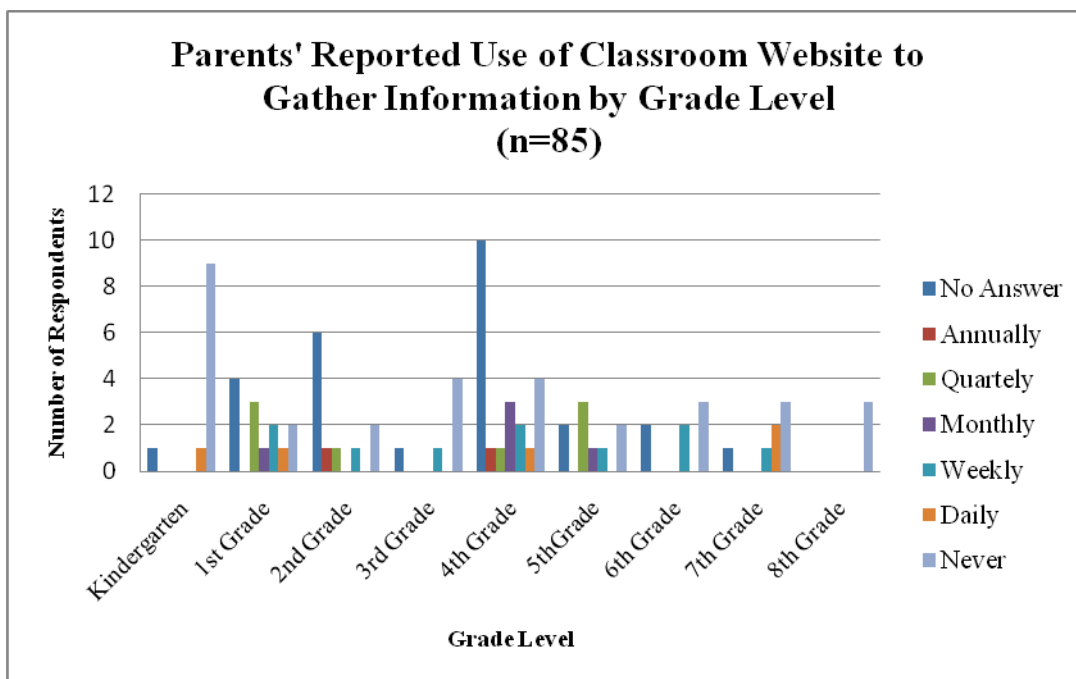


Figure 51. Parents' Reported Use of the District Website to Gather Information by Grade Level

Parents' Use of Classroom Website to Gather Information

Thirty-eight percent ($n = 32$) of the respondents *never* use the classroom website to gather information about the academic achievement of their child. Of these responses, nine have students in kindergarten, two of the respondents' youngest students are in first grade, two of the respondents' youngest student are in second grade, four of the respondent's youngest student is in third grade, four of the respondents' youngest student is in fourth grade, two are in fifth grade, three are in sixth grade, three are in seventh grade, and three respondent's youngest student is in eighth grade.

Four respondents use the district website to gather information about the academic achievement of their child on a *daily basis*. One respondent has their youngest student enrolled in kindergarten, one has their youngest child in first grade, and two have their youngest child in seventh grade.

Ten respondents use the district website on a *weekly basis*. Of these respondents, one reports having their youngest student enrolled in third grade, two have their youngest child in fourth grade, one is in fifth grade, two are in sixth grade, and one is in seventh grade.

Two respondents use the classroom website on a *monthly basis* to gather information on their students' academic achievement. One of these respondents reports their youngest student is in first grade and one respondent reports a youngest student in fifth grade.

Eight respondents report to using the classroom website on a *quarterly basis*.

Two respondents use the classroom website on an *annual basis*. These respondents have their youngest student in second and fourth grade.

Thirty-two percent ($n = 27$) of the respondents to this survey *did not answer* this question in the survey. Of the 27 respondents who did not answer, six reported they live in homes where English is the primary language spoken, or English is spoken with another language. Twenty-one respondents who did not answer this question live in home where Spanish is the primary language spoken. Of these respondents, one of the youngest students is in kindergarten, four are in first grade, six are in second grade, and one is in third grade. Ten respondents have a youngest student in fourth grade, two respondents' youngest student is in fifth grade, two respondents' youngest student is in sixth grade, and one respondent's youngest student is in seventh grade (see Figures 52-53 for a breakdown of the information presented in this section).

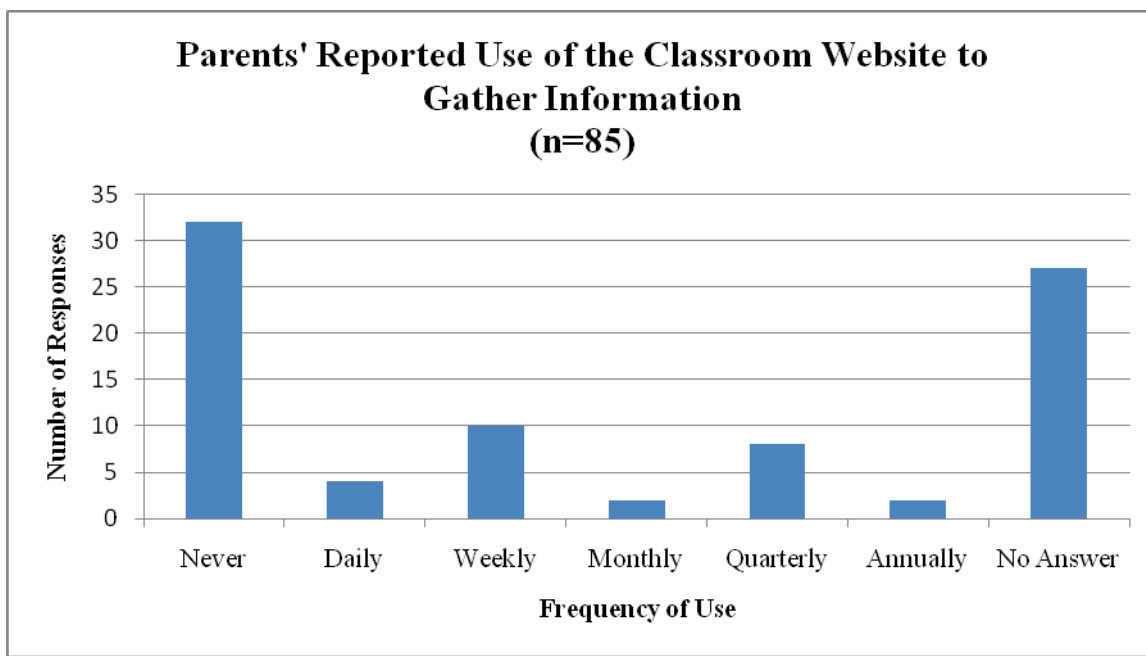


Figure 52. Parents' Reported Use of the Classroom Website to Gather Information

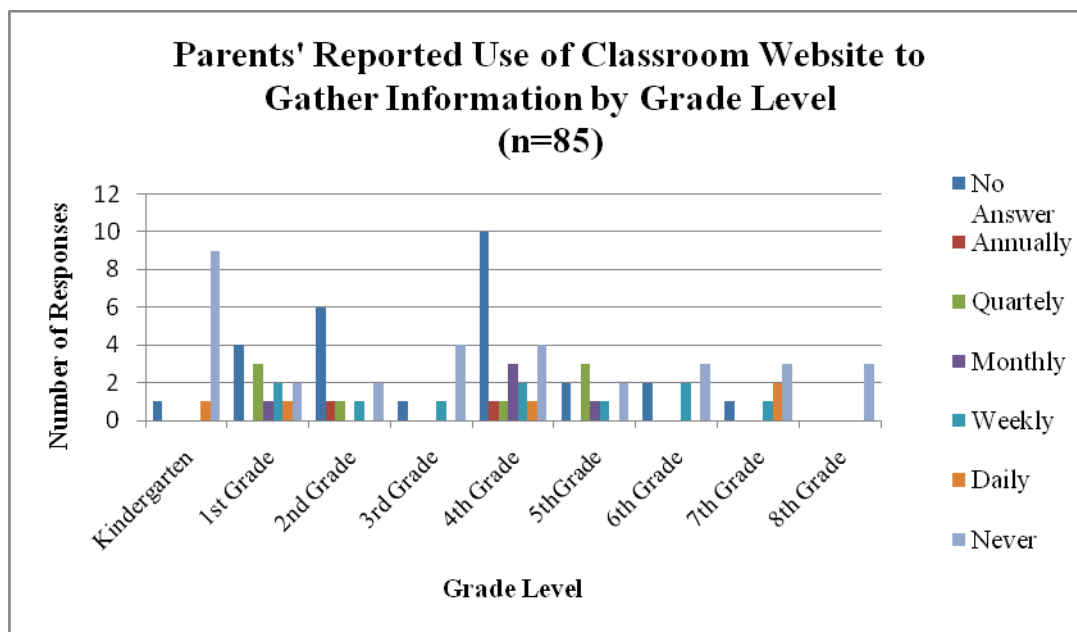


Figure 53. Parents' Reported Use of the Classroom Website to Gather Information by Grade Level

Parents' Use of Classroom Newsletter (Paper) to Gather Information

Eight respondents *never* use the classroom newsletter to gather information about the academic achievement of their child. Of these responses, two respondents have students in kindergarten, one's youngest student is in third grade, two have youngest students is in sixth grade, one's youngest student is in seventh grade, and two's youngest student is in eighth grade.

Eight respondents use the classroom newsletter to gather information about the academic achievement of their child on a *daily basis*. One respondent has their youngest student enrolled in kindergarten, two have their youngest child in first grade, one has their youngest child in second grade, and two have their youngest child in fourth grade.

Thirty-four percent ($n = 29$) of the respondents use the classroom newsletter on a *weekly basis*. Of these respondents, five report having their youngest student enrolled in kindergarten, four have their youngest student in first grade, three have their youngest students in second grade, three have youngest students in third grade, six are in fourth grade, four are in fifth grade, three are in sixth grade, and one is in seventh grade.

Twenty-one percent ($n = 18$) of respondents use the classroom newsletter on a *monthly basis* to gather information on their students' academic achievement. Three respondents who use the classroom newsletter on a monthly basis to gather information about the academic achievement of their student have their youngest student enrolled in kindergarten, three have their youngest child in first grade, two have their youngest student in second grade, one has their youngest student in third grade, and four have their youngest child in fourth grade. Three respondents who use the classroom newsletter to gather information on the academic achievement of their students have a youngest student in fifth grade, one has a youngest student in sixth grade, and one has a youngest student in eighth grade.

Twelve respondents report to using the classroom newsletter on a *quarterly basis*. One respondent has their youngest student in first grade, three have their youngest student enrolled in second grade, three have a youngest student enrolled in fourth grade, two have a youngest student enrolled in fifth grade, and three have a youngest student enrolled in seventh grade.

One respondent uses the classroom newsletter on an *annual basis*. This respondent has their youngest student enrolled in seventh grade.

Nine of the respondents to this survey *did not answer* this question in the survey. Of the nine respondents who did not answer this question, three report they live in homes where English is the primary language spoken, or English is spoken with another language and six live in a home where Spanish is the primary language spoken. Of these respondents, one of the youngest students is in first grade, two are in second grade, one is in third grade, three are in fourth grade, one is in sixth grade, and one is in seventh grade (see Figures 54-55 for a breakdown of the information presented in this section).

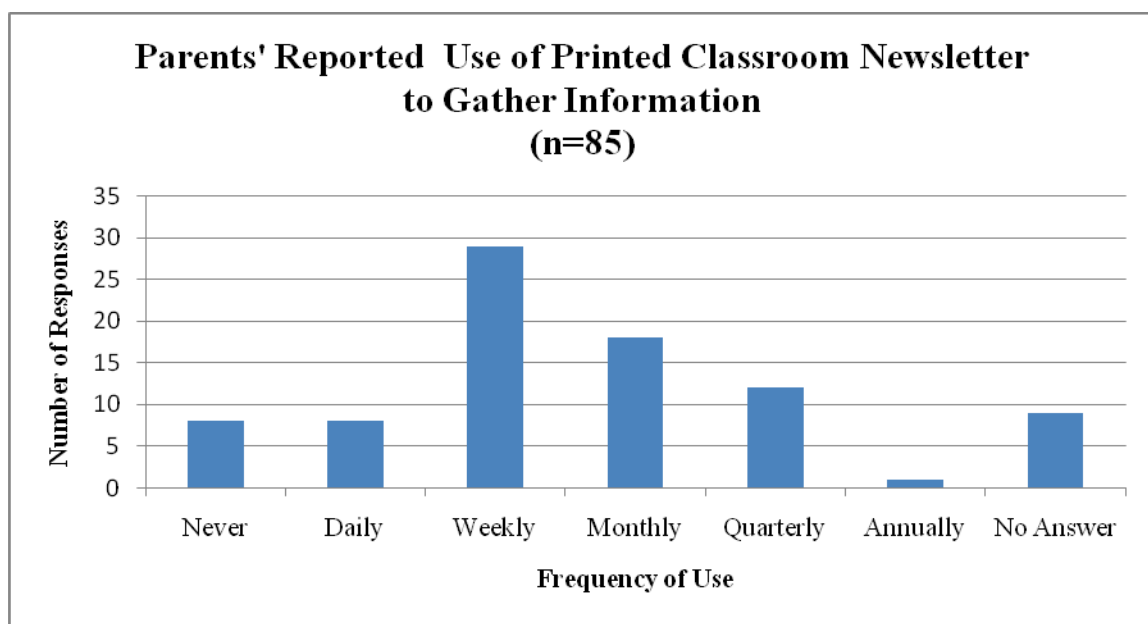


Figure 54. Parents' Reported Use of the Printed Classroom Newsletter to Gather Information

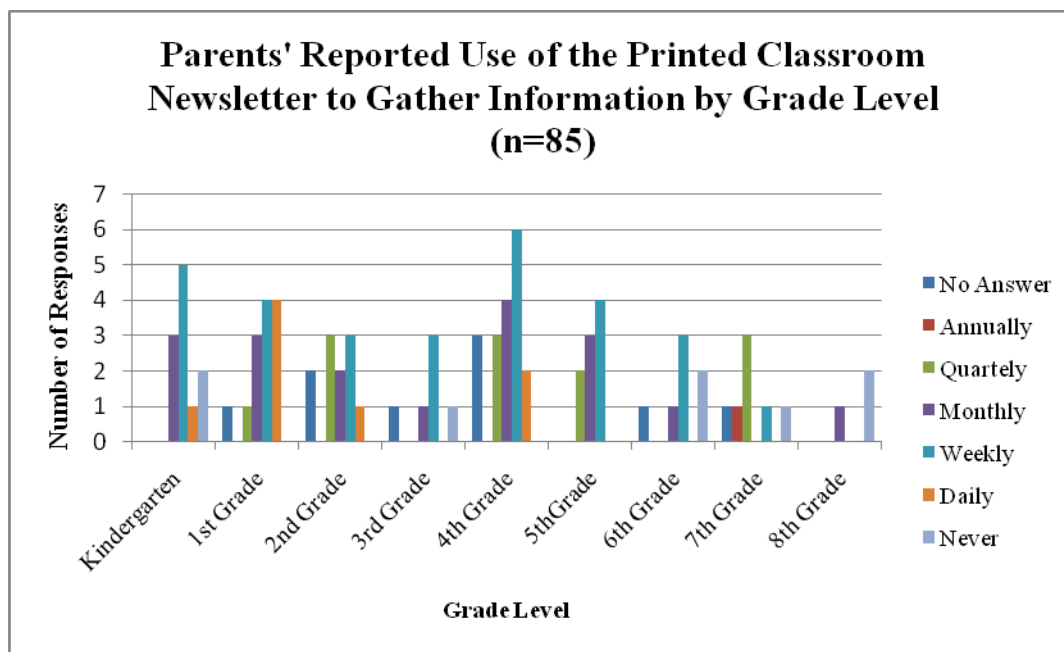


Figure 55. Parents' Reported Use of the Printed Classroom Newsletter to Gather Information by Grade Level

Parents' Use of Classroom Newsletter via Internet to Gather Information

Thirty-two percent ($n = 27$) of respondents *never* use an electronic classroom newsletter to gather information on their students' academic achievement. Seven respondents have their youngest student enrolled in kindergarten, four have their youngest child in first grade, two have their youngest student in second grade, four have their youngest student in third grade, one has their youngest child in fifth grade, three have a youngest student in sixth grade, four have their youngest student in seventh grade, and two have their youngest student in eighth grade.

One respondent uses the electronic classroom newsletter on a *daily basis*. This respondent's youngest student is in first grade.

Twelve respondents use the classroom newsletter via Internet to gather information about the academic achievement of their child on a *weekly basis*. One respondent has their youngest student enrolled in kindergarten, two have their youngest child in first grade, two have their youngest child in second grade, three have their youngest student in fourth grade, three have their youngest student in fifth grade, and one has a youngest student enrolled in seventh grade.

Eleven of the respondents use an electronic classroom newsletter on a *monthly basis*. One respondent reports their youngest child as a kindergarten student, one reports having their youngest student enrolled in first grade, two have their youngest student in second grade, one has their youngest student in third grade, three have youngest students in fourth grade, one has their youngest in fifth grade, and two are in sixth grade.

Three respondents use an electronic newsletter on a *quarterly basis*. One respondent has their youngest student in kindergarten, one has their youngest student in fourth grade, and one has their youngest student in fifth grade.

Two respondents report to using an electronic newsletter to gather information on their students' academic achievements on an *annual basis*. One respondent has their youngest student in second grade and one respondent has their youngest student in fourth grade.

Thirty-four percent ($n = 29$) of the respondents to this survey *did not answer* this question in the survey. Of the 29 respondents who did not answer, five reported they live in homes where English is the primary language spoken, or English is spoken with another language. Twenty-four respondents who did not answer this question lived in

homes where Spanish is the primary language spoken. Of these respondents, one of the youngest students is in kindergarten, five have their youngest student in first grade, four are in second grade, one is in third grade, ten are in fourth grade, three are in fifth grade, two are in sixth grade, two are in seventh grade, and one is in eighth grade (see Figures 56-57 for a breakdown of the information presented in this section).

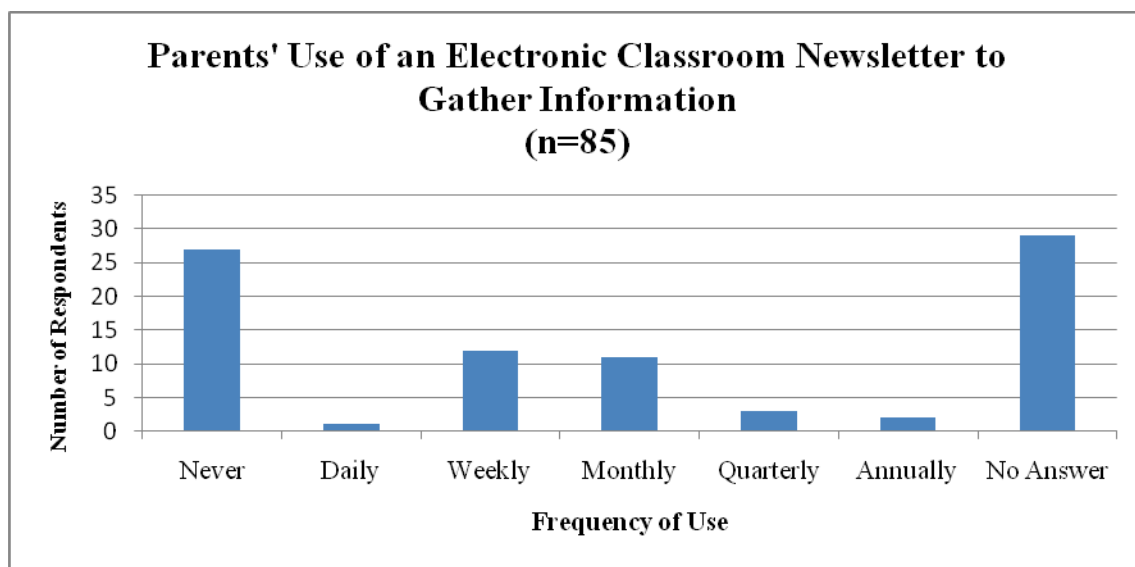


Figure 56. Parents' Use of an Electronic Classroom Newsletter to Gather Information

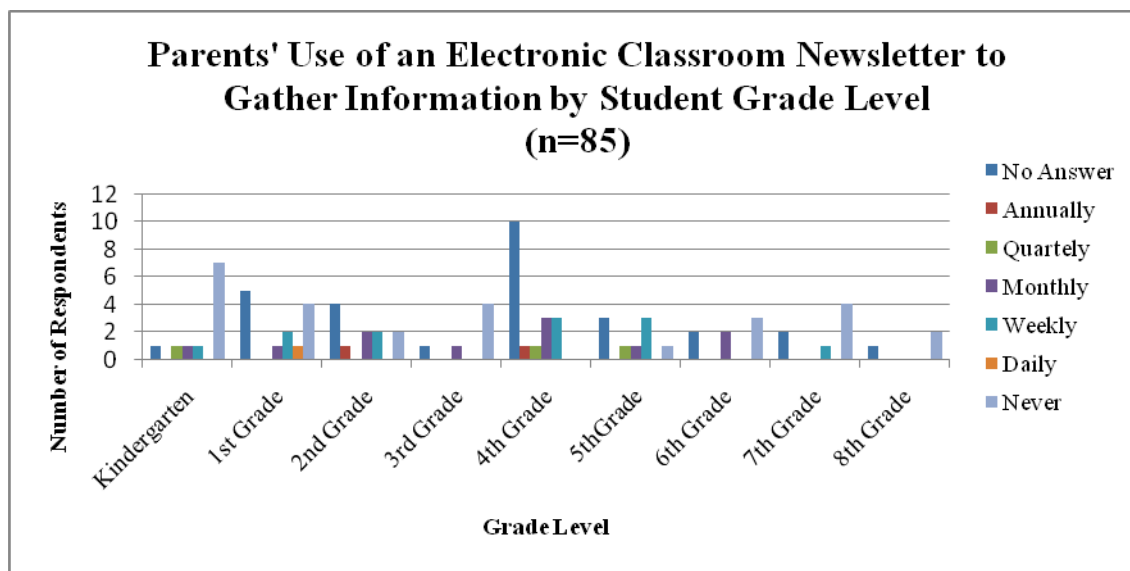


Figure 57. Parents' Use of an Electronic Classroom Newsletter to Gather Information by Grade Level

Parents' Use of Individualized Student Reports to Gather Information

Seven respondents use individualized reports to gather information on academic achievement about their student on a *daily basis*. One of the respondents has their youngest student in first grade, two have their youngest student in third grade, one has their youngest student in fourth grade, two have their youngest in sixth grade, and one has their youngest student in seventh grade.

Twenty-one percent ($n = 18$) of the respondents use individualized reports on a *weekly basis* to gather academic information about their student. One respondent has its youngest student in kindergarten, three have their youngest student in first grade, three have their youngest student in second grade, three have their youngest student in fourth grade, four have their youngest student in fifth grade, and three have their youngest student in sixth grade.

Twelve respondents use individualized reports to gather information on the academic success of their students on a *monthly basis*. Three respondents have a youngest student in kindergarten, one in second grade, one in third grade, six in fourth grade, and one in third grade.

Forty-seven percent of the respondents use individualized reports to gather information on the academic achievements of their students on a *quarterly basis*. Of these respondents, six have their youngest students in kindergarten, five have their youngest students in first grade, five have their youngest students in second grade, three have their youngest students in third grade, seven have their youngest students in fourth grade, three have their youngest students in fifth grade, two have their youngest students in sixth grade, six have their youngest students in seventh grade, and three have their youngest students in eighth grade.

One respondent uses individualized reports to gather information on his/her student on an *annual basis*. This respondent's youngest student is in second grade.

Five respondents *did not answer* this question. All of the five respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Three respondents who did not answer the question have students in first grade, one has a student in fourth grade, and one has a student in fifth grade (see Figures 58-59 for a breakdown of the information presented in this section).

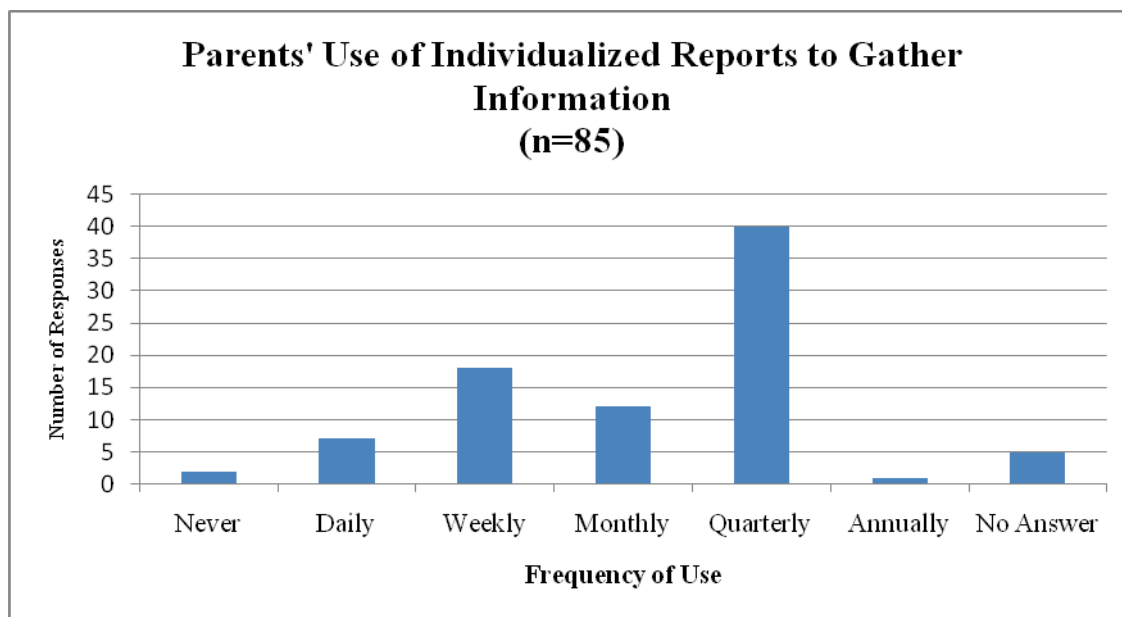


Figure 58. Parents' Use of Individualized Reports to Gather Information

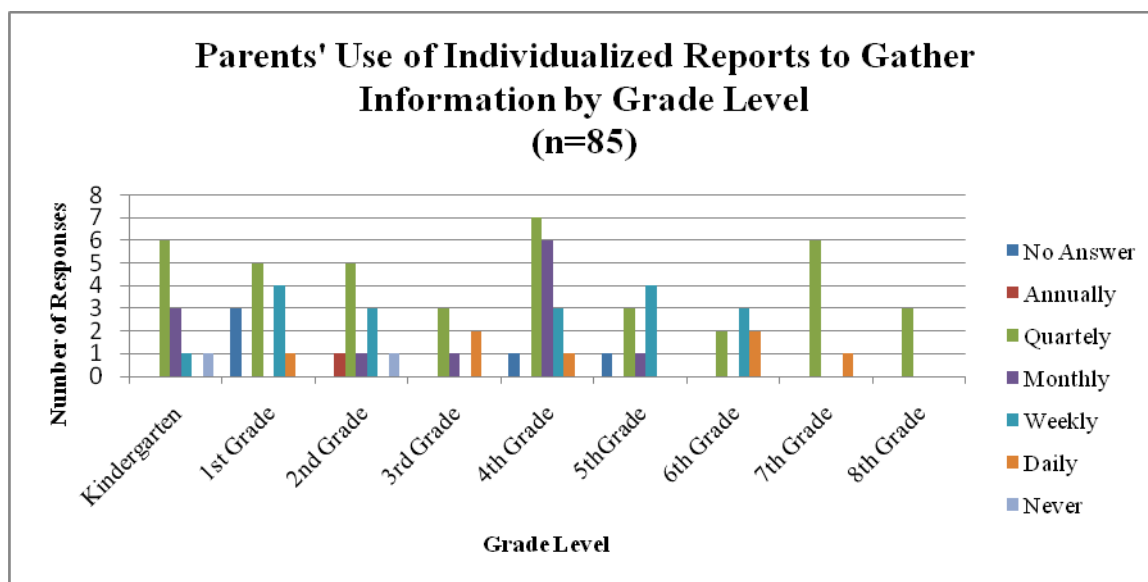


Figure 59. Parents' Use of Individualized Reports to Gather Information by Grade Level

Parents' Use of Personal Communications Individualized to Parents Regarding Student (Paper) to Gather Information

Six percent ($n = 5$) of respondents use personal communication on paper to gather information regarding the academic achievement of their student(s) on a *daily basis*. Four of the five respondents have students in second grade or younger. One respondent has a kindergarten student, one has their youngest student in first grade, two have their youngest student in second grade, and one has their youngest student in sixth grade.

Eighteen percent ($n = 15$) of respondents use personal communication to gather information on the academic achievement of their student(s) on a *weekly basis*. One respondent has its youngest student in kindergarten, one has its youngest in first grade, three have their youngest in second grade, two have students in fifth grade, six have students in junior high, three have their youngest student in sixth grade, and three have their youngest in seventh grade.

Five respondents gather information on student academic achievement on a *monthly basis*. Three of these parents have their youngest student in kindergarten and two have their youngest in fifth grade.

Twenty-two percent ($n = 19$) use personal communication to gather information on their student(s) academic achievement on a *quarterly basis*. Of these respondents, two have their youngest students in kindergarten, five are in first grade, three are in second grade, two are in third grade, two are in fourth grade, four are in fifth grade, and one is in sixth grade.

Three respondents use personal communication to gather information on an *annual basis*. Of these respondents, one has his/her youngest student in second grade, one is in fourth grade, and one is in seventh grade.

Thirty-two percent ($n = 27$) of the respondents to this questionnaire *did not answer* this question. Of the 27 respondents who did not answer this question, seven report they live in homes where English is the primary language spoken, or English is spoken with another language. Twenty respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Grade levels spanned kindergarten through eighth grade and included two students in kindergarten, five students in first grade, two students in second grade, one student in third grade, twelve students in fourth grade, one student in sixth grade, two students in seventh grade, and one student in eighth grade (see Figures 60-61 for a breakdown of the information presented in this section).

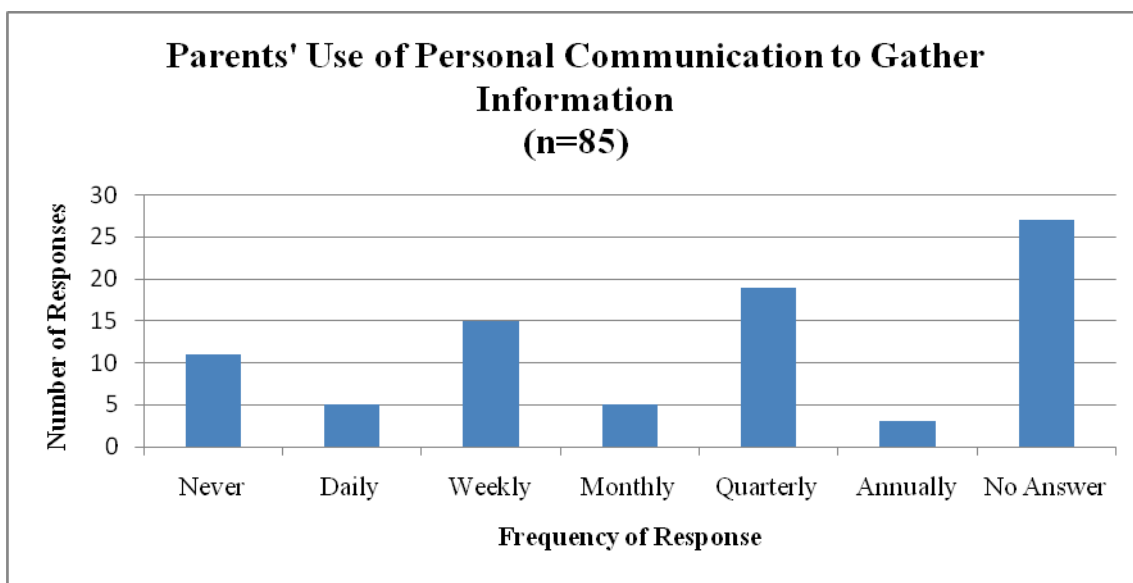


Figure 60. Parents' Use of Personal Communication to Gather Information

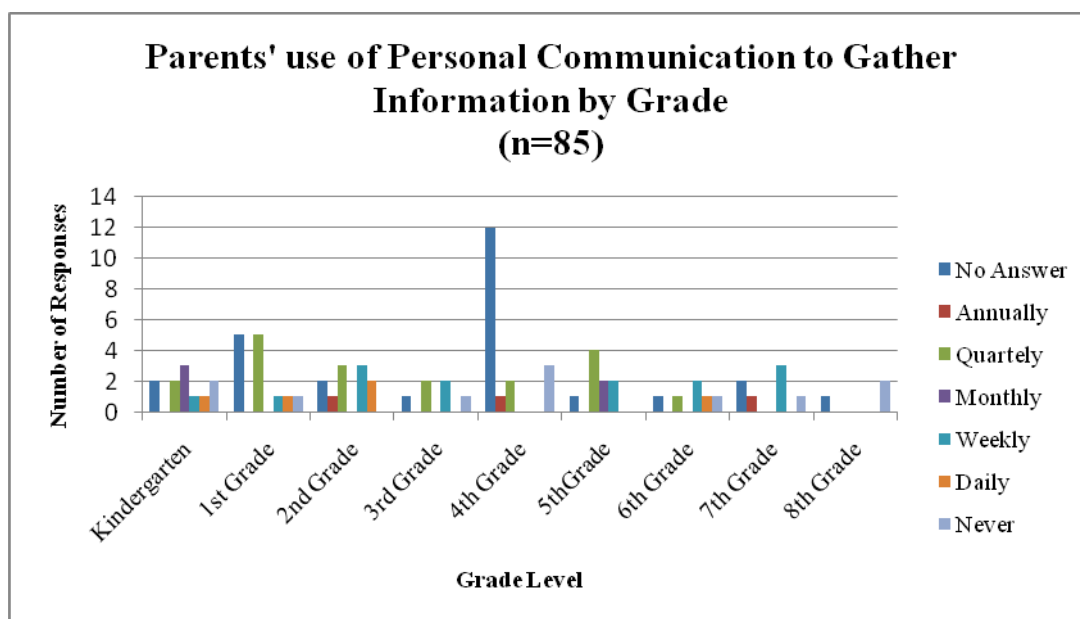


Figure 61. Parents' Use of Personal Communication to Gather Information by Grade Level

Email Communications to Individual Parents Regarding Specific Subject Matter About Student

Four percent ($n = 3$) of respondents use email communication to gather information on academic achievement about their student on a *daily basis*. One of the respondents has his/her youngest student in first grade, one has his/her youngest student in third grade, and one has their youngest student in sixth grade.

Fourteen percent ($n = 12$) of the respondents use email communication on a *weekly basis* to gather academic information about their student. One respondent has his/her youngest student in first grade, two have their youngest in second grade, five have their youngest in fourth grade, three have their youngest in fifth grade, and one has his/her youngest in seventh grade.

Eleven respondents use email communication to gather information on the academic success of their students on a *monthly basis*. Two respondents have their youngest student in kindergarten, one is in first grade, two are in second grade, two are in third grade, one is in fifth grade, two are in sixth grade, and one is in seventh grade.

Eleven of the respondents use email communication to gather information on their students on a *quarterly basis*. Of these respondents, three families have their youngest in third grade, two families have their youngest in first grade, two families' youngest are in fourth grade, two are in fifth grade, one is in sixth grade, and one family has their youngest student in seventh grade.

Two families use email communication to gather information on academic achievement on an *annual basis*. One family has their youngest student in fourth grade and the other family has their youngest student in eighth grade.

Over one-third ($n = 27$) of the respondents to the parent questionnaire *did not answer* this question. Of the 27 respondents who did not answer this question, seven report they live in homes where English is the primary language spoken, or English is spoken with another language. Twenty respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Grade levels spanned kindergarten through seventh grade and included two students in kindergarten, five students in first grade, five students in second grade, nine students in fourth grade, two students in fifth grade, two students in sixth grade, and two students in seventh grade (see Figures 62-63 for a breakdown of the information presented in this section).

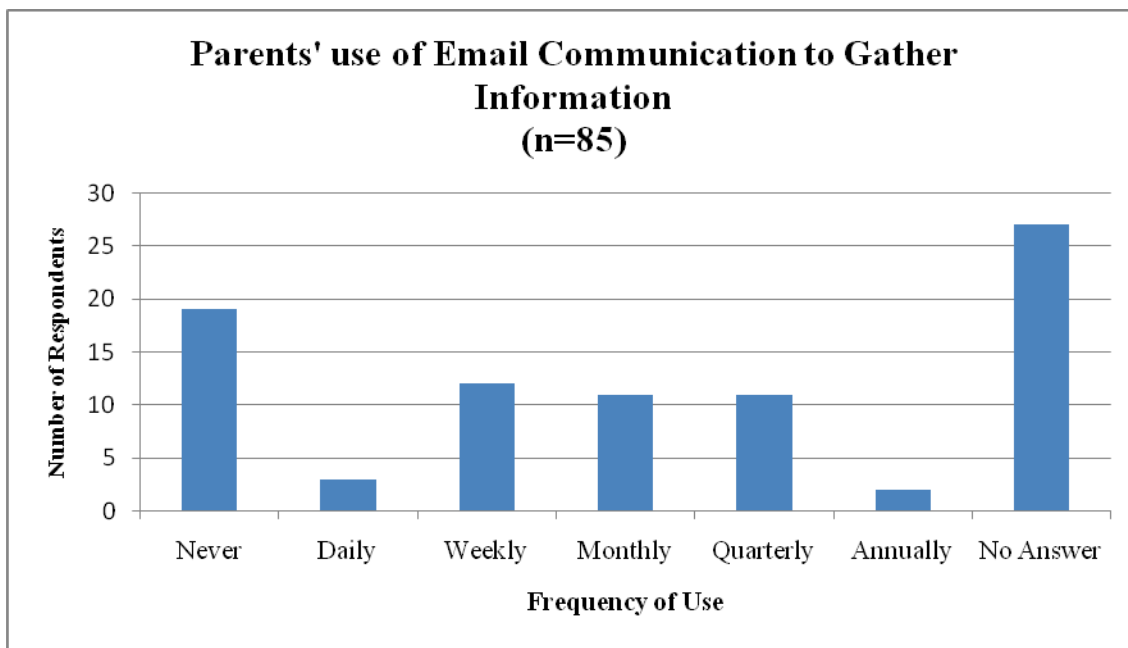


Figure 62. Parents' Use of Email Communication to Gather Information

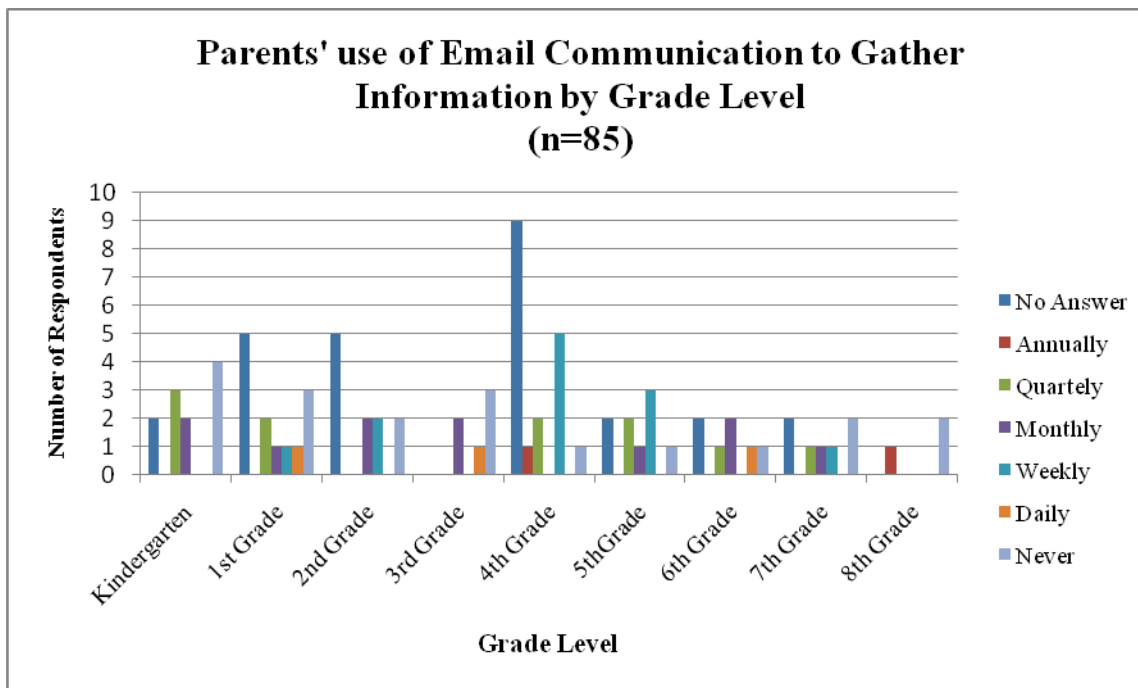


Figure 63. Parents' Use of Email Communication to Gather Information by Grade Level

Parents' Use of Face-to-Face Meetings Regarding Student Progress to Gather Information

One respondent uses face-to-face meetings to gather information on academic achievement about their student on a *daily basis*. This respondent has his/her youngest student in fourth grade.

Two respondents use face-to-face meetings to gather information on their student on a *weekly basis*. These students are in the first and fifth grades.

Nine respondents use face-to-face meetings to gather information on academic achievement on a *monthly basis*. Two of the students whose parents gather information from face-to-face meetings are in kindergarten, one is in first grade, one is in third grade, three are in fourth grade, and two are in fifth grade.

The majority of respondents ($n = 48$) gather information on their student(s) academic achievement on a *quarterly basis*. Students in this category span Grades K-8. Six students are enrolled in kindergarten, nine are in first grade, six are in second grade, five are in third grade, eight are in fourth grade, three are in fifth grade, four are in sixth grade, four are in seventh grade, and two are in eighth grade.

Eleven respondents gather information on academic achievement on an *annual basis*. Students of two respondents are in kindergarten, four are in second grade, two are in fifth grade, two are in sixth grade, and one is in seventh grade.

Fourteen percent ($n = 12$) of the respondents *did not answer* this question. Of the 12 respondents who did not answer this question, three report they live in homes where English is the primary language spoken, or English is spoken with another language.

Nine respondents who did not answer this question lived in homes where Spanish is the primary language spoken. One respondent's youngest student is in kindergarten, two are in first grade, one is in second grade, six are in fourth grade, one is in fifth grade, and one is in seventh grade (see Figures 64-65 for a breakdown of the information presented in this section).

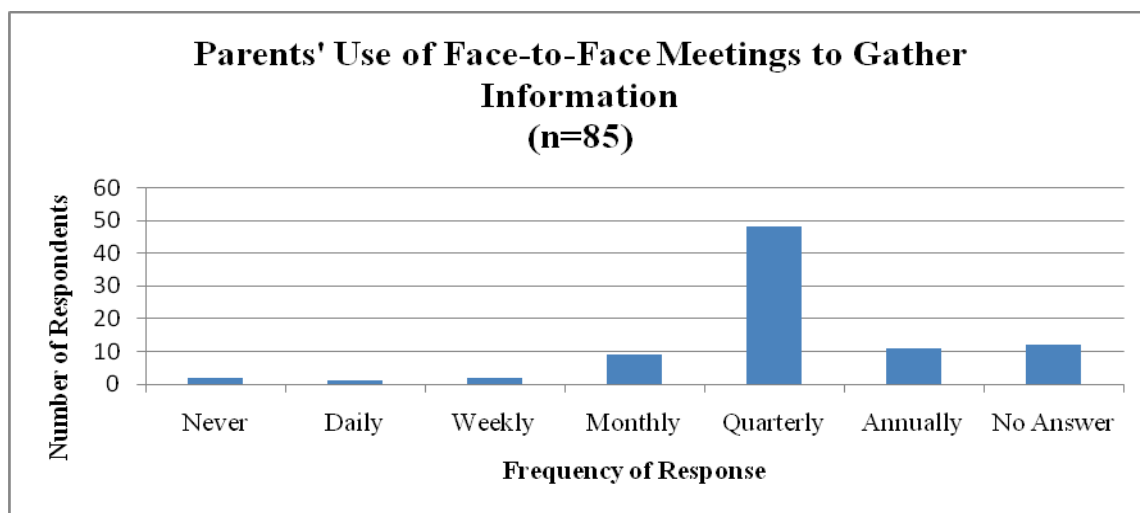


Figure 64. Parents' Use of Face-to-Face Meetings to Gather Information

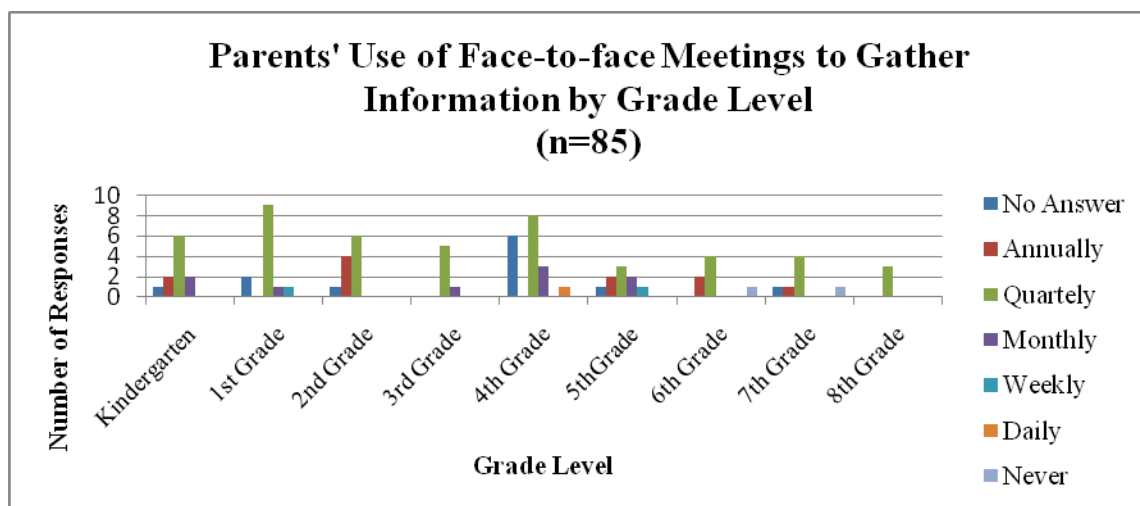


Figure 65. Parents' Use of Face-to-Face Meetings to Gather Information by Grade Level

Parents' Use of Informal Face-to-Face Interactions with Parents to Gather Information

Thirty-three percent ($n = 28$) of respondents *never* use informal face-to-face meetings to gather information on academic achievement of their student(s). Respondents to this frequency indicated their youngest student in the district spans Grades K-8. Six respondents who never use informal face-to-face meetings to gather information on academic achievement have their youngest students in kindergarten, three students from first grade, three students from second grade, five students from third grade, one student from fourth grade, three have their youngest student in fifth grade, three students are in sixth grade, three are in seventh grade, and one is in eighth grade.

One quarter ($n = 21$) of respondents use informal face-to-face meetings to gather information on student academic achievement on a *daily basis*. Respondents' youngest students are in Grades K-8. Of the respondents, 17 of the 21 have students in Grades K-5 and include one student from kindergarten, four students from first grade, two students from second grade, seven students from fourth grade, and three students from fifth grade. Two of the respondents' students are in sixth grade, one is in seventh grade, and one is in eighth grade.

Six respondents indicated they use informal face-to-face meetings to gather information on academic achievement on a *weekly basis*. One respondent has a student in kindergarten, two students are in second grade, two students are in fourth grade, and one student is in seventh grade.

Four respondents use face-to-face meetings on a *monthly basis*. Respondents with this frequency have students in the second half of elementary school with one student in fourth grade, two students in fifth grade, and one student in eighth grade.

Two respondents use informal face-to-face meetings to gather information on an *annual basis*. Respondents to this frequency have students in Grades 2 and 4.

Over one-quarter ($n = 22$) of respondents *did not answer* this question. Of the 22 respondents who did not answer this question, six report they live in homes where English is the primary language spoken, or English is spoken with another language. Sixteen respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Grade levels for the respondents spanned kindergarten through seventh and can be broken down in the following way: three students from kindergarten, six from first grade, two from second grade, one from third grade, five from fourth grade, one from fifth grade, two from sixth grade, and two from seventh grade (see Figures 66-67 for a breakdown of the information presented in this section).

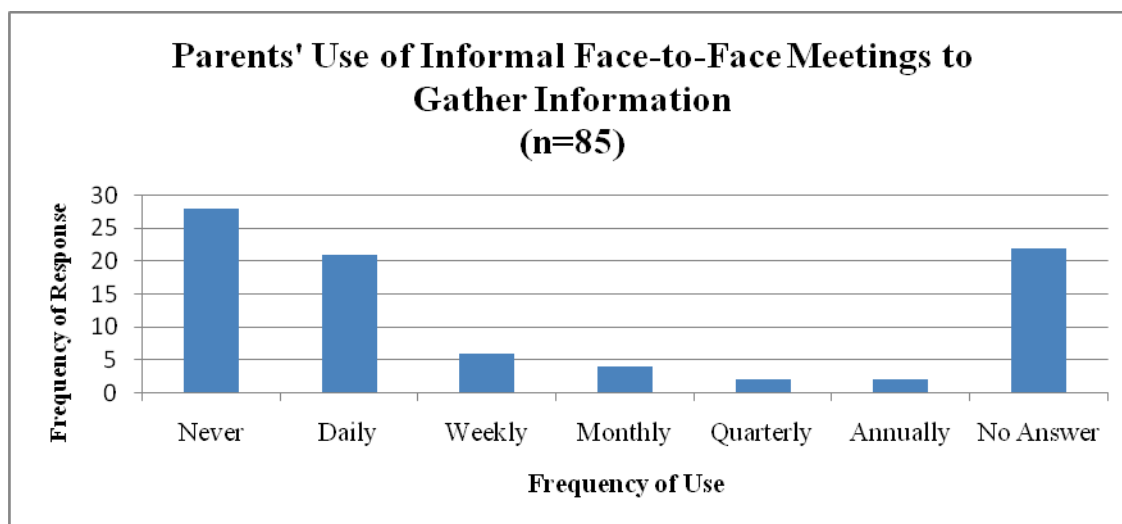


Figure 66. Parents' Use of Informal Face-to-Face Meetings to Gather Information

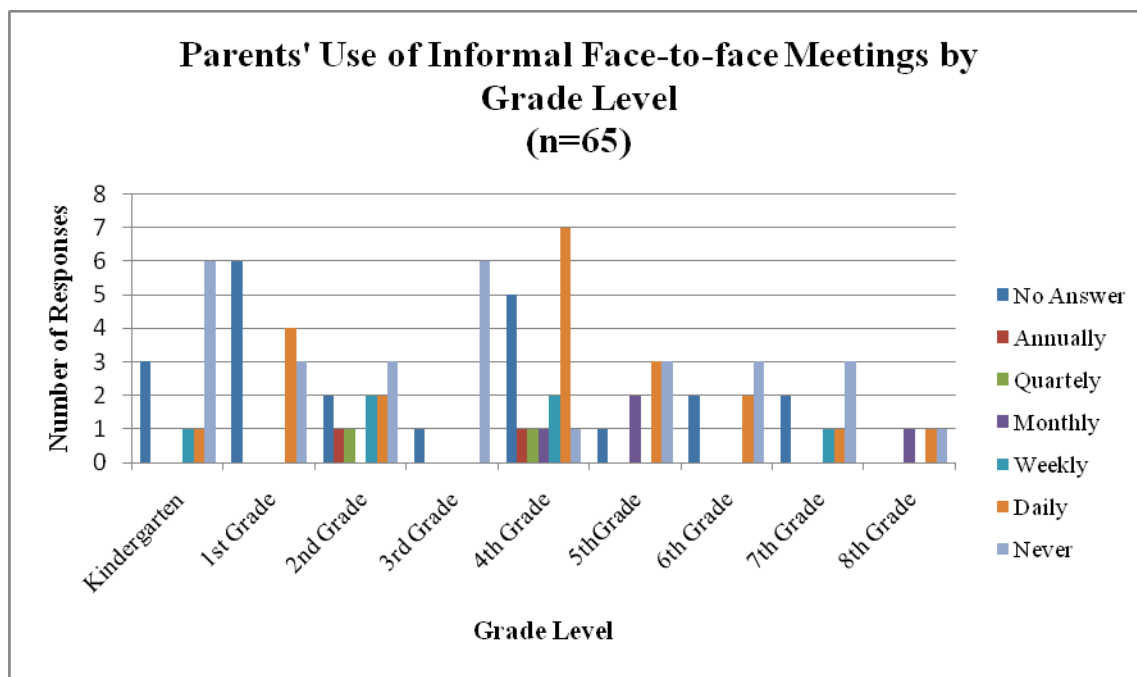


Figure 67. Parents' Use of Informal Face-to-Face Meetings by Grade Level

Parents' Use of Homework Help Page to Gather Information

Thirty-three percent ($n = 28$) of respondents *never* use homework help pages to gather information on academic achievement of their student(s). Respondents to this frequency indicated their youngest student in the district spans Grades K-8. Six respondents have their youngest students in kindergarten, three have their youngest students in first grade, three students from second grade, five students from third grade, one student from fourth grade, three have their youngest student in fifth grade, three students are in sixth grade, three are in seventh grade, and one is in eighth grade.

Twenty-five percent ($n = 21$) of respondents use homework help pages to gather information on student academic achievement on a *daily basis*. Respondents' youngest students are in Grades K-8. Of the respondents, 17 of the 21 have students in Grades K-5 and include one student from kindergarten, four students from first grade, two students

from second grade, seven students from fourth grade, and three students from fifth grade. Two of the respondents' students are in sixth grade, one is in seventh grade, and one is in eighth grade.

Six respondents indicated they use homework help pages to gather information on academic achievement on a *weekly basis*. One respondent has a student in kindergarten, two students are in second grade, two students are in fourth grade, and one student is in seventh grade.

Four respondents use face-to-face meetings on a *monthly basis* with one student in fourth grade, two students in fifth grade, and one student in eighth grade.

Two respondents use homework help pages to gather information on an *annual basis*. Respondents to this frequency have students in second and fourth grades.

Twenty-six percent ($n = 22$) of respondents *did not answer* this question. Of the 22 respondents who did not answer this question, seven report they live in homes where English is the primary language spoken, or English is spoken with another language. Fifteen respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Grade levels for these respondents students spanned Grades K-7 and can be broken down in the following way: three students from kindergarten, six students from first grade, two students from second grade, one student from third grade, five students from fourth grade, one student from fifth grade, two students from sixth grade, and two students from seventh grade (see Figures 68-69 for a breakdown of the information presented in this section).

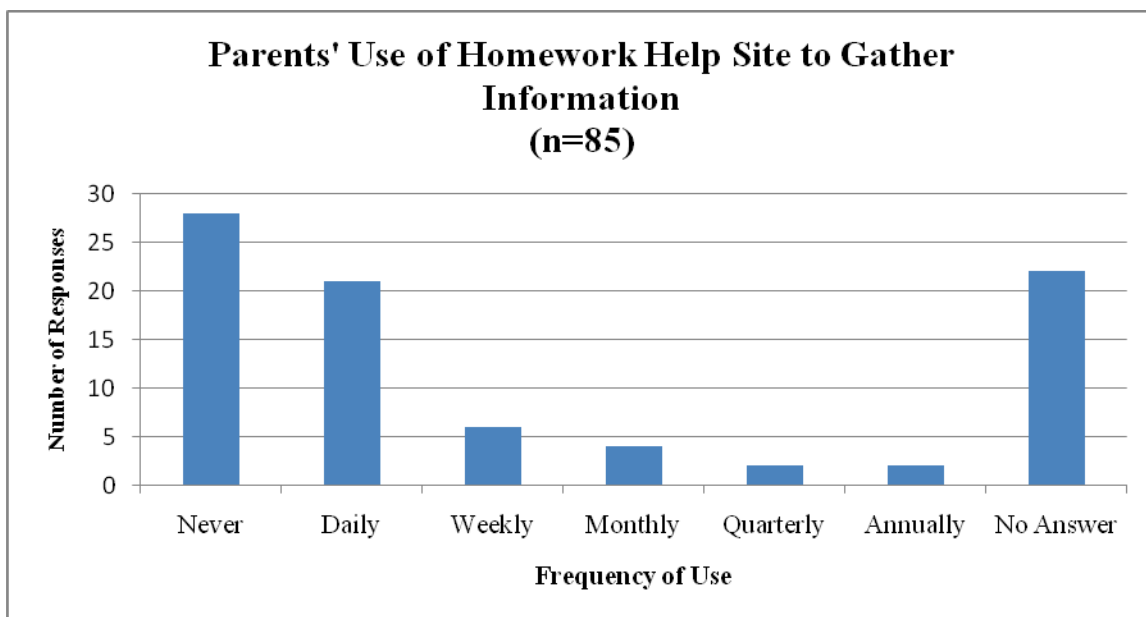


Figure 68: Parents' Use of Homework Help Site to Gather Information

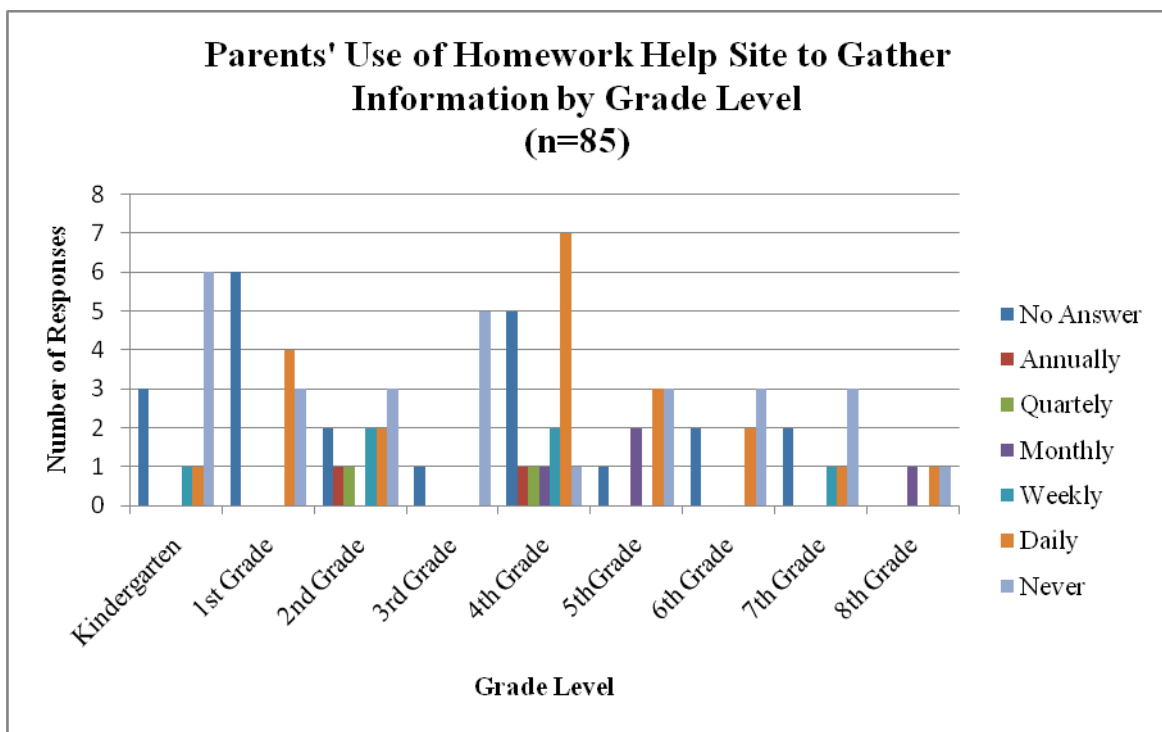


Figure 69. Parents' Use of Homework Help Site to Gather Information by Grade Level

Parents' Use of Online Grade Book to Gather Information

Thirty-two percent ($n = 27$) of the respondents *never* use the online grade book to gather information about the academic achievement of their child. The majority ($n = 24$) of the respondents who do not use the online grade book have students in elementary school. Of these responses, five have students in kindergarten, six respondents' youngest student is in first grade, two respondents' youngest student is in second grade, four respondents' youngest student is in third grade, and seven respondents have their youngest students in fourth grade. Three respondents have their youngest students in the junior high school. One respondent has a student in sixth grade and two respondents have students in eighth grade.

Twelve percent ($n = 10$) of parent respondents use the online grade book to gather information on student achievement on a *daily basis*. One respondent has their youngest student in eighth grade, two respondents' youngest students are in seventh grade, two are in sixth grade, and a student each is in Grades K-4.

Two respondents who use the online grade book on a *weekly basis* have students in second grade. Six of the eight parents have their youngest students in Grades 5-8 with four respondents reporting their youngest student in fifth grade, one in sixth grade, and one in seventh grade.

Six respondents use the online grade book on a *monthly basis*. Of these respondents, one reports having their youngest student enrolled in kindergarten, one has a fourth grade student, two have their youngest child in fifth grade, and two are in sixth grade.

Nine respondents use the online grade book to gather information about their child on a *quarterly basis*. One respondent's youngest child is in kindergarten, two are in second grade, two are in fourth grade, and one is in fifth grade.

Three respondents report they use the online grade book on an *annual basis* to gather information about academic achievement. Two of these respondents have students in second grade and one respondent's youngest student is in seventh grade.

Twenty-nine percent ($n = 25$) of the respondents to this survey *did not answer* this question in the survey. Of the 25 respondents who did not answer this question, eight report they live in homes where English is the primary language spoken, or English is spoken with another language. Seventeen respondents who did not answer live in homes where Spanish is the primary language spoken. Of these respondents' youngest students, three are in kindergarten, six are in first grade, two are in second grade, one is in third grade, seven respondents have a youngest student in fourth grade, two respondents' youngest students are in fifth grade, one respondent's youngest student is in sixth grade, and three respondents' youngest students are in seventh grade (see Figures 70-71 for a breakdown of the information presented in this section).

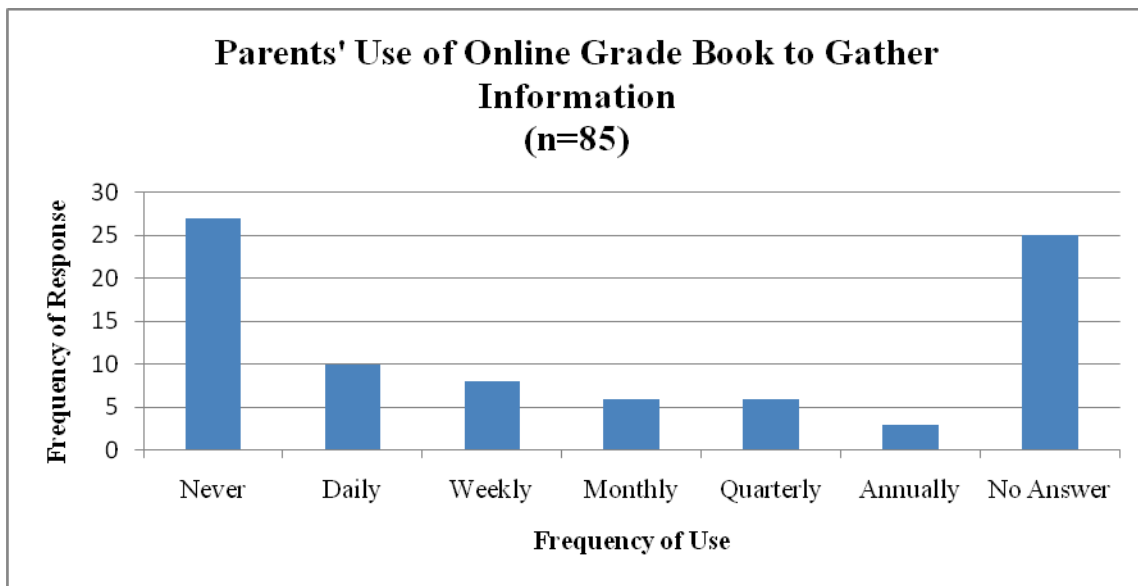


Figure 70. Parents' Use of Online Grade Book to Gather Information

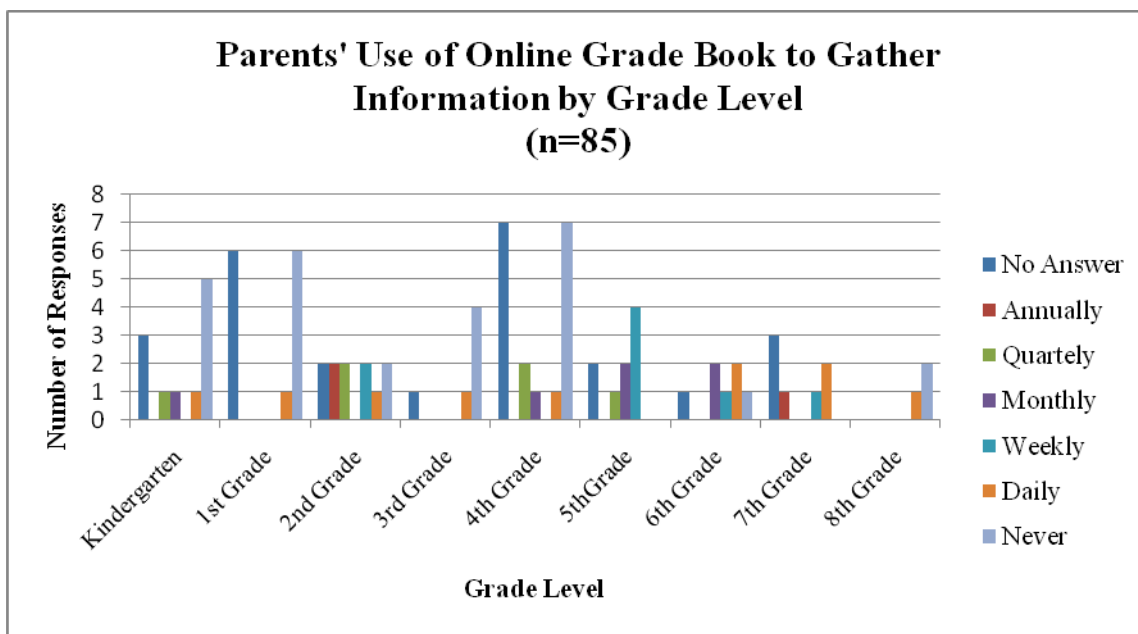


Figure 71. Parents' Use of Online Grade Book to Gather Information by Grade Level

Parent Communication to Teachers About the Successes or Concerns of Children

Question number five of the Parent Questionnaire asked parents how they communicate with their child/children's teacher(s) to address their child's successes or concerns. Parents were asked to rate the frequency of the following communications methods as either "*Never,*" "*Daily,*" "*Weekly,*" "*Monthly,*" "*Quarterly,*" or "*Annually.*"

1. District Website.
2. Classroom Website.
3. Classroom Newsletter (paper).
4. Classroom Newsletter via the Internet.
5. Individualized Student Reports.
6. Personal Communications Individualized to Parents Regarding Student (paper).
7. Email Communications to Individual Parents Regarding Specific Subject Matter About Student.
8. Face-to-Face Meetings Regarding Student Progress.
9. Informal Face-to-Face Interactions with Parents.
10. Homework Help Page.
11. Online Grade Book.

District Website

Forty-six percent ($n = 39$) of the parent respondents indicated they *never* use the district website to communicate student successes or concerns to the classroom teacher. Seven of these respondents have their youngest student in kindergarten; six have their

youngest student in first grade, three in second grade, four in third grade, five in fourth grade, three in fifth grade, four in sixth grade, five in seventh grade, and two in eighth grade.

Three respondents indicated using the district website on a *daily basis* to communicate successes or concerns with the classroom teacher. These respondents had students in Grades 1, 3, and 6.

Four respondents used the district website to communicate successes or concerns on a *weekly basis*. These respondents have students in Grades 1, 2, 4, and 5.

Seven percent ($n = 6$) of respondents use the district website to communicate successes or concerns to the classroom teacher on a *monthly basis*. One respondent's youngest student is in kindergarten, two are in second grade, and three are in fifth grade.

Less than 10% ($n = 8$) use the district website to communicate successes or concerns with the classroom teacher on a *quarterly basis*. One respondent's youngest student is in kindergarten, one has their youngest student in first grade, one is in second grade, three are in fourth grade, one is in fifth grade, and one is in sixth grade.

No respondents use the district website to communicate successes or concerns to the classroom teacher on an *annual basis*.

Twenty-nine percent ($n = 25$) of the respondents to this survey *did not answer* this question in the survey. Of the 25 respondents who did not answer this question, eight report they live in homes where English is the primary language spoken, or English is spoken with another language. Seventeen respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Of these respondents'

youngest students, two are in kindergarten, four are in first grade, four are in second grade, and one is in third grade. Nine respondents have a youngest student in fourth grade, one respondent's youngest student is in fifth grade, two respondents' youngest students are in sixth grade, and two respondents' youngest students are in seventh grade (see Figures 72-73 for a breakdown of the information presented in this section).

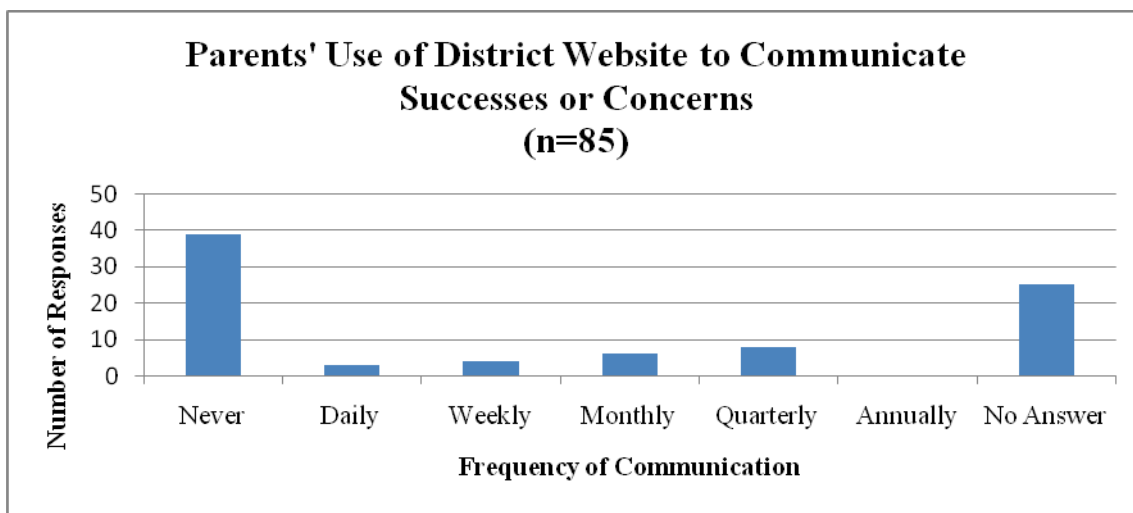


Figure 72. Parents' Use of District Website to Communicate Successes or Concerns

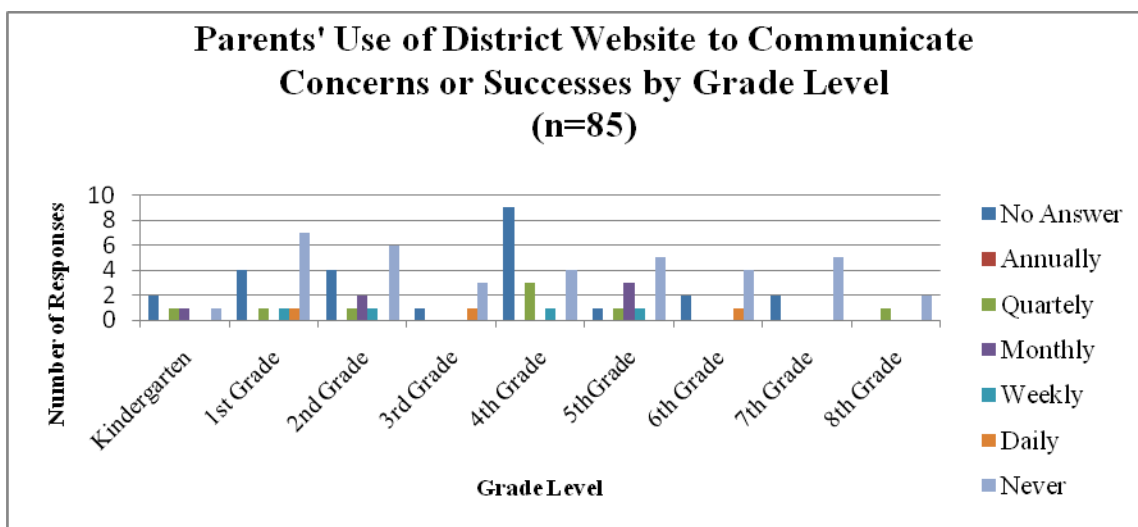


Figure 73. Parents' Use of District Website to Communicate Concerns or Successes by Grade Level

Classroom Website and Classroom Newsletter via the Internet¹

For both classroom website and classroom newsletter via the Internet, almost half of the respondents ($n = 42$) indicated they *never* use the classroom website or classroom newsletter via the Internet to communicate student successes or concerns to the classroom teacher. For both methods, eight of these respondents have their youngest student in kindergarten; six have their youngest in first grade, five in second grade; four in third grade, eight in fourth grade, two in fifth grade, five in sixth grade, three in seventh grade, and three in eighth grade.

One respondent each indicated using the class website and the classroom newsletter via the Internet on a *daily basis* to communicate successes or concerns with the classroom teacher. These respondents' youngest students were in seventh grade.

Three respondents each used the classroom website and classroom newsletter via the Internet to communicate successes or concerns on a *weekly basis*. These respondents have students in Grades 3, 5, and 7.

Four respondents each use the classroom website and classroom newsletter via the Internet to communicate successes or concerns to the classroom teacher on a *monthly basis*. For both communications methods, two respondents' youngest students are in first grade, one is in second grade, and one is in fifth grade.

Seven percent ($n = 6$) each use the classroom website and classroom newsletter via the Internet to communicate successes or concerns with the classroom teacher on a

¹Researcher's Note: Both Classroom Website and Classroom Newsletter via the Internet have the exact same data results. Because of this, the researcher has chosen to list the results only once, in this section, for the sake of avoiding repetition.

quarterly basis. For both, one respondent's youngest student is in kindergarten, one has their youngest student in second grade, one is in second grade, one has a youngest student in fourth grade, and three are in fifth grade.

For both methods, no respondents use the classroom website or classroom newsletter via the Internet to communicate successes or concerns to the classroom teacher on an *annual basis*.

For both classroom website and classroom newsletter via the Internet, over one-third ($n = 29$) each of the respondents *did not answer* these questions. For each method, nine of the 29 respondents who did not answer report they live in homes where English is the primary language spoken, or English is spoken with another language. Twenty respondents each who did not answer this question lived in homes where Spanish is the primary language spoken. Of these respondents' youngest students, two are in kindergarten, five are in first grade, four are in second grade, and one is in third grade. Nine respondents have a youngest student in fourth grade, two respondents' youngest student are in fifth grade, two respondents' youngest students are in sixth grade, and two respondents' youngest students are in seventh grade (see Figures 74-75 for a breakdown of the information presented in this section).

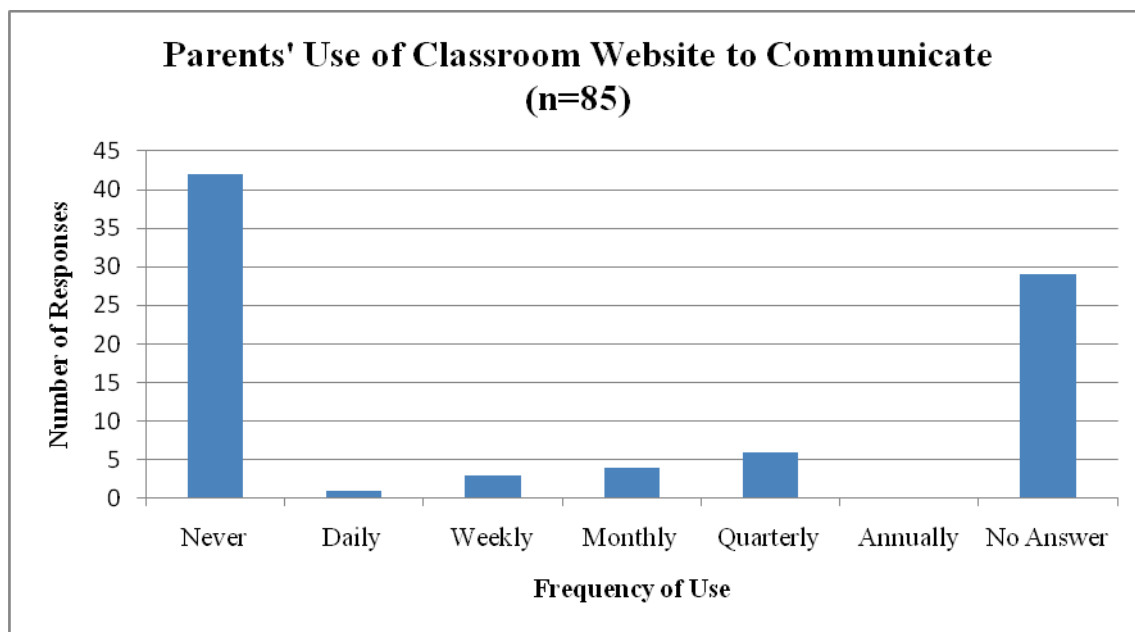


Figure 74. Parents' Use of Classroom Website to Communicate

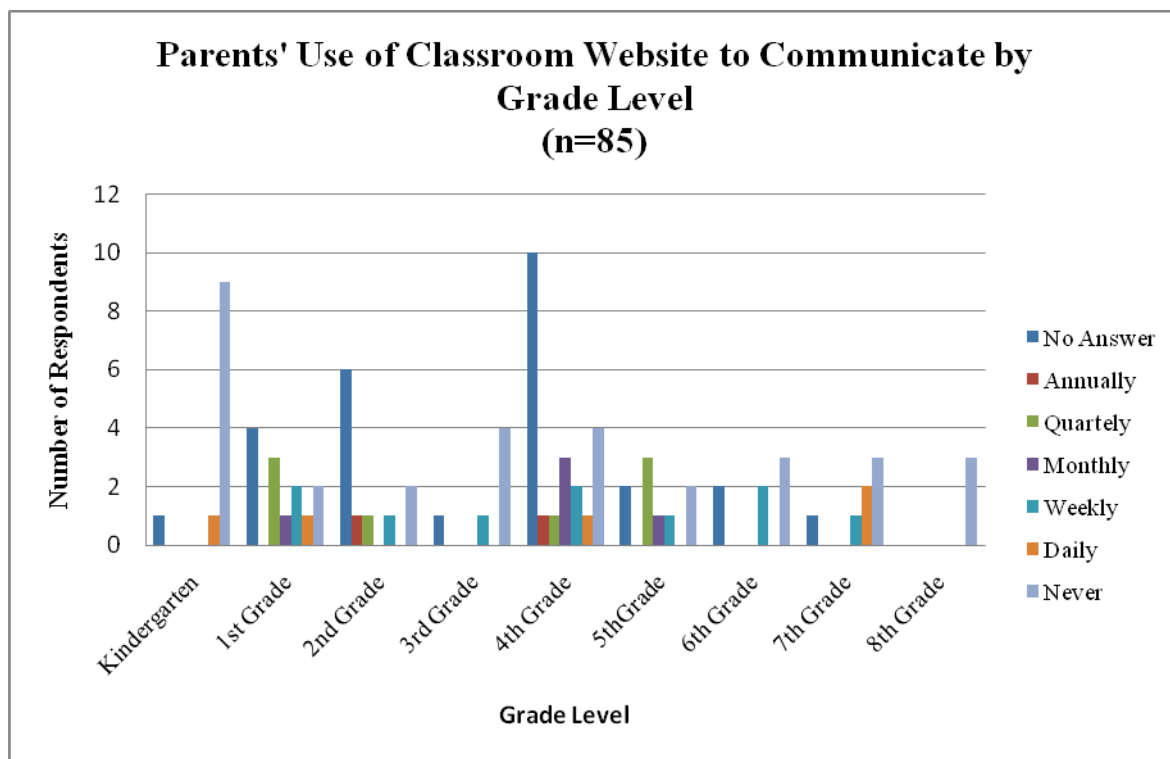


Figure 75. Parents' Use of Classroom Website to Communicate by Grade Level

Classroom Newsletter (Paper)

Twenty-six percent ($n = 22$) of the parent respondents indicated they *never* use the classroom newsletter to communicate student successes or concerns to the classroom teacher. Four of these respondents have their youngest student in kindergarten, three have their youngest in first grade, two in second grade, three in third grade, one in fourth grade, two in fifth grade, two in sixth grade, three in seventh grade, and two in eighth grade.

Seven respondents indicated using the class newsletter on a *daily basis* to communicate successes or concerns with the classroom teacher. Of these respondents, two have their youngest students enrolled in kindergarten, one has his/her youngest student enrolled in second grade, three have their youngest students enrolled in fourth grade, and one has their youngest student in seventh grade.

Sixteen percent ($n = 14$) of respondents use the class newsletter to communicate about successes or concerns with the classroom teacher on a *weekly basis*. One respondent reports to having his/her youngest student in kindergarten, three have their youngest in first grade, three have their youngest in second grade, two have their youngest in third grade, two have their youngest in fifth grade, and three have their youngest in sixth grade.

Ten respondents use the class newsletter on a *monthly basis*. Two respondents have youngest students in first grade, one has his/her youngest student in second grade, three have their youngest student in fourth grade, three have their youngest student in fifth grade, and one respondent has their youngest student in eighth grade.

Ten respondents use the class newsletter to communicate successes or concerns to the classroom teacher on a *quarterly basis*. Three of these respondents have their youngest student in kindergarten, three have their youngest students in first grade, one respondent's youngest student is in second grade, two have their youngest student in fourth grade, and one is in seventh grade.

No respondents use the classroom newsletter to communicate successes or concerns to the classroom teacher on an *annual basis*.

Twenty-six percent ($n = 22$) of the respondents to this survey *did not answer* this question in the survey. Of the 22 respondents who did not answer this question, eight report they live in homes where English is the primary language spoken, or English is spoken with another language. Fourteen respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Of these respondents' youngest students, one is in kindergarten, two are in first grade, three are in second grade, and one is in third grade. Nine respondents have a youngest student in fourth grade, two respondents' youngest students are in fifth grade, two respondents' youngest students are in sixth grade, and two respondents' youngest students are in seventh grade (see Figures 76-77 for a breakdown of the information presented in this section).

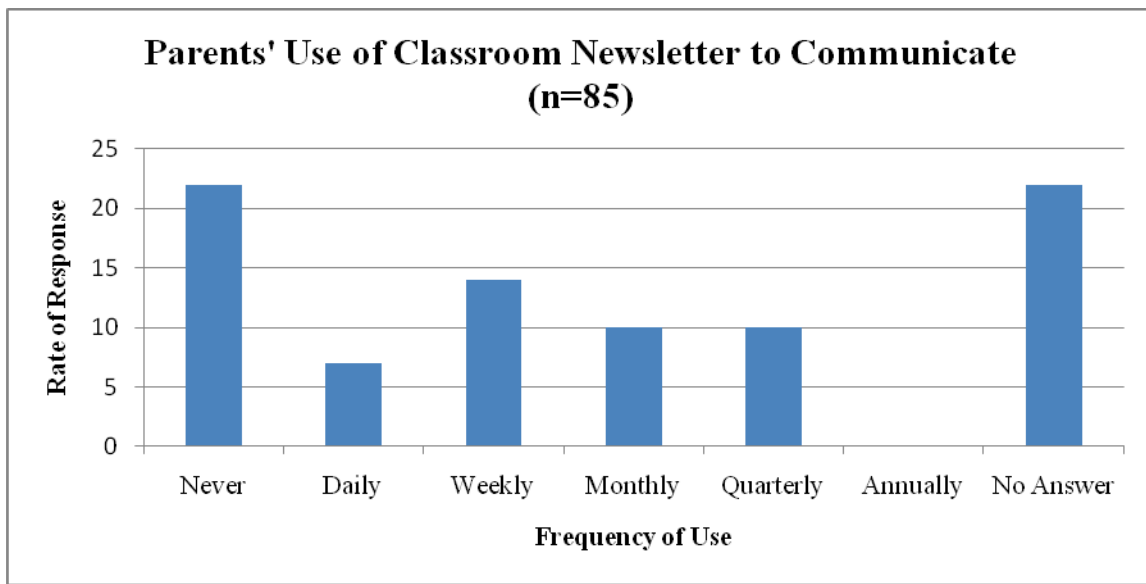


Figure 76. Parents' Use of Classroom Newsletter to Communicate

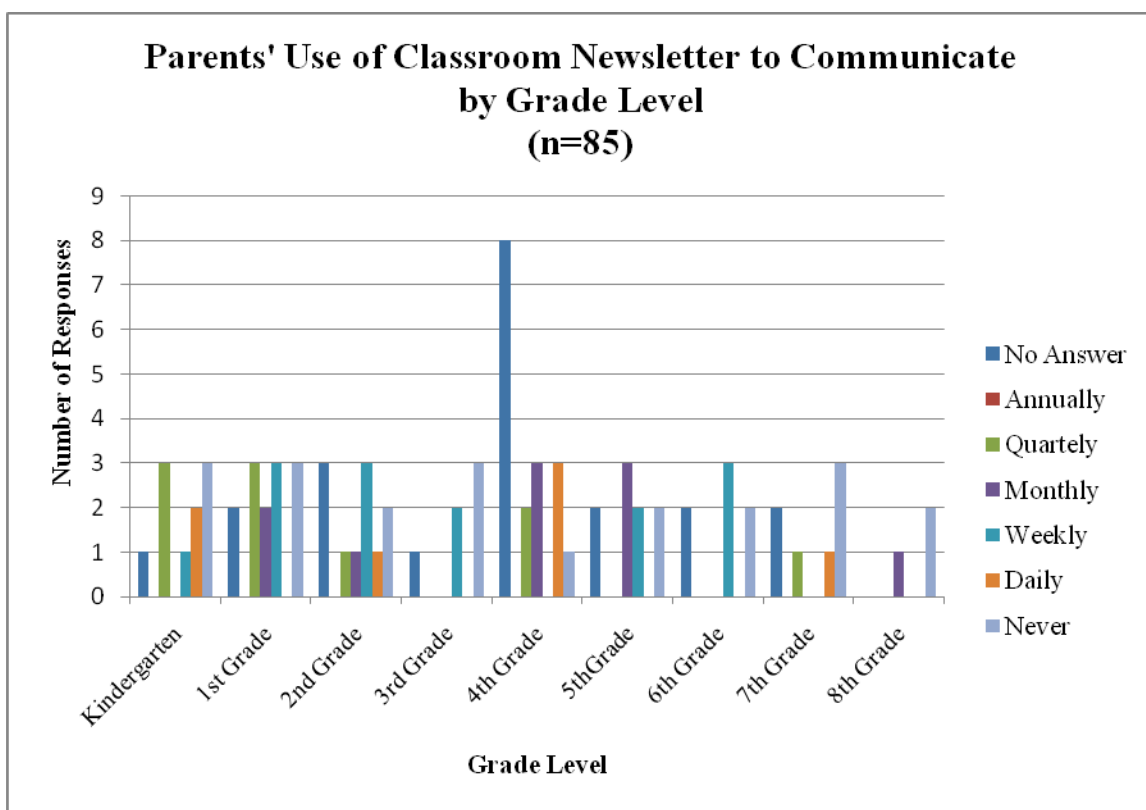


Figure 77. Parents' Use of Classroom Newsletter to Communicate by Grade Level

Individualized Student Reports

Twenty-two percent ($n = 19$) of the parent respondents indicated they *never* use individualized student reports to communicate student successes or concerns to the classroom teacher. Five of these respondents have their youngest student in kindergarten, four respondents have their youngest student in first grade, two in second grade, three in third grade, two in fourth grade, one in sixth grade, one in seventh grade, and one in eighth grade.

One respondent indicated their use of individualized reports on a *daily basis*. This respondent had a student in fourth grade.

Nine respondents used individualized reports to communicate successes or concerns to the classroom teacher on a *weekly basis*. One respondent had their youngest student in first grade. Two respondents' youngest students were in second grade, three respondents' youngest students were in fourth grade, two respondents' youngest students were in fifth grade, and one respondent had their youngest student in seventh grade.

Eleven respondents used individualized reports on a *monthly basis* to communicate with the classroom teacher regarding student successes or concerns. One respondent's youngest student was in kindergarten, two were in first grade, and one was in second grade. Two respondents had their youngest students in fourth grade, three had their youngest students in fifth grade, and two had their youngest students in sixth grade.

One third ($n = 28$) of the respondents use individualized student reports to communicate successes or concerns to the classroom teacher on a *quarterly basis*. Four of these respondents had their youngest student in kindergarten, one had their youngest

student in first grade, four respondents' youngest student was enrolled in second grade, two had their youngest students in third grade, three had their youngest students in fourth grade, three had their youngest students in fifth grade, two had their youngest students in sixth grade, five had their youngest students in seventh grade, and two had their youngest students in eighth grade.

No respondents use individualized student reports to communicate successes or concerns to the classroom teacher on an *annual basis*.

Twenty percent ($n = 17$) of the respondents to this survey *did not answer* this question in the survey. Of the 17 respondents who did not answer this question, three respondents report they live in homes where English is the primary language spoken, or English is spoken with another language. Fourteen respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Of these respondents' youngest students, one was in kindergarten, five were in first grade, two were in second grade, and one was in third grade. Five respondents had a youngest student in fourth grade, one respondent's youngest student was in fifth grade, and two respondents' youngest students were in sixth grade (see Figures 78-79 for a breakdown of the information presented in this section).

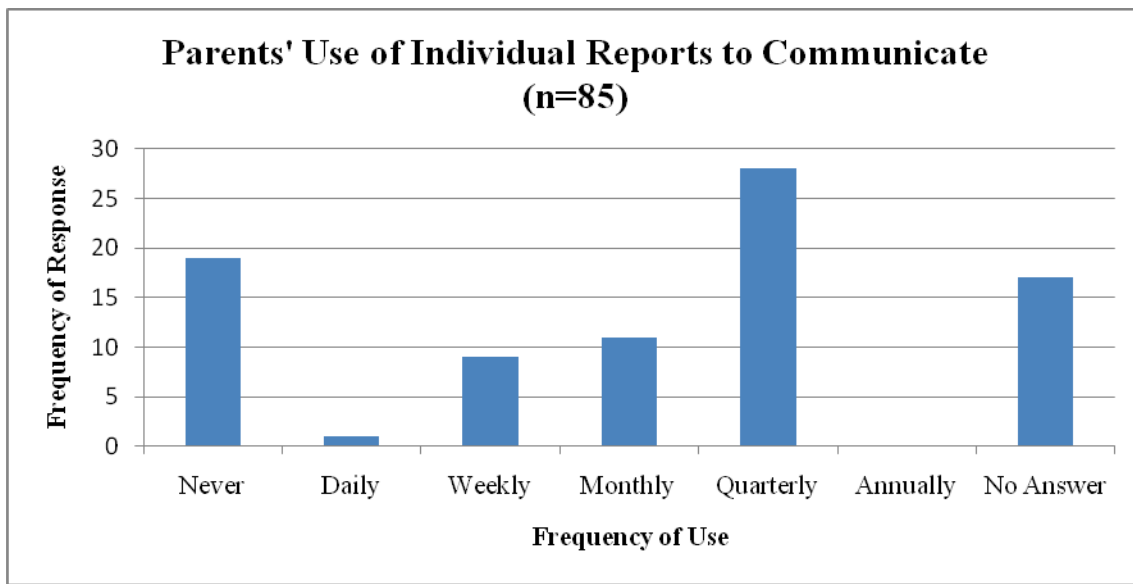


Figure 78. Parents' Use of Individual Reports to Communicate

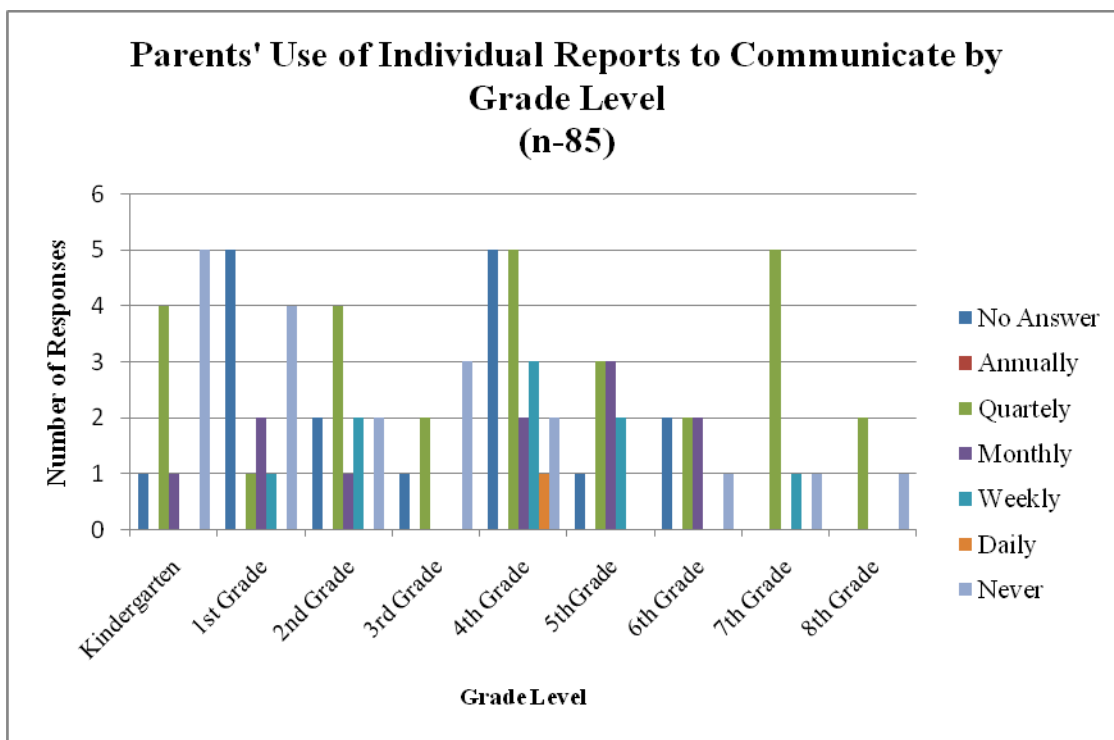


Figure 79. Parents' Use of Individual Reports to Communicate by Grade Level

Personal Communications Individualized to Parents Regarding Student (Paper)

Eighteen percent of the respondents *never* use personal communications individualized on paper to communicate with the classroom teacher regarding student successes or concerns. These respondents report to having students in Grades K-8. Three respondents had youngest students enrolled in kindergarten, two had youngest students enrolled in second grade, two had youngest students enrolled in third grade, four had youngest students enrolled in fourth grade, two had youngest students enrolled in sixth grade, one had their youngest student enrolled in seventh grade, and one had their youngest student enrolled in eighth grade.

Four respondents indicated their use of personal communications on paper on a *daily basis* to address student successes or concerns. One respondent had their youngest student in first grade, one had their youngest student in second grade, one had their youngest student in fourth grade, and one had their youngest student in fifth grade.

Eight respondents indicated their use of personal communication on paper to address student successes or concerns on a *weekly basis*. One respondent had their youngest student in kindergarten, one had their youngest student in second grade, one had their youngest in third grade, two had their youngest in fifth grade, one in sixth grade, and two have their youngest in seventh grade.

Fourteen percent ($n = 12$) of the respondents use personal communications individualized on paper to communicate with the classroom teacher regarding student successes or concerns on a *monthly basis*. One of these respondents had their youngest student in kindergarten, four had their youngest student in first grade, two had their

youngest student in fourth grade, one had a youngest student in fifth grade, and two had youngest students in sixth grade and one each in seventh and eighth grades.

One third ($n = 28$) of respondents indicated they used individualized communication regarding student concerns or success on paper to communicate with the classroom teacher on a *quarterly basis*. Respondents who use paper communication quarterly have youngest students in the district who span Grades K-8. Six respondents had their youngest students enrolled in kindergarten, four had their youngest students enrolled in first grade, five had their youngest students enrolled in second grade, two had their youngest student enrolled in third grade, four had their youngest students enrolled in fourth grade, four had their youngest students enrolled in fifth grade, two had their youngest students enrolled in seventh grade, and one had their youngest student enrolled in eighth grade.

No respondents use personal communication on paper to communicate successes or concerns to the classroom teacher on an *annual basis*.

Eighteen of the respondents to this survey *did not answer* this question in the survey. Of the 18 respondents who did not answer this question, five report they live in homes where English is the primary language spoken, or English is spoken with another language. Thirteen respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Of these respondents' youngest students, four were in first grade, two were in second grade, and one was in third grade. Seven respondents had a youngest student enrolled in fourth grade, one respondent's youngest student was in fifth grade, two respondents' youngest students were in sixth grade, and

one respondent's youngest student was in seventh grade (see Figures 80-81 for a breakdown of the information presented in this section).

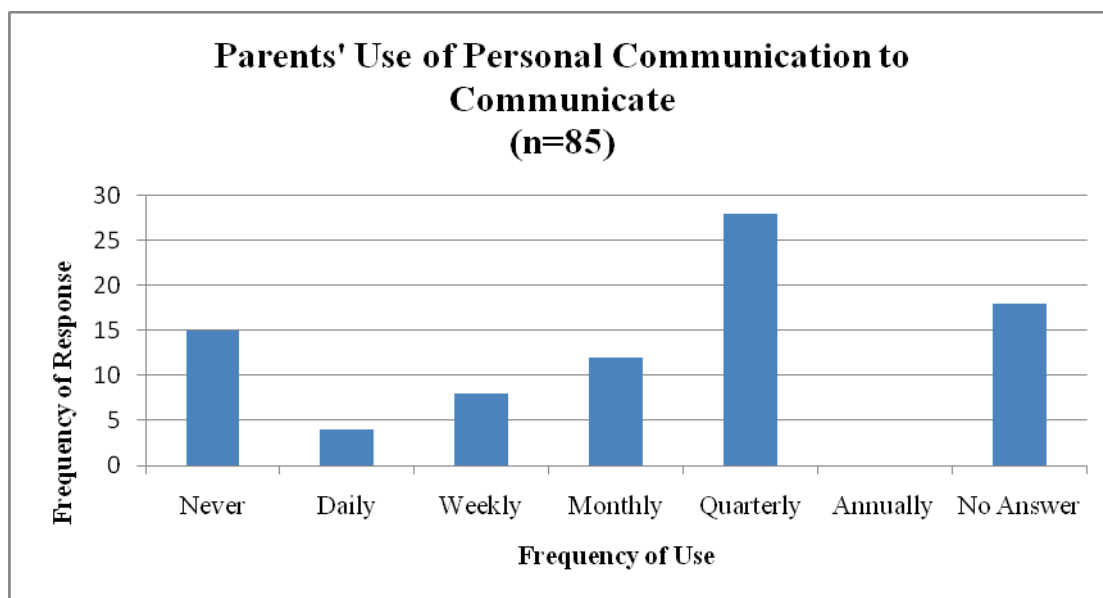


Figure 80. Parents' Use of Personal Communication to Communicate

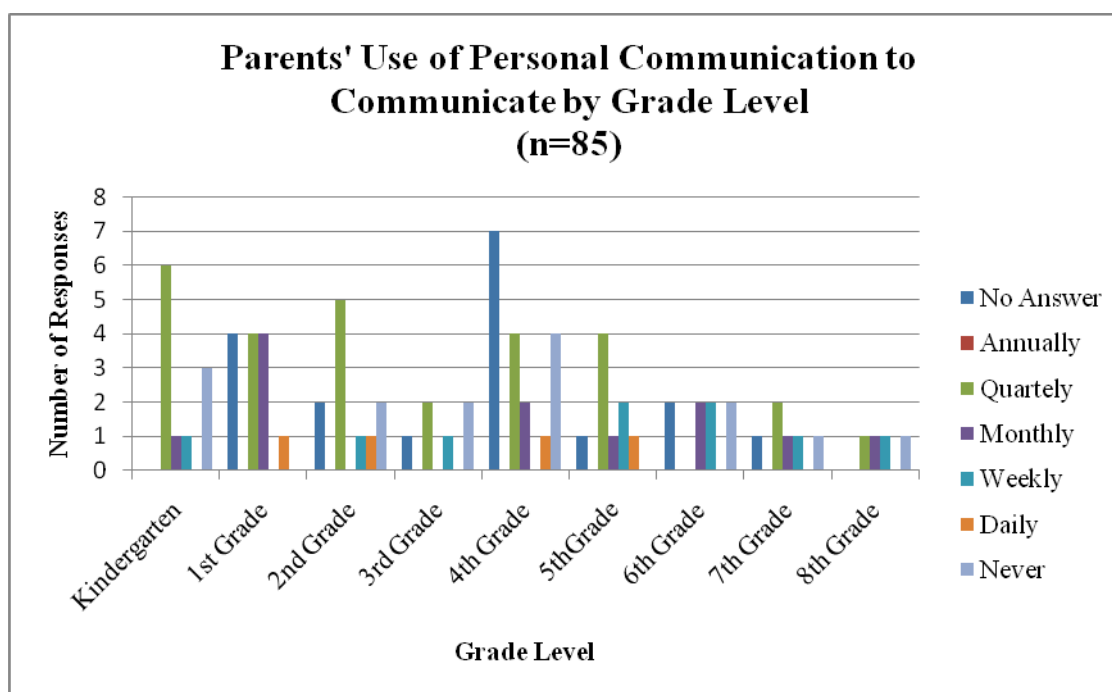


Figure 81. Parents' Use of Personal Communication to Communicate by Grade Level

Email Communications to Individual Parents Regarding Specific Subject Matter About Student

Twenty-one percent ($n = 18$) of the parent respondents indicated they *never* use email to communicate student successes or concerns to the classroom teacher. Three of these respondents had their youngest student enrolled in kindergarten, one had their youngest student enrolled in first grade, four in second grade, one in third grade, two in fourth grade, one in fifth grade, one in sixth grade, three in seventh grade, and two in eighth grade.

One respondent indicated their use of email on a *daily basis*. This respondent had a student in third grade.

Ten respondents used email to communicate successes or concerns to the classroom teacher on a *weekly basis*. One respondent had their youngest student enrolled in kindergarten, two respondents' youngest students were in first grade, two respondents' youngest students were in second grade, three respondents' youngest students were in fourth grade, one respondent's youngest students was in fifth grade, and one respondent had their youngest student enrolled in seventh grade.

Fifteen percent ($n = 13$) of respondents used email on a *monthly basis* to communicate with the classroom teacher regarding student successes or concerns. Two respondent's youngest students were in kindergarten, one respondent's youngest student was in first grade, two were in third grade, three had their youngest students in fourth grade, four had their youngest students in fifth grade, and one had their youngest students in sixth grade.

Twenty-six percent ($n = 22$) of the respondents use email to communicate successes or concerns to the classroom teacher on a *quarterly basis*. Four of these respondents had their youngest student in kindergarten, four had their youngest student in first grade, three respondents' youngest students were in second grade, two had their youngest students in third grade, two had their youngest students in fourth grade, two had their youngest students in fifth grade, three had their youngest students in sixth grade, one had their youngest students in seventh grade, and one had their youngest student in eighth grade.

One respondent indicated the use of email to communicate successes or concerns to the classroom teacher on an *annual basis*. This respondent's youngest student was enrolled in seventh grade.

Twenty-four percent ($n = 20$) of the respondents to this survey *did not answer* this question in the survey. Of the 20 respondents who did not answer this question, five report they live in homes where English is the primary language spoken, or English is spoken with another language. Fifteen respondents who did not answer this question live in home where Spanish is the primary language spoken. Of these respondents' youngest students, one was in kindergarten, five were in first grade, and two were in second grade. Eight respondents had a youngest student enrolled in fourth grade, one respondent's youngest student was in fifth grade, two respondents' youngest students were in sixth grade, and one respondent's youngest student was in seventh grade (see Figures 82-83 for a breakdown of the information presented in this section).

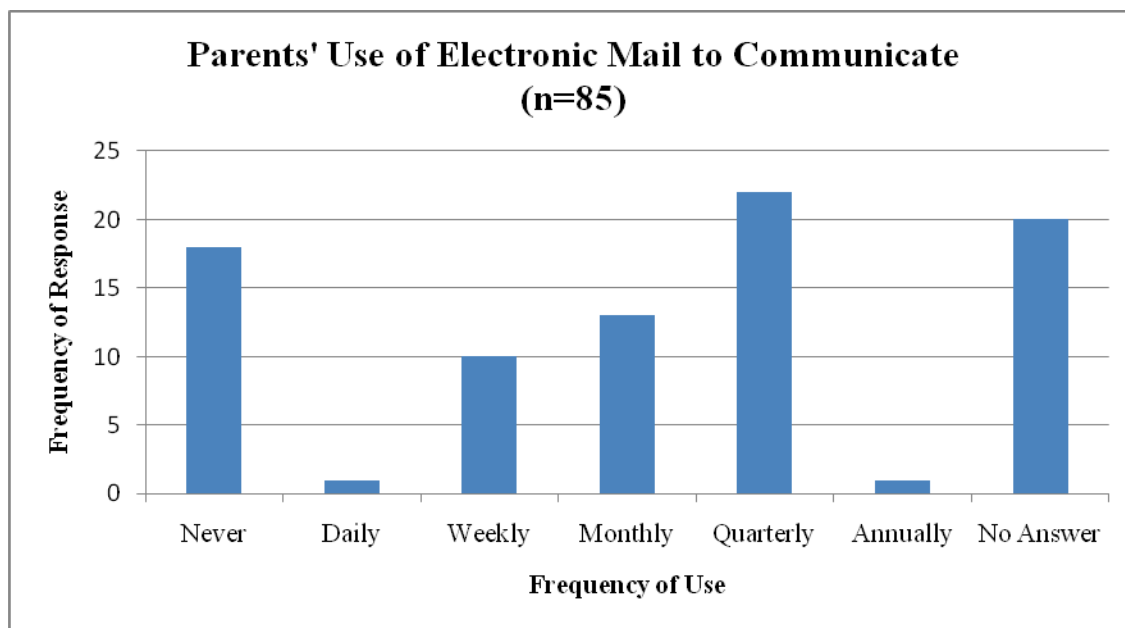


Figure 82. Parents' Use of Electronic Mail to Communicate

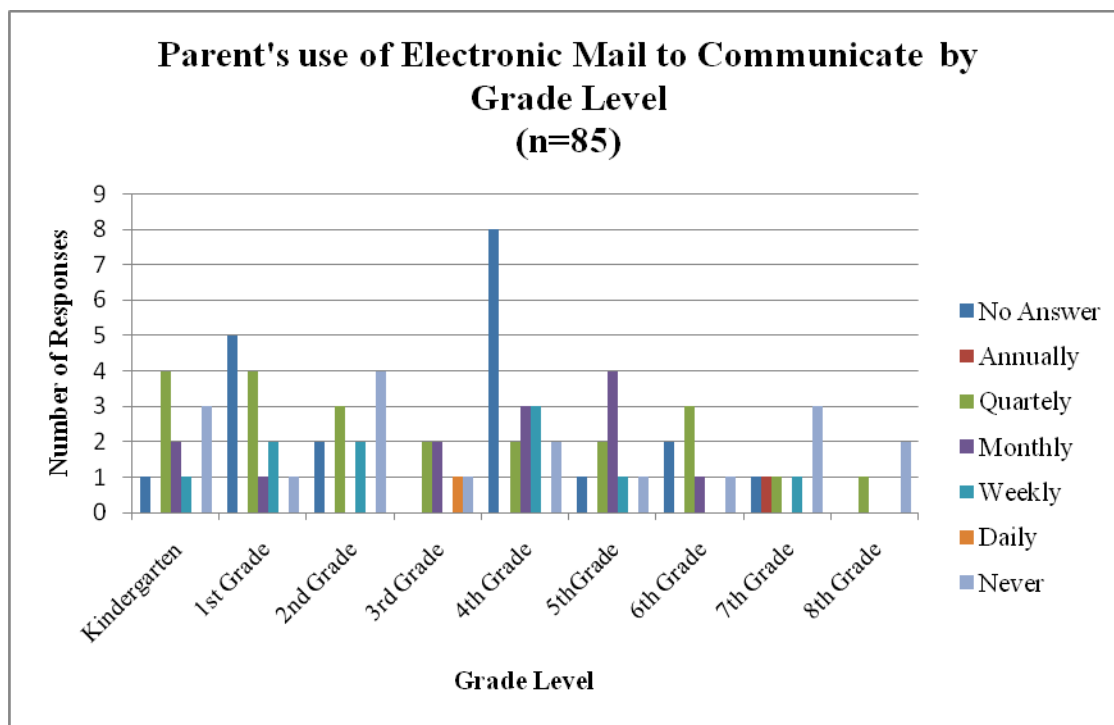


Figure 83. Parents' Use of Electronic Mail to Communicate by Grade Level

Parent Use of Face-to-Face Meetings Regarding Student Progress to Communicate

Ten of the parent respondents indicated they *never* use face-to-face meetings to communicate student successes or concerns to the classroom teacher. One respondent had their youngest in kindergarten, two had their youngest in first grade, two in second grade, two in fourth grade, one in fifth grade, one in sixth grade, and one in eighth grade.

No respondents indicated their use of face-to-face meetings on a *daily basis* to communicate about student successes or concerns.

Six respondents used face-to-face meetings to communicate successes or concerns to the classroom teacher on a *weekly basis*. One respondent who uses face-to-face meetings to communicate successes or concerns had their youngest student enrolled in kindergarten, three respondents' youngest students were enrolled in first grade, one respondent's youngest student was enrolled in third grade, and one respondent's youngest student was enrolled in fifth grade.

Nine respondents used face-to-face meetings on a *monthly basis* to communicate with the classroom teacher regarding student successes or concerns. Three respondents' youngest students were in kindergarten, three were in first grade, one was in second grade, one was in third, and one was in fourth grade.

Forty-two percent ($n = 36$) of the respondents use face-to-face meetings to communicate successes or concerns to the classroom teacher on a *quarterly basis*. Two of these respondents had their youngest student in kindergarten, four had their youngest student enrolled in first grade, four respondents' youngest students were enrolled in second grade, three had their youngest students enrolled in third grade, nine had their

youngest student in fourth grade, four had their youngest students in fifth grade, three had their youngest students in sixth grade, five had their youngest students in seventh grade, and one had their youngest student in eighth grade.

Ten respondents used face-to-face meetings to communicate successes or concerns to the classroom teacher on an *annual basis*. Two of the respondents have students in kindergarten, one had their youngest student in first grade, two had their youngest students in second grade, two had their youngest students in fifth grade, two had their youngest students in sixth grade, and one had their youngest student in seventh grade.

Sixteen percent ($n = 14$) of the respondents to this survey *did not answer* this question in the survey. Of these respondents' youngest students, two were in kindergarten, two were in second grade, six were in fourth grade, one was in fifth grade, one was in sixth grade, one was in seventh grade, and one was in eighth grade (see Figures 84-85 for a breakdown of the information presented in this section).

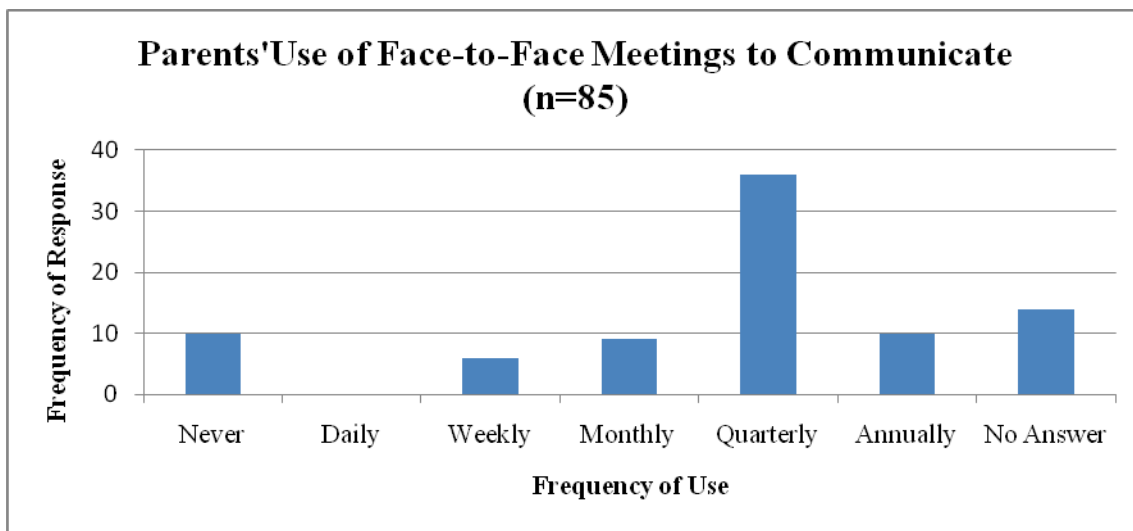


Figure 84. Parents' Use of Face-to-Face Meetings to Communicate

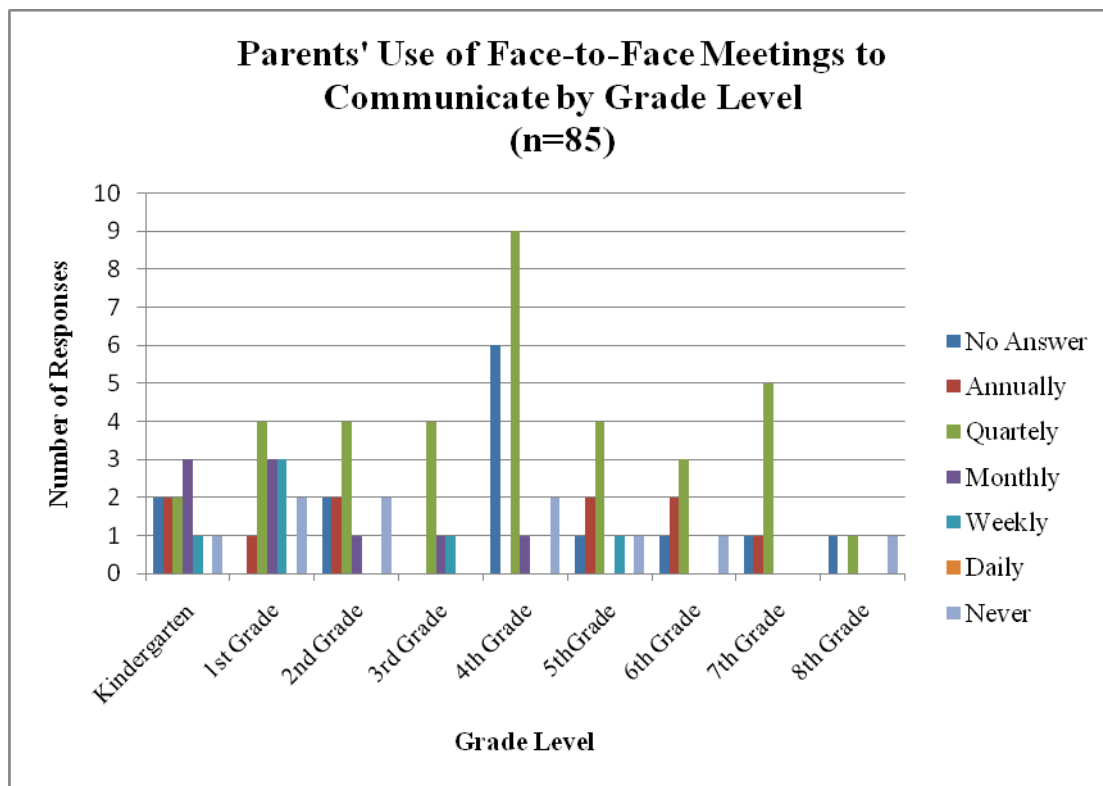


Figure 85. Parents' Use of Face-to-Face Meetings to Communicate by Grade Level

Informal Face-to-Face Interactions With Parents

Twenty-four percent ($n = 20$) of the parent respondents indicated they *never* use face-to-face meetings to communicate student successes or concerns to the classroom teacher. Two respondents had their youngest students enrolled in kindergarten, two had their youngest student enrolled in first grade, three in second grade, three in third grade, two in fourth grade, two in fifth grade, three in sixth grade, and three in seventh grade.

One respondent indicated their use of informal face-to-face meetings on a *daily basis* to communicate about student successes or concerns. This respondent's youngest student was enrolled in third grade.

Six respondents used informal face-to-face meetings to communicate successes or concerns to the classroom teacher on a *weekly basis*. One respondent had their youngest student in first grade, one respondent's youngest student was in second grade, two respondents' youngest students were in fourth grade, and two respondents' youngest students were in fifth grade.

Ten respondents used informal face-to-face meetings on a *monthly basis* to communicate with the classroom teacher regarding student successes or concerns. Three respondents' youngest students were in kindergarten, three were in first grade, and four had their youngest student in fourth grade.

Twenty-four percent ($n = 20$) of the respondents use informal face-to-face meetings to communicate successes or concerns to the classroom teacher on a *quarterly basis*. Two of these respondents had their youngest student in kindergarten, five respondents' youngest students were in second grade, two had their youngest students in third grade, two had their youngest students in fourth grade, four had their youngest students in fifth grade, one had their youngest student in sixth grade, two had their youngest students in seventh grade, and two had their youngest students in eighth grade.

Four respondents use informal face-to-face meetings to communicate successes or concerns to the classroom teacher on an *annual basis*. Three of the four respondents had their youngest student enrolled in kindergarten and one respondent had their youngest student enrolled in first grade.

Twenty-eight percent ($n = 24$) of the respondents to this survey *did not answer* this question in the survey. Of the 24 respondents who did not answer this question, 10

respondents report they live in homes where English is the primary language spoken or English is spoken with another language. Fourteen respondents who did not answer this question live in home where Spanish is the primary language spoken. Of these respondents' youngest students, one was in kindergarten, six were in first grade, two were in second grade, eight were in fourth grade, one was in fifth grade, three were in sixth grade, two were in seventh grade, and one was in eighth grade (see Figures 86-87 for a breakdown of the information presented in this section).

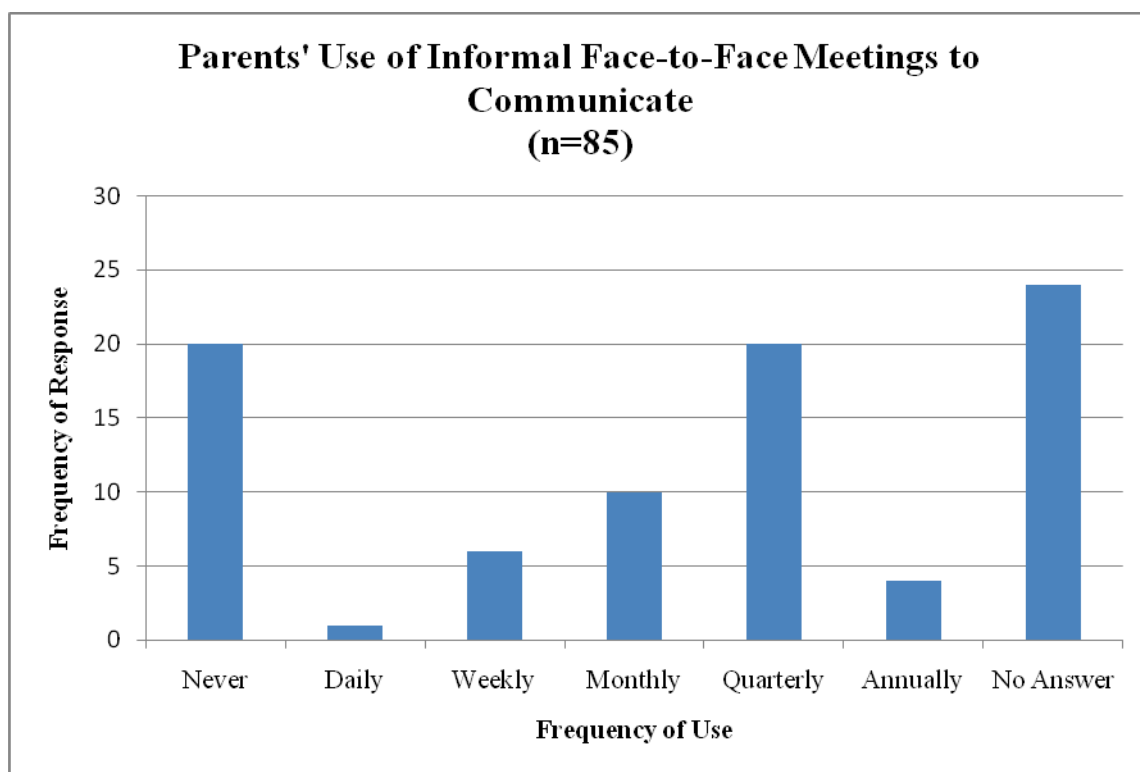


Figure 86. Parents' Use of Informal Face-to-Face Meetings to Communicate

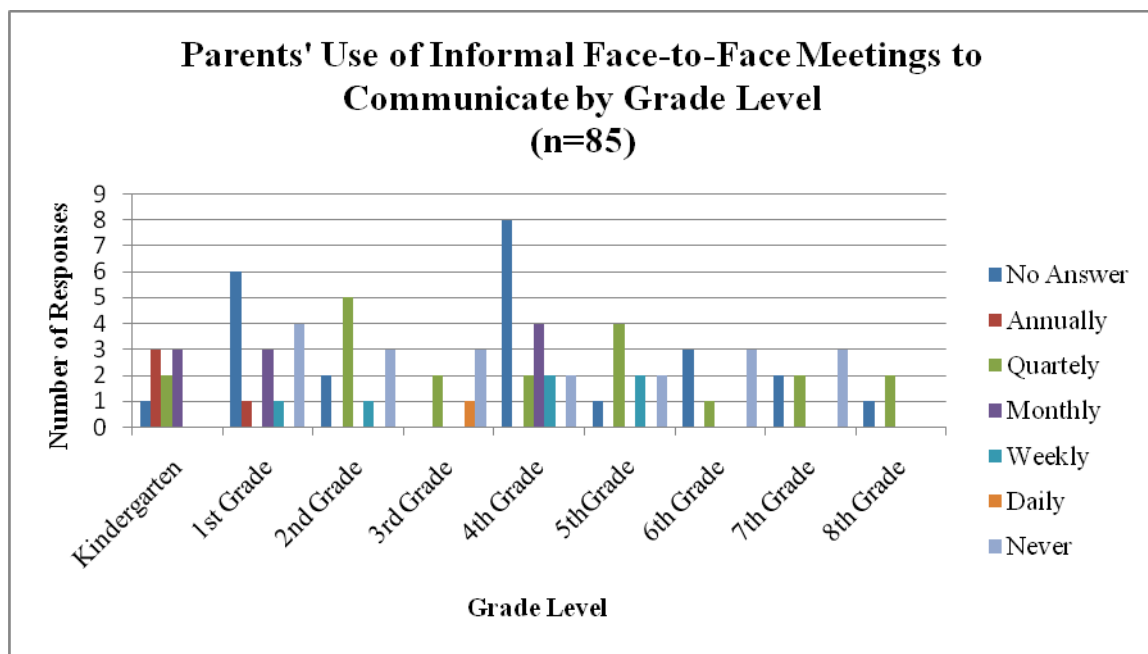


Figure 87. Parents' Use of Informal Face-to-Face Meetings to Communicate by Grade Level

Homework Help Page

Thirty-three percent (n=28) of the parent respondents indicated they *never* use the homework help page to communicate student successes or concerns to the classroom teacher. Five respondents had their youngest student in kindergarten, two had their youngest student in first grade, four in second grade, four in third grade, four in fourth grade, two in fifth grade, three in sixth grade, three in seventh grade, and one in eighth grade.

Eighteen percent ($n = 15$) respondents indicated their use of homework help page on a *daily basis* to communicate about student successes or concerns. Two respondents had their youngest student enrolled in kindergarten, one had their youngest student enrolled in first grade, two had their youngest student enrolled in second grade, seven

indicated their youngest students were enrolled in fourth grade, one in fifth grade, one in sixth grade, and one in seventh grade.

Five respondents used the homework help page to communicate successes or concerns to the classroom teacher on a *weekly basis*. Four of the five have their youngest student enrolled in first grade, one respondent has their youngest student in fifth grade.

Eight respondents used the homework help page on a *monthly basis* to communicate with the classroom teacher regarding student successes or concerns. One respondent's youngest student was in kindergarten, one respondent's youngest student was in second grade, one respondent's youngest student was in fourth grade, four respondent's youngest students were in fifth grade, and one respondent's youngest student was in eighth grade.

Eight respondents used the homework help page to communicate with the classroom teacher regarding student success or concerns on a *quarterly basis*. Two of these respondents had their youngest in kindergarten, one respondent had their youngest in first grade, two respondents' youngest were in second grade, one had their youngest in third grade, and two respondents had their youngest in fourth grade.

One respondent used the homework help page to communicate with their student's teacher on an *annual basis*. This respondent's youngest student was in first grade.

Twenty respondents to this survey *did not answer* this question in the survey. Of the 20 respondents who did not answer this question, 10 report they live in homes where English is the primary language spoken, or English is spoken with another language. Ten

respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Of these respondents' youngest students, one was in kindergarten, four were in first grade, two were in second grade, one was in third grade, four were in fourth grade, one was in fifth grade, three were in sixth grade, three were in seventh grade, and one was in eighth grade (see Figures 88-89 for a breakdown of the information presented in this section).

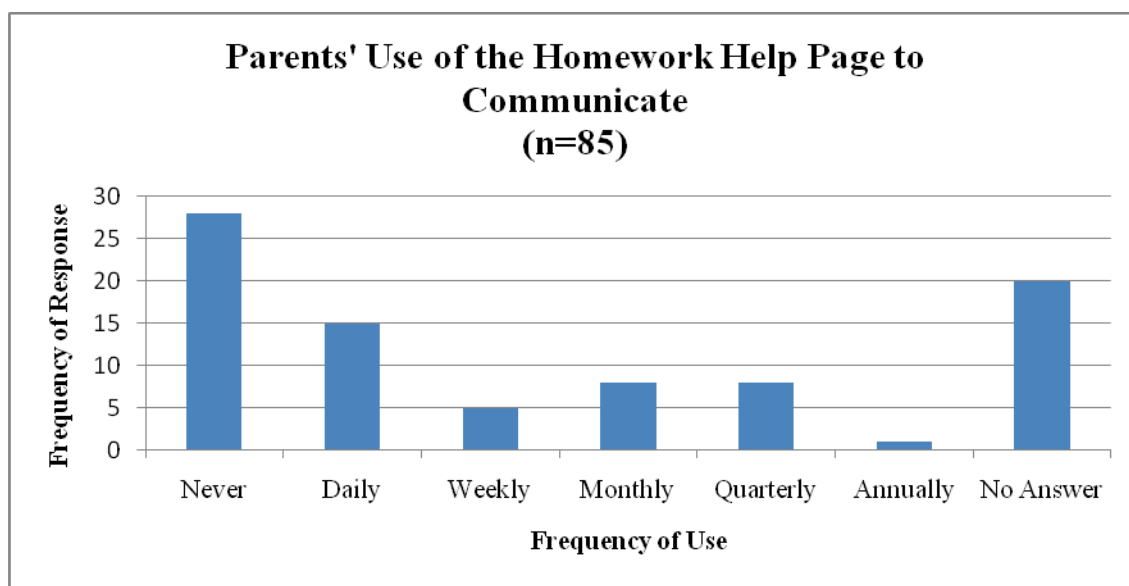


Figure 88. Parents' Use of the Homework Help Page to Communicate

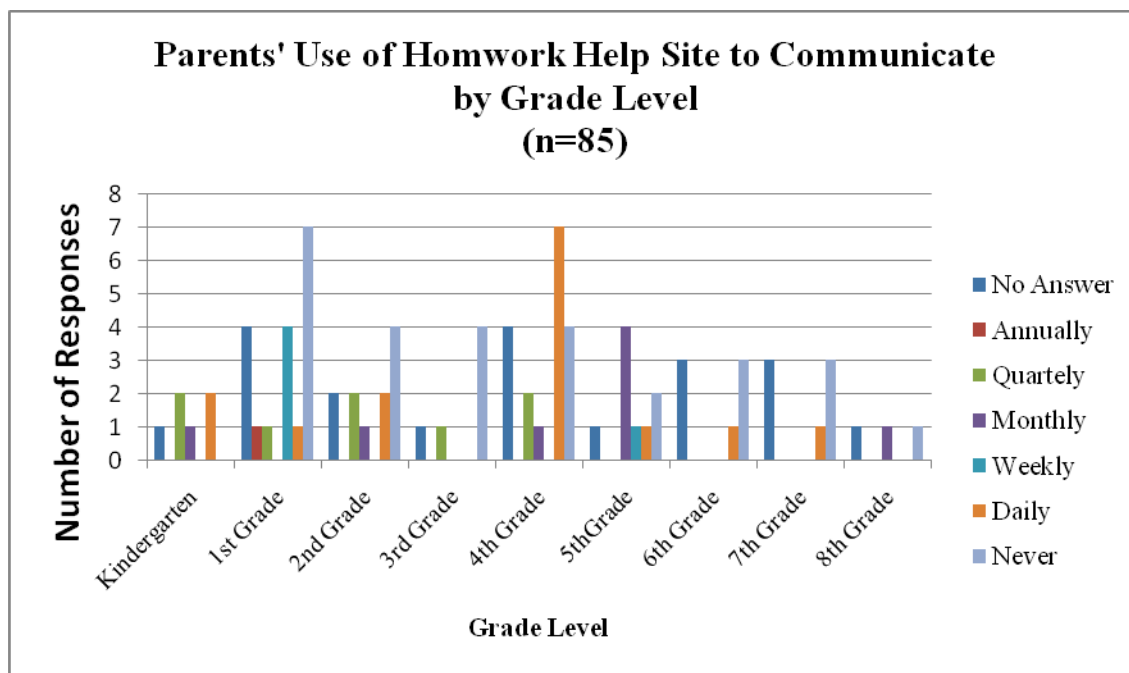


Figure 89. Parents' Use of the Homework Help Page to Communicate by Grade Level

Online Grade Book

Thirty-four percent ($n = 29$) of parent respondents *never* use the online grade book to communicate with their students' teachers regarding student concerns or successes. Six of these respondents have their youngest in kindergarten, three have their youngest in first grade, four in second grade, four in third grade, six in fourth grade, two in fifth grade, two in sixth grade, one in seventh grade, and one in eighth grade.

Six respondents indicated using the online grade book on a *daily basis* to communicate successes or concerns with the classroom teacher. These respondents had students in Grades K, 2, 3, 4, 7, and 8.

Six respondents used the online grade book to communicate successes or concerns on a *weekly basis*. These respondents have students in first and second, two in fourth, and one each in fifth and seventh grades.

Six respondents also use the online grade book on a *monthly basis* to communicate with the classroom teacher about student successes or concerns. Two respondents have their youngest student in kindergarten, one has their youngest student in first grade, and three have their youngest student in fifth grade.

Five respondents use the online grade book to communicate with the classroom teacher regarding student successes or concerns on a *quarterly basis*. One respondent has his/her youngest student in fourth grade, one respondent has their youngest student in fifth grade, and three respondents have their youngest students in sixth grade.

Two respondents use the online grade book to communicate with the classroom teacher on an *annual basis*. Respondents who use the online grade book to communicate with the classroom teacher at this frequency have their youngest students in first and seventh grade.

Thirty-six percent ($n = 31$) of the respondents to this survey *did not answer* this question in the survey. Of the 31 respondents who did not answer this question, 12 report they live in homes where English is the primary language spoken, or English is spoken with another language. Nineteen respondents who did not answer this question lived in homes where Spanish is the primary language spoken. Of these respondents' youngest students, two are in kindergarten, seven are in first grade, five are in second grade, and one is in third grade. Eight respondents have a youngest student in fourth grade, two respondents' youngest students are in fifth grade, two respondents' youngest students are in sixth grade, and three respondents' youngest students are in seventh grade and one is in

eighth grade (see Figures 90-91 for a breakdown of the information presented in this section).

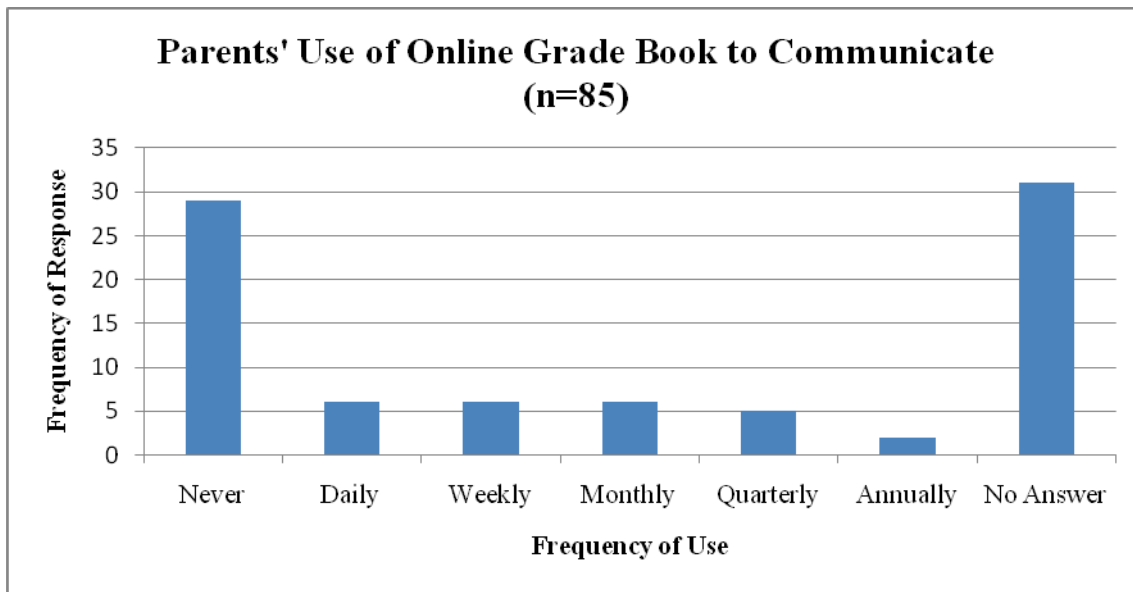


Figure 90. Parents' Use of Online Grade Book to Communicate

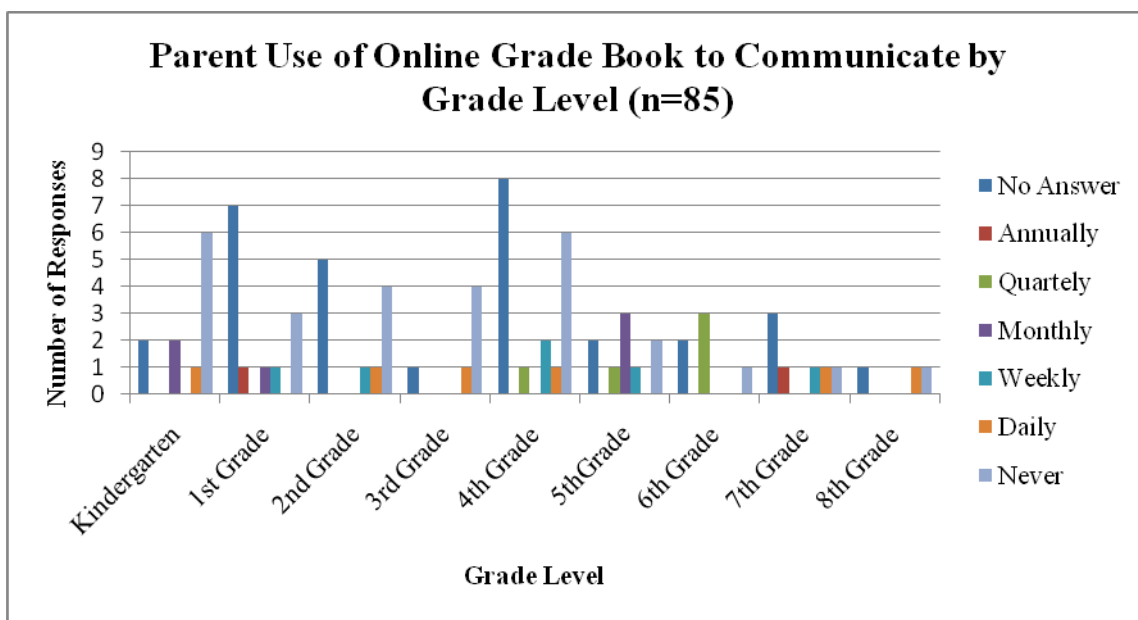


Figure 91. Parents' Use of Online Grade Book to Communicate by Grade Level

Parent Use and Follow-Up When Using Electronic Communication

Parent respondents were asked a series of three questions regarding additional communication, clarification, and follow-up to electronic communications between themselves and the school.

Question #1: *How often does the initial email communication facilitate more communication?* Parents were asked to rate the frequency as either “*Very Often,*” “*Often,*” “*Sometimes,*” “*Almost Never,*” “*Never.*”

As Figure 92 shows, 68% ($n = 58$) of parent respondents report that when they used email to communicate with their students’ teachers, the initial email communication facilitates more communication. Forty respondents (47%) of parents equally report that the initial email communication either *often* or *very often* results in more communication between parents and teachers. Eighteen parents report their initial communication only *sometimes* facilitates more communication. Nineteen percent of parents’ respondents *almost never* or *never* find their initial email communication facilitates more communication, with four respondents feeling there is *almost never* more communication, and twelve respondents reporting an initial email *never* facilitates more communication. Eleven respondents *did not answer* this question.

Question #2: *How often is clarification needed?* Parents were asked to rate the frequency as either “*Very Often,*” “*Often,*” “*Sometimes,*” “*Almost Never,*” “*Never.*”

As Figure 92 shows, 21% of respondents reported that clarification is either *very often* or *often* needed. Of these respondents, three report that clarification is *very often*

needed and fifteen report that clarification is *often* needed. Forty-three percent ($n = 28$) reported that clarification is *almost never* needed, and nine reported that clarification is *Never* needed. Again, 12 of the parent respondents *did not respond* to this question in the survey.

Question #3: *How often is a personal email needed for follow-up?* Parents were asked to rate the frequency as either “*Very Often*,” “*Often*,” “*Sometimes*,” “*Almost Never*,” “*Never*.”

As Figure 92 shows, respondents felt that 71% of the time ($n = 60$), some type of personal email is needed to follow-up with an initial communication. Of these respondents, 14 *almost never* require follow-up email; 23 *sometimes* require a follow-up personal email; 14 reported to *often* needing a follow-up email to an initial communication; and six feel they need a follow-up email *very often*. Eleven respondents *did not answer* this question. Of these 11 respondents, five report they live in homes where English is the primary language spoken or English is spoken with another language. Six live in homes where Spanish is the primary language spoken. Figure 92 displays the information covered in this section.

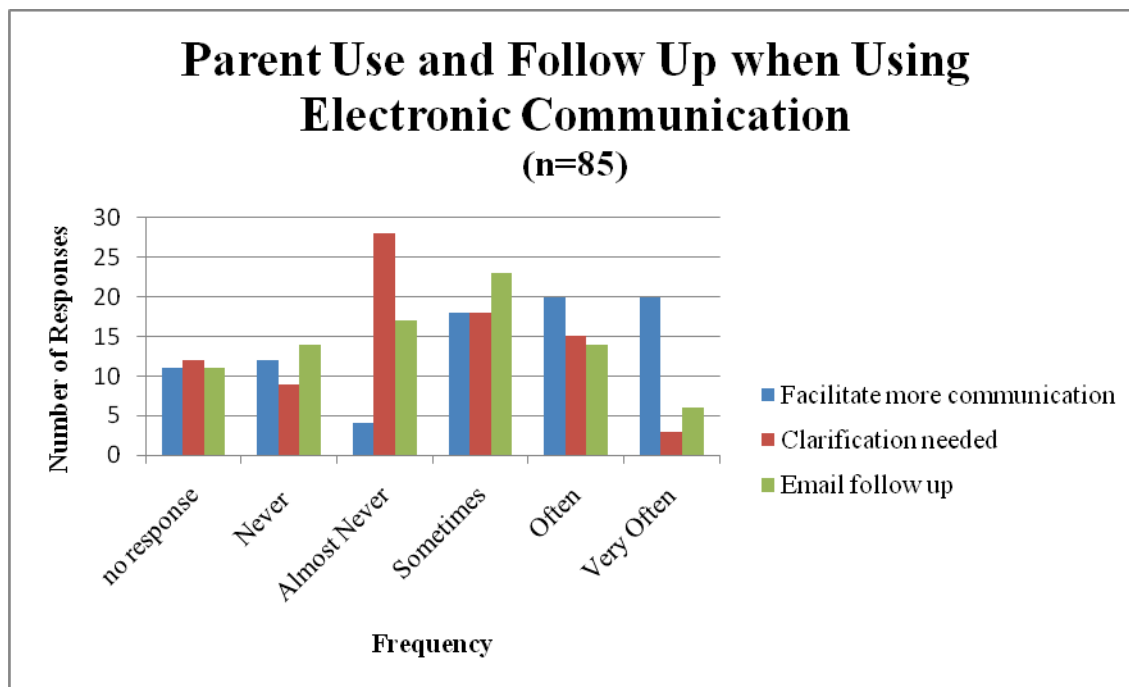


Figure 92. Parents' Use and Follow-Up Actions When Using Electronic Communication

Parents' Perceptions Regarding Electronic Conversations

Parent respondents were asked a series of open-ended questions regarding their thoughts on electronic communications, the understanding of the family's cultural background when communicating through technology, as well as how comfortable they are using electronic communication when addressing concerns about their child's academic achievements with members of the school.

Question: *What can be done differently to improve these electronic conversations?*

Twenty-three respondents *did not answer* this question. Of the 23 who did not answer, 16 reported they live in homes where English is the primary language spoken, or

English is spoken with another language; 17 live in homes where Spanish is the primary language spoken.

The following themes emerged in reviewing responses to this item:

- The use of electronic communication is appropriate. *(n = 14)*
- The use of electronic communication needs to be improved. *(n = 7)*
- Parents want to learn to use electronic communication and be in touch with members of the school community. *(n = 12)*
- Parents would like the school to provide training in how to use electronic communication forms. *(n = 7)*
- Parents do not like electronic communication. *(n = 11)*
- Parents do not have access to technology. *(n = 11)*

Parent responses regarding what might be done to improve electronic communications were greatly varied. Sixteen percent (*n = 14*) of parents feel the school's use of electronic communication is good and does not need to be changed. These parents identify the use of electronic communications to collaborate with teachers on a timely basis and as an effective way to gather the information they need regarding their students. Seven respondents who feel the use of electronic communication is good and does not need to be changed live in English-speaking homes; four respondents live in homes where Spanish is the primary language. Respondents' answers in favor of the electronic communication system within the district follow:

- “I like communicating via email with teachers. I’ve never really had a problem with it. They generally respond before school or during lunch hour. Very effective.”
- “Nothing—email is a quick and effective way to communicate with a teacher regarding my children’s progress in school.”
- “None, the teachers always respond in a very timely manner to any communication form sent to them.”
- “Teachers always respond quickly, wouldn’t change this.”
- “Homework schedule for the week is available . . . when a child is sick, you can take a look at this and download the worksheets.”
- “I’m good with your services.
- “Teachers write to us in our language so we understand.”
- “The conversations are very good.”
- “Depends on the situation and subject and other activities child is in.”
- “Depending on the teacher, it works well.”
- “I think it’s ok.”
- “Nothing.”

Eight percent ($n = 7$) of parent respondents feel the electronic methods of communication within the school or district needs to be improved. Many comments paid particular attention to requesting an updated grading system for parent use. Parents also requested more updated information via electronic communication. All respondents who

suggested improvements to the use of electronic communication live in English-speaking homes. Individual responses with these messages follow:

- “Should update Skyward more often.”
- “Online grade book for elementary school that is used and up-to-date by the teachers. Our district has one but our teacher never used it.”
- “Put the grade on the online book.”
- “Implement online grade books, classroom websites.”
- “More frequent updates on my child’s learning experiences.”
- “Have periodic progress reports emailed to parents versus sending them home with child.”
- “They need to update website. If I tried to look up a lunch menu, it would be from months ago. It would be nice to have electronic grades also.”

Fourteen percent ($n = 12$) of parent respondents want to be able to use electronic communication to stay in touch with members of the school community more easily. These communications forms were not limited to types of communication designed for parents to monitor the academic progresses of their students. Parent respondents also communicated a desire to be able to know more of what is happening throughout the school community via electronic communication forms. Eleven respondents that specified electronic communication would facilitate communication with members of the school community live in English-speaking homes; one respondent lives in a home where Spanish is the primary language. Individual parent comments that reflect this summary follow:

- “To have more communication between parents and teachers.”
- “If monthly, weekly, or daily updates were posted for access only by parents and teachers, I would access them. I am at a computer all day and this would be easy for me.”
- “Answered within two hours.”
- “Follow-up on conversations for clarification.”
- “Teacher’s requests to communicate via e-mail and Internet.”
- “Electronic communications are very rare, typically regarding volunteering/supporting classroom activities, etc. and not so much about academic progress, successes, or concerns.”
- “More effective website details . . .”
- “Use them more frequently instead of paper.”
- “Educating parents and teachers on email etiquette and processes like how often do you email the teacher with no result before escalating, and/or copying others on the team, special service and principal helps.”
- “Each teacher should send email text you. Students should also be a part of their progress.”
- “Having a web page that puts a parent in the seat of a teacher. If a parent can understand in a special and quick way about homework, behavior issues, and upcoming class work, it would put a parent in a better position to prepare the child for class work and doing homework.”

- “Unsure. There is not much yet. We are just starting to see some electronic communication. Would love more.”

Eight percent of parents ($n = 7$) also responded that they would like to have the school train them in how to use electronic communication forms. Parents indicate their desire for practical education on how to communicate electronically, as well as the etiquette regarding using electronic forms of communication. Three respondents who would like training in using technology live in English-speaking homes and four live in homes where Spanish is the primary language. Individual parent responses regarding training about electronic communication follow:

- “I have never received email from the school.”
- “Practice using more often.”
- “Educating parents /teachers. Setting guidelines for response. Having email requests carry same weight as written letters. [for example] You can ask for your student to be evaluated via email but must submit a letter to make process stick.”
- “I want to learn about this.”
- “More people need access to computers.”
- “Use it more often.”
- “Show me how to use the Internet.”

Thirteen percent of parent respondents ($n = 11$) also indicated a general dislike for electronic communication. The majority of parents (6 of 11 respondents) who specifically indicated that they do not like electronic communication directly referred to

their preference of face-to-face conversations over electronic conversations. One parent respondent cited their concern over losing details in conversations if they were delivered electronically. One parent overtly does not like using electronic communication citing it as “the worst.” Seven respondents who expressed a general dislike for electronic communication live in English-speaking homes and four respondents live in homes where Spanish is the primary language. Individual parent responses to this section follow.

- “One-to-one talk.”
- “I would need face-to-face to get a personal relation with the teacher who has my child in their class. My child is important to me, so I need to contact, that’s just me.”
- “Take time to meet face-to-face.”
- “Need to know in person with others.”
- “I am not interested in this. It’s better face-to-face conversations to have immediate solutions.”
- “Talking to them more often.”
- “Even though we have Internet access, it is something we don’t use on a daily basis.”
- “We would lose details about projects through quick emails.”
- “Any problems with the students should be addressed directly to the parents.”
- “I don’t use them. Letters that my child brings home are fine.”
- “It’s the worst. I don’t agree with emails.”

Thirteen percent of parent respondents ($n = 11$) do not have access to technology. One parent does not see the need for electronic communication because the student performs well in school. Three parents cite a lack of technology or access to the Internet in order to access any electronic communication from the school. One parent indicates a desire to use electronic communication in the future in spite of the fact that they do not currently have this ability. Two respondents who do not have access to technology live in English-speaking homes; five live in homes where Spanish is the primary language.

Individual parent responses follow:

- “My son does well so we really don’t need to communicate.”
- “It will be nice to have one.”
- “I don’t use them.”
- “Not Applicable.”
- “You can’t really use computers because computers are not accessible to us.”
- “I don’t have a computer.”

Parent responses to open-ended questions regarding teachers’ use of electronic communication varied greatly. Twenty-seven percent ($n = 23$) of parent respondents *did not respond* to this question, 16% ($n = 14$) are content with the use of electronic communication; 13% ($n = 11$) do not have access to technology, and 13% ($n = 11$) do not like the use of electronic communication. The remaining 31% ($n = 26$) of parent respondents feel the school should take action to improve electronic communication either through directly providing training for parents ($n = 7$), finding some way for

parents to learn about electronic communication ($n = 12$), or improving the use of electronic communication ($n = 7$).

Parents' Perceptions of Teacher Knowledge of Familial Cultural Background When Using Electronic Means of Communication

Question: *How does your child/children's teacher(s) demonstrate knowledge of your family's cultural background when communicating with you via the Internet?*

Parent responses varied from not feeling the teacher had an understanding of their culture to not understanding how family culture impacts communication between teachers and parents. Ten respondents felt the question was *not applicable*. The following themes emerged in reviewing responses to this item:

- Teachers do not need to know about the cultural backgrounds of students' families. *(n = 19)*
- Teachers demonstrate knowledge of the students' cultural backgrounds. *(n = 5)*
- Parents do not know if the teacher is aware of their cultural background. *(n = 6)*
- Teachers are not aware of parents' cultural background. *(n = 10)*

While other respondents were not sure or did not feel teacher knowledge of their family cultural background was important, 22% ($n = 19$) of parent respondents did not see a need for the teacher to know anything about their cultural background. One respondent commented, "Doesn't apply. Don't know why teachers should have to know

cultural background to communicate via Internet other than language barriers.” Another respondent echoed that idea by responding, “I do not see the importance of cultural background in school. We are there to learn, not represent a culture!” Seventeen of the nineteen respondents live in homes where English is the primary language spoken, one reported English and Spanish spoken in the home, one reported speaking Greek with English in the home, and one reported speaking Tagalog and English in the home. Two respondents who feel teachers do not need to be aware of the cultural background of their students live in homes where Spanish is the primary language. Responses from parents that reflect an idea that an understanding of cultural background is not important to electronic communication between teachers and parents follow:

- “Doesn’t apply. Don’t know why teachers should have to know cultural background to communicate via Internet other than language barriers.”
- “I do not see the importance of cultural background in school. We are there to learn, not represent a culture!”
- “We are American and speak English. There is no problems with communications or cultural backgrounds. If I moved my family to another country, I feel it would be my responsibility to learn their language and culture and to teach my children it as well, not everyone else’s.”
- “Our cultural background does not affect Internet communication. Teacher communicates with us in English as we are an English-speaking household.”
- “She isn’t aware and it isn’t necessary.”

- “Our family’s cultural background is irrelevant. The communication is done in English and my son’s academic and home language is English.”
- “The teacher mainly talks to me and I am American; there are not cultural differences.”
- “Doesn’t—I do not see a need for the teacher to demonstrate knowledge of my family’s cultural background for this purpose.”
- “Teachers communicate in English”
- “They just email me in English.”
- “Teacher speak English. We wouldn’t expect a message in Spanish.”
- “I don’t have an example of this.”
- “This is not applicable.”
- “Never a problem.”
- “Never been done.”
- “Never.”
- “Fine.”
- “None.”
- “Does not apply.”

Six percent ($n = 5$) of parent respondents indicated they feel their students’ teacher effectively demonstrates knowledge of the family’s cultural background when communicating with them via electronic communications. Parent responses were brief and ranged from, “They are just very supportive in any situation,” to one word responses such as “great.” Four of the respondents who feel the teacher demonstrates a knowledge

of their family background live in homes where English is the primary language, one also speaks Spanish in the home, and one lives in a home where Spanish is the primary language spoken. Parent responses that indicate parental support of teachers' understanding of family cultural backgrounds follow:

- “Very well.”
- “Great.”
- “They are just very supporting in any situation.”
- “Different languages.”
- “Excellent.”

Seven percent of parent respondents ($n = 6$) did not know if the parent had knowledge of their cultural background, or they did not feel this question was applicable to them. Eight respondents replied *Not Applicable* to this question and five respondents replied, “Not a problem” to this question. Other respondents did not know if the teacher had addressed the cultural backgrounds of their students' families. Four of the respondents who do not know if the teacher has knowledge of their family background live in homes where English is the primary language, one of these respondents also speaks Albanian in the home, and two of these respondents live in homes where Spanish is the primary language. Parent responses follow:

- “She has never done that.”
- “I have not received email.”
- “This has never been communicated or at least to my knowledge.”
- “No clue. Teachers really do not probe into parents' cultural backgrounds.”

- “We don’t communicate with them via Internet.”
- “I don’t know. We would have to ask the teacher.”

Eleven percent of parent respondents ($n = 10$) point out that teachers do not know about their cultural background and one respondent feels it would be easy for teachers to learn about family’s cultural backgrounds. Three respondents feel teachers do not know about their cultural background and responded either “not much” or “not at all.” Some parents would like to see classroom teachers take more of an interest in the cultural background of students’ families. The theme of communicating face-to-face was touched on by two respondents as well. Four of the respondents who feel the teacher does not know about their cultural background live in homes where English is the primary language and six live in homes where Spanish is the primary language. Parent responses follow:

- “I think it would be very easy for the teacher to know more about the cultures of the families.”
- “The teacher does not demonstrate knowledge of our family background.”
- “There is a lack of education and understanding of our traditions and language.”
- “Personal knowledge. Face-to-face is better.”
- “We see each other face-to-face and have conversations that way.”
- “It’s better to talk face-to-face to clarify everything immediately and not have to wait for an email.”
- “Give us something to learn about what our kids are learning.”

The fewest number ($n = 5$) of respondents felt teachers demonstrate an understanding of the cultural background of their students, and a similar number ($n = 6$) of respondents felt the teacher was not aware of students' cultural backgrounds. Similarly, seven respondents did not feel this question was applicable. The largest number of parent respondents ($n = 19$) did not feel that teachers need to know about the cultural backgrounds of their students.

Parent Comfort With Using Electronic Communication to Express Concerns Regarding Student Academic Achievement

Question: *How comfortable are you using technology when addressing your concerns regarding your child's academic achievements?*

The following themes emerged from this open-ended question:

- Parents are comfortable using technology. $(n = 23)$
- Access is a detriment to parents using technology. $(n = 6)$
- Parents prefer face-to-face communication when communicating with teachers. $(n = 8)$
- Parents will do whatever is needed if it benefits their student. $(n = 3)$
- Parents are not comfortable using technology as a communications tool. $(n = 5)$

Twenty-seven percent ($n = 23$) of respondents replied they are "very comfortable" using technology to address their concerns regarding their student's academic achievement. Parent respondents indicated they feel very comfortable using

technology and added their thoughts regarding the usefulness of technology to communicate with the school. These comments focused on the ease of use, and the fact that these respondents felt using technology to communicate allowed them to overcome time constraints or the limitations of work in order to be in contact with their student's teachers. Of the respondents who are comfortable using technology to communicate with their students' teachers, 13 live in homes where English is the primary language spoken. Of these 13 respondents, one household also speaks English (British) English, one family speaks Greek, one family speaks Albanian, and three families speak both English and Spanish. Six families who feel comfortable using technology to communicate with their students' teachers live in homes where the family primarily speaks Spanish. These respondents' answers follow:

- "Very comfortable if it were used."
- "Very good, it is the most simple way to get whatever information."
- "Very comfortable as long as the teacher links on to website frequently to get response back quickly."
- "Very comfortable. The teacher is always able to reply to my emails fairly quickly and does a nice job of also communicating on a weekly basis via my son's student planner."
- "Very comfortable. I work full time and so does my husband. Many times it is easier to get on the computer."

- “Very comfortable. It’s very effective and less time consuming for the teacher and parents. It’s also more concise and to the point. I’ve always gotten quick responses as well.”
- “I am very comfortable in emailing as the teachers are quicker to respond to email or written letter.”
- “Extremely. Check my computer all the time.”
- “I am very comfortable.”
- “Comfortable”
- “I would feel pretty comfortable.”
- “I am comfortable”
- “It does not bother me either way.”
- “Completely.”

Seven percent ($n = 6$) of parent respondents cited access as a detriment to using technology to communicate with their students’ schools. Respondents cited parents’ inabilities to use technology, lack of access to technology, as well as the desire to “be a part of it.” One respondent pointed out current economic conditions and the desire to use technology if it were provided free-of-charge. Of the respondents who cited access to technology as a deterrent to using it to communicate with teachers, three live in English-speaking homes and three live in Spanish-speaking homes. These responses follow:

- “It is easier but there are a lot of families that don’t have Internet access and don’t know how to use a computer.”

- “I would be able to receive email now because I do check my email but I have only done that in the last two months.”
- “Not everyone has Internet all day. There should be free Internet access, but still not everyone has time and the economy is bad.”
- “I would love to be a part of it”
- “I don’t have this.”
- “I don’t communicate with them. But if I had to, I would be very comfortable by email.”

The theme of face-to-face communication emerged again through parent responses inquiring about the effectiveness of using technology to communicate with schools. Nine percent ($n = 8$) of respondents specifically cited their preference for interpersonal interaction over communicating with teachers through technological means. One parent respondent pointed out an opinion that people do not communicate effectively through technology, saying, “It’s easy to hide behind a computer.” Other parent respondents specifically indicated their preference for addressing concerns and issues in person rather than through electronic communication. Seven of the eight respondents who prefer face-to-face communication to communicate with teachers live in English-speaking homes and one lives in a home where Spanish is the primary language. These responses follow:

- “I am comfortable but prefer a face-to-face discussion since many interpretations of written communication can occur—not all of them positive. It’s easy to hide behind a computer.”

- “Comfortable for updates—but face-to-face included in those communications.”
- “I don’t use it. It is much better to contact people in person. The Internet limits contact between the teacher and parents of the students. This is why I don’t have a computer.
- Very as long as it’s going good. If problems, face-to-face.”
- “I’d rather meet in person to discuss at length any and all concerns. I think my children are worth my time and effort to meet with teachers. Teachers should put more time in meeting parents.”
- “Not much. I like the human touch.”
- “A phone call for concerns.”
- “I prefer pen and paper or conference times!”
- “We not know much computer so face-to-face is better for me. But to get my child’s grades and so on I use the computer.”

Four percent ($n = 3$) of parent respondents indicated they would do whatever is necessary toward benefitting their student toward success in school. Respondents live in homes where Spanish is the primary language spoken. These responses follow:

- “It is very important for my children.”
- “This is very important to the student’s academic development so therefore, it is also important to us as their parent.”
- “I feel good for my son.”

One parent respondent indicated discomfort when using technology to communicate with their student's teachers. This parent lives in a home where Spanish is the primary spoken language. Five percent ($n = 4$) of parent respondents have Internet access available to them but do not see its use as a communications tool. One parent responded, "It's only good for basic searching on Internet. We will lose our brains because we are so dependent on technology." Two of these respondents live in homes where English and one other language is spoken; in one home, English is spoken with Albanian; and in the other home, English is spoken with Tagalog. Two respondents who do not use the Internet as a tool for communication live in homes where Spanish is primarily spoken. These responses follow:

- "Not very comfortable.
- "It's only good for basic searching on Internet. We will lose our brains because we are so dependent on technology."
- "The email they were sending to me is a 'no reply email' basically, no communication at all. They are just sending me grade updates and that's it."
- "We never use the Internet for searching things about school topics."
- "It depends on how the communication is being used and what the content is."

While the majority of parents respondents ($n = 23$) feel comfortable using technology to address their concerns regarding student academic achievement, there are still parents who are not comfortable using this communication form. While some respondents ($n = 3$) said they would do whatever is necessary to ensure the academic

success of their student, others feel access is a detriment to using technology ($n = 6$), or they are not comfortable using technology as a communication tool ($n = 5$).

District Technology Plans

A copy of the district board policy regarding parent involvement and electronic communication was obtained through the district website to ascertain policy regarding the use of electronic communication throughout the district. Under the Community Relations section of the Online Board Policy, the district addressed its intent toward parent involvement (School District, 2010). District policy states that the district should assure collaborative relationships between students' families and the members of the school community by enabling parents to become active partners in education.

Board policy states the superintendent is responsible for:

1. Establishing policies that support collaborative relationships by keeping parents informed about their child's school and education.
2. Encouraging parent involvement in school.
3. Seeking input from parents and guardians on important district issues.
4. Establishing effective two-way communications between all families and district personnel.
5. Informing parents on how they can support their child's learning.

The implementation or review of these policies is not specified in the online district board policy (School District, 2010). Establishing partnerships between parents and school is also addressed in the Instruction section of the board policy under the Homework subsection. Board policy states that homework serves as a communications

link between the school, parents, and/or guardians. Each school's electronic network is seen as a communications tool. According to the Online Board Policy, district electronic networks are also included as a part of the school instructional program as a vehicle to promote educational excellence through facilitating resource sharing, innovation, and collaboration (School District). This board policy was implemented and last updated in Fall 2005.

Summary

Chapter IV is intended to display data gathered from a qualitative analysis of responses to the Teacher Questionnaire that were distributed simultaneously to 211 teachers in a large culturally diverse school district, along with the Parent Questionnaire that was distributed to 3,906 families in the school district. Teacher Questionnaire respondents totaled 64 teachers; Parent Questionnaire respondents totaled 85 parents.

The district has one junior high school with an enrollment of 1,305 students. Six of the seven elementary schools participated in this research; enrollment numbers follow:

School 1 Enrollment	474 students
School 2 Enrollment	582 students
School 3 Enrollment	348 students
School 4 Enrollment	423 students
School 5 Enrollment	434 students
School 6 Enrollment	340 students

The chapter presented demographic data relating to both the parents and teachers who were included in this study.

Teacher demographic data included gender, professional experience, teaching assignment, and class size. Teachers were asked the forms and frequency of communication they use to collaborate with the parents or guardians of their students, and reported on the frequency and follow-up needed when receiving email from students' parents as well. Teacher responses to open-ended questions regarding how teachers communicate with parents and their perceptions of how electronic communication facilitates trust and collaboration were also displayed.

Parent or guardian demographic data included gender, home language, and number and ages of children in the home. Parents reported the forms and frequency of communication they receive about their child from the school district, and were asked to record the forms and frequency of communication they use to communicate to the school regarding student academic issues and how often these communications required additional communication. Parent responses to open-ended questions relating to the effectiveness of electronic communications as a communications method and parent perceptions of district cultural knowledge were also displayed.

This chapter outlined the district board policy regarding parent involvement and electronic communication. This policy details the standards regarding electronic communication use throughout the district. Chapter V seeks to identify common themes that emerge, as a result of this presentation of the study's data.

CHAPTER V
INTERPRETATIONS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Epstein (2001) wrote:

Without partnerships, educators segment students into the school child and the home child, ignoring the whole child. This parceling reduces or eliminates guidance, support, and encouragement for children's learning from parents, relatives, neighbors, peers, religious leaders, and other adults. (p. 5)

The positive impact of partnerships between the adults in a student's life has been documented by numerous research studies (De Gaetano, 2007; DePlanty, Coulter-Kern, & Duchane, 2007; Epstein, 2001; Hoover-Dempsey et al., 2005; Miretzky, 2004; Sanders, 2008; Warren, Hong, Rubin, & Uy, 2009). Building partnerships between parents and teachers promotes a collaborative relationship where parents can work together with members of the school community toward student academic achievement (Ho Sui-Chu & Willms, 1996; Sanders, 2008; Walker, Hoover-Dempsey, Whetsel, & Green, 2004; Warren et al., 2009). The NCLB act also identified the importance of the home-school relationship and mandated that each school district develop a plan to support parent teacher partnerships (U.S. Department of Education, 2001).

Socioeconomic status, education, and culture can each factor into whether a parent becomes involved in the educational process (Joshi, Eberly, & Konzal, 2005; Lee & Bowen, 2006; Leonardi, 2002). Parent perception of their role in the educative process also impacts participation (Anderson & Minke, 2007; Green, Walker, Hoover-Dempsey, & Sandler, 2007; Hoover-Dempsey et al., 2005). The most effective models used to promote parent involvement and collaboration involves promoting reciprocal relationships between home and school (Epstein, 1986; Green et al., 2007; Hoover-Dempsey et al., 2005; Walker et al., 2004). Across the country, school districts are attempting to implement electronic communication as a communications form that supports a collaborative and personal relationship between parents and teachers, but also allows for flexibility in the delivery and response to the communication (Anderson & Minke, 2007; Hurst, 2007). This study used Activity Theory as a conceptual framework to investigate how the school community uses their existing electronic communications system to work together toward facilitating student achievement (Anderson & Minke, 2007; Engeström, 2004; Jonassen & Rohrer-Murphy, 1999).

The purpose of this qualitative study is to examine the ways parents and teachers utilize electronic communications to invite one another to participate in activities designed for student academic achievements (Anderson & Minke, 2007). This study concentrated on the ways parents and teachers communicate and the frequency of internet facilitated communication (IFC), and identifies how parents and teachers communicate in a school district that has provided the necessary technology to facilitate electronic communication by the teachers in the district.

The primary research question is: *How does electronic communication impact parent-teacher communications regarding student academic achievements?*

Specifically, the fundamental research questions are:

1. What are the types, frequency, and degree of communications initiated by parents and teachers with the advent of instantaneous communication created by electronic communications technology?
2. When parents initiate electronic communication regarding student academic achievement, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?
3. When teachers initiate electronic communication regarding student academic achievements, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

Research for this study was conducted in a large suburban elementary school district of a major metropolitan city. The district consists of eight elementary school buildings that serve Grades K-8. The racial and ethnic diversity within the district is within a measurable range for research with 31.9% of the families from Caucasian homes and 60.3% from Hispanic. Socioeconomic diversity exists in the district with 46.1% of the families registered as low income households. Cultural diversity is present with 23% of the students from families with a limited English proficiency rate.

Permission to use the district was granted from the school superintendent. Subsequently, the researcher requested permission via telephone call and electronic letter from the principals of the eight schools in the district—permission was received to

include seven schools in the district: six elementary and one district junior high school. Participating teachers received a questionnaire in their district mailbox. Parent questionnaires were given to classroom teachers for distribution in their classrooms via the student's communications folder, which travels to and from school in the student's backpack. Parent questionnaires were delivered in English on one side and Spanish on the other and respondents were encouraged to answer questions in the language they feel most comfortable using. By the conclusion of the allotted window of time, 85 of the 3,906 parent questionnaires were completed, and 64 of the 211 teacher surveys were completed and returned. This made for 149 total completed surveys.

Summary findings are reported in this chapter. The analysis is organized by participant responses to the research questions and followed by the researcher's interpretation of the findings. Links to current research are included and study limitations are discussed. Finally, possibilities for future research are suggested.

Analysis and Interpretation

Research Question 1: What are the types, frequency, and degree of communications initiated by parents and teachers with the advent of instantaneous communication created by electronic communications technology?

Regardless of gender, language, experience, or age of student, 100% of parents and teacher respondents ($n = 149$) use one or more of the following to communicate regarding student academic achievement:

1. District Website.
2. Classroom Website.

3. Classroom Newsletter (paper).
4. Classroom Newsletter via the Internet.
5. Individualized Student Reports.
6. Personal Communications Individualized to Parents Regarding Student (paper).
7. Email Communications to Individual Parents Regarding Specific Subject Matter About Student.
8. Face-to-Face Meetings Regarding Student Progress.
9. Informal Face-to-Face Interactions with Parents.
10. Homework Help Page.
11. Online Grade Book.

Each communications form was used either, daily, weekly, monthly, quarterly, or on an annual basis by parents and teachers with students from pre-school through eighth grade to gather or communicate information. Lee and Bowen (2006) linked increased parent involvement in school matters with higher educational achievement. Epstein and Sanders (2006), Halsey (2005) and Sanders (2008) have reported on parents' desire to be involved in their children's educational process. The survey results indicating parent and teacher use of communications tools available in the school district support both of these statements.

Parents

Parents of younger students use communication tools differently than parents of older students (Epstein, 2001; Hayes & Chodkiewicz, 2006). Research indicates that parent involvement decreases as students matriculate through the district (Epstein, 2001). Responses to this survey reflect this trend. Parent use of communication devices to gather information rose from kindergarten and peaked in fourth grade at 57% ($n = 48$). By the fifth grade, parent use of communication methods to gather information waned gradually through eighth grade at 9% ($n = 8$). Parents of younger students did not use any particular type of communication with any more frequency than parents of older students.

Parents did tend to use more traditional communication methods such as classroom newsletters, individualized grade reports, and face-to-face meetings to gather information regarding their student's academic achievement. For instance, 82% ($n = 70$) of respondents indicated they use a traditional paper form of the classroom newsletter with any frequency to gather information regarding student achievement. Conversely, 34% ($n = 29$) of parent respondents use an electronic form of the classroom newsletter to gather information. This trend was consistent for parents from English, as well as Spanish-speaking households. Parents predominantly answered that they see the teacher in face-to-face meetings and use individualized reports to gather information regarding academic achievement on a quarterly basis. Forty-two percent ($n = 36$) of parents also use face-to-face meetings on a quarterly basis to communicate successes or concerns about student achievement back to the school. This frequency mirrors research regarding

the frequency and methodology school districts employ to report to parents via conferences and traditional grade reports (Halsey, 2005).

Parent response to the use of electronic communication forms to gather information (such as the use of a classroom website, homework help pages, or an online grade book) resulted in the highest frequency of questions left blank, as well as the highest number of parents reporting they never use these types of communication. Over 25% of parent respondents never use the district website, classroom websites, homework help pages, or the online grade book. In Grades 6-8, parent responses that they *Never* use electronic communication were very close in number to the parents who report to using electronic communication on a daily basis. For instance, four parents of middle school students indicated they never use the online grade book and four parents reported using the online grade book on a daily basis. The lack of parent use of existing communications form to gather information may reflect on a lack of training on how to use electronic communication. If parents can get the information they desire on a consistent basis and in a traditional form, they will not have a reason to change their habits and learn how to use a newer resource (Kvasny & Keil, 2006).

Parent respondents use the district and classroom websites as a vehicle to gather information rather than to communicate information. Fifty-two parent respondents indicated they use the district website to gather information with any frequency, whereas 21 parents indicated they use the district website to communicate information back to the district. Similarly, 27 respondents indicated use of the classroom website as a source of information gathering while 14 use the classroom website as a means of communicating

information back to the classroom. From this response rate, it appears the district and classroom websites are less of a format to elicit communication and more of an outlet for the display of information from the school out to whomever is interested. This type of one-way information distribution is common to schools but should not be considered communication because there is frequently no apparent way for the parent to respond to the display of information (Epstein, 1986). While newsletters might be considered a display of information, 58% ($n = 51$) of parent respondents to this study report using the classroom newsletter as a way to communicate concerns or successes back to the school. The fact that parents rely on traditional forms of school communication to gather information is interesting in light of the fact that over 70% of parent respondents indicate their use of electronic communication with the school. As a result of an initial email communication, 73% ($n = 62$) of parents report to using electronic communication to facilitate additional conversation regarding information. Seventy-three percent ($n = 62$) respond to an initial email to clarify information they have received from the school and 70% ($n = 60$) use electronic communication follow-up on an original electronic communication with a personal email of their own. This trend (to primarily utilize electronic communication in response to an electronic communication rather than initiate an electronic communication) seems to indicate a parental hesitancy to use the digital tools available to them. As a consequence, these parents revert to more traditional communication forms that fit their comfort level (Kvasny & Keil, 2006; Selwyn, 2004).

The district in this study was selected due to the diversity found in the parent and student populations. The district reports 31.9% families from Caucasian homes and

60.3% from Hispanic homes. Additionally, 46.1% of families are registered as low-income households. Background research pertaining to use of electronic resources along racial, ethnic, and social class indicates immigrant and low-income families have less access to the internet (Leonardi, 2002; Ono & Zavodny, 2008). This study did not ask respondents about household income levels, therefore background information regarding socioeconomic status was not used to analyze data.

Parent respondents answered questions about the language spoken. The home languages reported were 51% English ($n = 43$), 34% Spanish ($n = 29$), 8% both English and Spanish ($n = 8$), 1% both English and Albanian ($n = 1$), 1% both English and Greek ($n = 1$), 1% both English and Tagalog ($n = 1$), 1% both English and British English ($n = 1$), 1% both English and Polish ($n = 1$), and 1% both English and Arabic ($n = 1$) spoken in the home. This information provided a basis from which to analyze cultural uses of technology, based on an assumption that language can be an indicator of home culture (Ono & Zavodny, 2008).

Background research indicates immigrants, in general, are less likely to use computers because mastery of the English language impacts immigrants' technology use (Leonardi, 2003; Ono & Zavodny, 2008). Background research on Latino technology use indicates that technology is not as prevalent in Latino cultures as in Anglo cultures (Leonardi, 2002; Ono & Zavodny, 2008). Research specifies this is because Latinos do not see electronic communication as a viable method of contacting other people because Latinos favor personal interactions. While 23% of families in the district are from homes with limited English proficiency, and 34% ($n = 29$) of respondents indicated Spanish is

spoken in the home, trends that link language proficiency with technology use did not appear in the study results. As was indicated through the open-ended response questions on the parent survey, some Latino parents responded they do not use technology; others said they use technology because it is important for their children. Parent response data seem to indicate a tendency toward interpersonal meetings when collaboration occurs between parents and teachers. However, this trend was not divided along ethnic or gender lines. Additionally, trends in parent use were not divided by gender or ethnic backgrounds.

Eight percent of parent respondents from English-speaking households ($n = 7$) and 13% of parents from Spanish-speaking households ($n = 11$) indicated their preference for personal communication over electronic communication. A parent from an English-speaking household responded:

- “I’d rather meet in person to discuss at length any and all concerns. I think my children are worth my time and effort to meet with teachers. Teachers should put more time in meeting parents.”

Similarly, a parent from a Spanish-speaking household responded in the following way:

- “I don’t use it. It is much better to contact people in person. The internet limits contact between the teacher and parents of the students. This is why I don’t have a computer.”

Conversely, 8% of parent respondents from English-speaking households ($n = 7$) and 5% of parents from Spanish-speaking households ($n = 4$) indicated their support of

the use of technology. The following responses were common from households where Spanish or English are the primary language:

- “This is very important to the student's academic development so therefore it is also important to us as their parent.”
- “Very good, it is the most simple way to get whatever information.”

As a consequence, data from this research did not support previous research citing a cultural divide in technology use as a communications mean.

Teachers

Teacher respondents ($n = 64$) to this survey reflect both male and female teachers. Professional experience both in and out of the district spanned from 37 years of experience to first-year teachers. Teacher respondents taught in classrooms from pre-school through eighth grade. Respondents reported class sizes from six to 37 students. This demographic information is a thorough representation of the professional teaching staff in this district.

Teachers were asked what communication forms they use to share information regarding student achievement with parents. Teachers could report “*Never*,” “*Daily*,” “*Weekly*,” “*Monthly*,” “*Quarterly*,” or “*Annually*” to the following 11 communications methods:

1. District Website.
2. Classroom Website.
3. Classroom Newsletter (paper).
4. Classroom Newsletter via the Internet.

5. Individualized Student Reports.
6. Personal Communications Individualized to Parents Regarding Student (paper).
7. Email Communications to Individual Parents Regarding Specific Subject Matter About Student.
8. Face-to-Face Meetings Regarding Student Progress.
9. Informal Face-to-Face Interactions with Parents.
10. Homework Help Page.
11. Online Grade Book.

Eighty-nine percent ($n = 57$) of teacher respondents indicate they feel their practices regarding communication with parents is effective, somewhat effective, or very effective.

Teachers in this study reported to most often using personal communications, formal and informal face-to-face meetings, and paper based classroom newsletters most often to communicate with parents. These communication forms mimic the traditional communication forms used by the parent respondents in this study. Ninety-five percent ($n = 61$) of teacher respondents use personalized communication with parents regarding their student on paper on a daily, weekly, monthly, quarterly, or annual basis. Teachers communicate with parents via personalized communication on a daily or weekly basis by 48% ($n = 31$) of the time. When teachers were asked to respond to how they communicate concerns to parents, teachers listed traditional methods of personalized communication such as phone calls or face-to-face meetings. Teachers' responses also

supported the use of electronic means of communication to communicate with parents. Eighty percent of teacher respondents ($n = 51$) indicated their use of email to communicate with parents. This frequency seems to indicate the use of electronic communication is recognized by teachers as a tool that can be used for personalized communication with parents throughout the district (Engeström, 2004; Selwyn, 2004).

Face-to-face encounters are used in some form by a majority ($n = 61$) of the teacher respondents. Seventy-three percent ($n = 47$) of teacher respondents report using face-to-face meetings with parents on a quarterly basis. This frequency reflects the timing of parent-teacher conferences or opportunities for open house activities. The remaining teacher respondents report to having face-to-face meetings with parents on a weekly, monthly, or annual basis. Ninety-five percent of teacher respondents report using informal face-to-face meetings to communicate with parents regarding student progress. The grade levels taught by these respondents spanned pre-kindergarten through eighth grade. These data seems to indicate an ongoing parent presence in the school building for 95% of teachers to report using this communications form to report about student progress to parents.

To better understand the use of digital and non-digital communication forms, teachers were directly asked about their use of a paper-based classroom newsletter to communicate with parents, as well as their use of an electronic newsletter to communicate with parents. Sixty-nine percent ($n = 44$) of teachers reported using a non-electronic classroom newsletter to communicate with parents with some frequency. Alternately, only 16% ($n = 10$) use an electronic newsletter to communicate with parents.

Eighty percent ($n = 51$) of teachers never use an electronic grade book. Teachers reported using the district website, classroom website, and homework help page the least to communicate with parents. While these communication methods are electronic in their format, these communication forms are traditionally used to display information, rather than garner collaboration (Center for Research on Elementary and Middle Schools, 1986; Epstein, 2001). Teacher responses to open-ended questions regarding technology use revealed their perceptions of using electronic communication as a method of collaborating with parents. Teachers cite the availability of electronic communication as a viable collaborations method, but also refer to parents' inaccessibility to technology or parent lack of knowledge regarding how to use technology as their reason for relying on traditional communications methods:

- “Most of my parents do not own a computer; therefore voice-to-voice is much more effective.”
- “Unfortunately, many families in our school don't have computer and email access so we're not able to utilize it as much as we'd like to.”
- “Many do not have internet access. Many do not speak English.

Teachers were asked about their years of experience in order to determine if time in the classroom might impact teacher practice. No trends emerged when considering teacher experience. The lack of difference between veteran teachers and newer teachers is surprising given the fact that the positive impact of communication between parents and teachers is covered in current teacher preparation coursework (Epstein & Sanders, 2006).

According to both parent and teacher respondents in this district, traditional forms of communication that rely on face-to-face meetings or paper based reports are the preferred methods to send and receive information regarding student progress over electronic communication forms. These traditional communication forms most often happen on a quarterly basis, but for some communication forms, teachers communicate on a monthly, weekly, or daily basis with parents. Electronic communication forms are used more frequently to display information than to invite parent participation or collaboration between parents and teachers toward the goal of student achievement. The results of this research indicate that teachers show a bias for traditional communication forms since they report using electronic communication forms on the least frequent basis.

How individuals use environmental tools to accomplish tasks or reach goals is mediated by their social group (Engeström, 2004). The school district involved in this research currently has made a number of electronic as well as non-electronic tools for communication available to the school community's teachers and parents. The results of this research study suggest that school community members are not collectively using all of the electronic communication tools to collaborate with one another toward student achievement. Research data suggest:

- A trend toward using traditional, non-electronic communication forms for collaboration.
- A trend suggesting electronic communication forms are used for gathering information.

Of the respondents, 13% ($n = 11$) of parents and 56% ($n = 36$) of teachers reported the use of electronic communication forms to facilitate collaborative conversations. Traditional communication forms are more widely used. For example, 100% of teachers ($n = 64$) and 86% of parents ($n = 73$) responded to using face-to-face meetings to collaborate, 70% of teachers ($n = 44$) use phone calls to communicate with parents, and 61% of parents ($n = 39$) report using handwritten notes to communicate with teachers.

The existence and varied use of these two different communication forms seems to indicate that, although the district has provided the means for electronic communication, parents and teachers still use non-electronic communication methods to collaborate with one another. This may signal an inconsistency in the suggested form of communication within the school community (Engeström, 2001). This inconsistency is relevant because it provides the opportunity for a change in behavior by the school community regarding the kinds of tools used for parent-teacher communications (Engeström, 2001). The school community is communicating with one another through two different set of tools. Some community members have deviated from the traditional norms of communication like phone calls, face-to-face meetings, and handwritten notes and are using technology facilitated communication forms such as electronic mail. However, other parents and teachers continue to use traditional, non-electronic communication forms to facilitate collaboration. According to Engestrom's interpretation of Activity Theory, the inconsistency regarding the use of electronic and non-electronic communication forms provides the district with an opportunity to collectively review

why both electronic and non-electronic communication forms are both in use, and make decisions regarding the use and development of the communication forms available in the district (Engeström, 2001).

Research Question 2: When parents initiate electronic communication regarding student academic achievement, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

Teachers were asked to respond to questions regarding the frequency of communication from parents directed toward teachers. Teachers report that parents infrequently establish an electronic conversation with the classroom teacher:

- “The parent population in this school is in large, afraid of using technology or are unaware of how to use it especially when having first grade students because parents aren't used to it.”
- “I have very little electronic communication with bilingual parents. We communicate in person or by phone with a translator.”

Thirty-four percent ($n = 22$) of teachers report their preference toward using electronic communication because of the ability to track conversations and deliver detailed information. These teachers used the open-ended questions on the questionnaire to cite the benefits of electronic communications between parents and teachers:

- “Several parents have communicated behavior concerns, clarification requests regarding activities, and offers to help out with projects and field trips. I feel that since many parents work and don't see me face-to-face; we can have clear communication that can even be referred to again. It is very effective.”

- “Being able to email with a parent has certainly made life easier and more ‘detailed.’ It’s easier to show parents and explain a grade when all the info is written out. You’re able to get a message to them without playing phone tag.”

The identification of the effectiveness of electronic communication toward collaborative problem solving and task completion supports the premise that teacher respondents identify electronic communication as a viable tool for professional community at the school (Engeström, 2004). Conversely, teachers also cited limitations in their use of electronic communication to contact parents. Teacher respondents indicate the classroom teacher’s preference to communicate in a format that supports parent access or skill set:

- “No difference—they cannot afford computers or think it’s too complicated to learn.”
- “Most of my parents do not own a computer; therefore voice-to-voice is much more effective.”

Teacher responses echoed background research and attributed the lack of use of electronic communication to a connection between a family’s socioeconomic status and their use of electronic communication forms (Thompson, 2008).

Sixty-eight percent ($n = 44$) of teacher respondents reported that once an email is initiated by a parent, additional communication usually takes place—however, clarification is not frequently needed. The infrequency of the need for clarification regarding parent-generated email supports the teacher respondents’ implied

understanding that using email as a communications tool is an effective solution. A few teachers expressed their desire to communicate with parents at a convenient time:

- “I am available 24 hours a day by electronic communication, which I feel helps parents better communicate and feel secure.”

While teachers cite the reciprocal nature of parent initiated electronic communication, teacher respondents also countered with the perception that face-to-face encounters and telephone communications are more effective ways of engaging parents in collaborative activities designed to promote student achievements. Teacher responses ($n = 5$) echoed the perception that telephone conversations build better partnerships between teachers and parents than electronic communication:

- “It's a great tool, but most Hispanic parents don't have the resources, which is frustrating. Trust is built by phone, not with this method.”
- “Many families prefer phone calls/letters as they have limited access to internet.”
- “Actually, the phone is still a more effective tool for us. We all have phones in our classrooms. Not all of our parent have phones however. It is sometimes hard to contact some of our parents.”

This response mirrors the findings of background research that states that traditional telephone communication between teachers and the community leads to a greater degree of trust between parents and teachers (Becker & Epstein, 1982; Miretzky, 2004).

Teachers were asked to respond to their perception of the effectiveness of electronic communication in facilitating collaboration in the school's culturally diverse community. Responses suggest that teachers realize the need for differentiating communication language:

- “Website offers information in Spanish as well as English.”
- “I think that electronic communication is a really good way to facilitate initial contact within cultural diversity.”
- “It allows for parents who are not native to the English language to take time to understand the message being conveyed.”

These perceptions align with the background research regarding building strong collaborative relationships in culturally diverse schools (Forsyth, Barnes, & Adams, 2006).

A sample of teacher responses also reflects research regarding the cultural use of technology to build collaborative relationships (Joshi et al., 2005; Leonardi, 2003; Ono & Zavodny, 2008). According to data, some teacher respondents feel electronic communication is an effective method of contacting parents regarding academic achievement:

- “Gives parents the opportunity to communicate with me when a concern arises.”
- “It allows parent-teacher communication, which aids in collaboration.”

One-third ($n = 21$) of teacher respondents indicated that electronic communication is effective at establishing parent-teacher partnerships with the common

goal of supporting academic achievement. And yet, an almost equal number of teacher respondents ($n = 22$) feel parents do not have the appropriate resources or training to utilize electronic communication as a tool to facilitate collaboration with parents.

Primarily, teachers cite cultural and socioeconomic factors as their reasons for not using electronic communication with parents:

- “Many do not have internet access, many do not speak English.”
- “Only among the bilingual and monolingual teachers, but NOT as a community! Again, lots of parents can't afford the luxury.”

This difference in teachers' practice can lead to inconsistent messages from the school to parents regarding what communication tools to use. As a result, the lack of consistency in the districts' message from the school district to the parents (regarding communication methods) can be confusing and can result in a lack of trust between parents and the school district as a whole (Forsyth et al., 2006).

While relatively small in nature ($n = 5$), a few teachers responded that bilingual parents do not use electronic communication:

- “I'm not sure that it's had an effect. Many of our bilingual families don't have internet access.”
- “Parents are able to understand what the facts are in a problem situation and can ask questions, share ideas, etc., by email with ease. Parents who do not write in English are not able to use this format of communication though.”

Teacher responses regarding access to technology illustrate the teacher's understanding of the cultural limitations of electronic communication. While research

supports a difference in the use of technology by different cultural groups, the fact that less than 10% of teacher respondents articulated this understanding may indicate a lack of awareness of cultural practices among parents in the district, than of a different cultural norm in existence in this particular school district (Leonardi, 2003).

A small number of teacher respondents ($n = 7$) report there are no issues regarding trust between parents and teachers in the district and, as a consequence, asking about the effectiveness of electronic communication toward building trust is irrelevant:

- “Trust isn't a problem. We communicate with email as a convenience since most parents are working.”
- “I don't think it has. We don't have trust issues in this school.”

This type of response indicates that teachers may not be aware of how parents' cultural backgrounds have the potential to impact how they view the use of electronic communication, or these teacher respondents might not feel an individual's background impacts the way they assimilate into the larger culture (De Gaetano, 2007). The divergence of teacher responses to the research question regarding the effectiveness of parent generated electronic communication signals inconsistency within the district regarding the use of communication tools within a diverse community.

While teacher responses demonstrate their willingness to use either electronic or non-electronic communication forms to collaborate with teachers, teacher responses also seem to indicate a perception that the parent population is unable to use electronic means of communication due to either cultural or socioeconomic reasons. In this case, common tools are available to all community members, but the community members are not all

using the tools in the same way. Engestrom's (2001) interpretation of Activity Theory suggests that when members of a community are using different sets of tools to accomplish the same outcome, the difference in usage can be used as an indicator to begin reviewing the reasons different members of the community choose different tools. Background research has shown that sometimes the use of tools is constrained by factors that limit the effective use of the tools such as language or accessibility to electronic tools (Basharina, 2007). When some community members do not perceive usefulness in a tool as a means to achieve a common goal, the members will look to other available tools in the community to achieve the desired outcome (Nardi, 1995). This research seems to indicate that some teacher respondents do not perceive that electronic communication is an effective tool to use to collaborate with the parent population, so they choose more traditional, non-electronic communication forms to reach the goal of teacher-parent collaboration.

Research Question 3: When teachers initiate electronic communication regarding student academic achievements, does the initial communication facilitate more communication? How often is clarification needed in these electronic communications?

Parents were asked to respond to questions regarding teacher initiated electronic communication related to academic achievement. Parent respondents were asked to consider their response to teacher-generated electronic communication, as well as the clarity of electronic communication. Of the respondents, 87% of parents ($n = 74$) surveyed for this research project answered questions related to how they react to

electronic communications. If these parents can answer questions regarding their use of electronic communication, the researcher can conclude that these parents also have had personal experience with electronic communication with their students' teachers. As the literature asserts, members of a community need to collectively understand the tools available and the rules that govern the use of those tools in order to ensure they are readily accepted into practice (Waycott, Jones, & Scanlon, 2005). Parent study participants report that initial electronic communications from teachers lead to additional communications without much need for clarification. Additionally, parent respondents reported that initial electronic communication lead to additional email messages. Electronic communication can be considered a tool to aid a collaborative process when follow-up activities are frequent and consistent.

Parents' open-ended responses reflect inconsistencies regarding their perceptions regarding electronic conversations. These inconsistencies did not follow any trends in terms of the cultural background of respondents or the grade level of the students. Parent perceptions varied greatly and were almost evenly-split with regards to how electronic communication is used in the district. Responses included satisfaction with the current use of electronic communication, dissatisfaction with the current use of electronic communication, or the desire to obtain the necessary tools or learn how to use electronic communication tools. According to Engestrom's (2004) interpretation of Activity Theory, while electronic communication might be seen as a collaborations tool, if its effectiveness as a tool is questioned by the community, or the community does not have

access to the tool, electronic communication can be an effective solution but will not be fully utilized by the community.

The discrepancy in parent responses regarding the use or impact of electronic communication as a common tool might signify that these respondents perceive themselves as *customers* of the school district rather than a member of a school community (Forsyth et al., 2006). In this framework, the parent sees the school as an organization that provides a service to each individual family. As a result, parents may not be interested in the school community as a whole. With the majority of parent respondents ($n = 50$) suggesting changes regarding the use of electronic communication in the district, the differing opinions of a smaller section of parents ($n = 14$) may be a reflection of their perceived role in the school community, or these parents may be unaware of the demands of members of a diverse cultural community.

Parent's lack of technology use could also be due to a lack of family access to technology, which was reflected in the following parent responses to how their use of electronic communication facilitates trust between the classroom teacher and parents:

- "I don't have one."
- "You can't really use computers because computers are not accessible to us."

Research has suggested that households from lower socioeconomic statuses have less access to technology than those from higher socioeconomic statuses (Thompson, 2008). The lack of access parents have to technology could be due to socioeconomic status but questions concerning access were not included in this research survey.

Lack of use could also be due to a lack of parents' knowledge of how to use electronic communication. The following parent response to the question, *What could be done to improve electronic communications?*, illustrates a lack of understanding regarding how and when to use electronic communication forms:

- “Educating parents /teachers. Setting guidelines for response. Having email requests carry same weight as written letters. [for example] You can ask for your student to be evaluated via email but must submit a letter to make process stick.”

Considering the predominance of low-income families in the district, this trend could be a result of parents' perception of themselves as less of a partner in the education process (Sanders, 2008). It also could reflect a belief that electronic communication is not a recognized tool for communication from students' homes back into the school community (Engeström, 2004; Selwyn, 2004). If parents are reluctant to initiate conversations, this may be because this activity is incongruous with the perceived rules of engagement in the school community, or parents may not feel they have enough clout in the educative process to initiate conversations regarding student achievement (Engeström, 2004; Forsyth et al., 2006). Consequently, technology use as a collaborations form is not an understood communications method in the district by both parents and teachers in the district. This unwritten understanding is evidenced by the infrequency of parents initiating communication using electronic tools.

Parent responses also indicate their desire to receive access to, and training in how to, use electronic communication:

- “Not everyone has Internet all day. There should be free Internet access, but still not everyone has time and the economy is bad.”
- “Educating parents and teachers on email etiquette and processes like how often do you email the teacher with no result before escalating, and/or copying others on the team, special service and principal helps.”

The lack of parent access to technology coupled with parent lack of knowledge regarding how to use this tool results in a digital divide between the users and non-users of electronic resources (Cleary, Pierce, & Trauth, 2006). If electronic communication has been identified by the school community for a common purpose, but there are parents in the community unable to use the tool due to access or understanding, these parents can become disenfranchised and hesitate to participate in the community (Joshi et al., 2005; Warren et al., 2009).

The school district is a diverse community; 60% of parents are from Hispanic households. Background literature asserts Hispanic families do not use electronic communication because they do not feel electronic communication supports the interpersonal focus of their culture (Leonardi, 2002). While the majority of families in the district are from Hispanic households, 13% of parent respondents ($n = 11$) said they do not like electronic communication. Additionally, not all respondents who object to the use of electronic communication are from Hispanic households. Some respondents cited their preference for face-to-face communication methods, but this response was not pervasive enough to attribute the preference to face-to-face communication over electronic communication methods.

Parent respondents were also asked for their perceptions of teachers' knowledge of their familial cultural background when using electronic communication means. The majority of parents who answered this question ($n = 19$) responded that teachers do not need to know about the cultural backgrounds of students' families. These statements were answered by families where both English and Spanish are the primary languages spoken in the home:

- "I do not see the importance of cultural background in school. We are there to learn, not represent a culture!"
- "Teachers speak English. We wouldn't expect a message in Spanish"

These families may be interpreting their role in the school community as a consumer of the services offered by the school district instead of as a member of a collaborative community working together toward student achievement (Forsyth et al., 2006). In this case, the school district provides a service to the district families, and the families use the service. But, the service could be altered to better fit the families' needs. Parents may not feel they have enough influence to request that a school differentiate their practices to meet the family needs. Or, the families may feel the district is not responsible for changing established practice to meet some of the community needs (Cochran & Dean, 1991; Green et al., 2007; Hoover-Dempsey et al., 2005).

While the families from the school district used in this study are from multicultural backgrounds, only 14% of parent respondents commented on the classroom teachers' responsibility toward understanding a student's family background when communicating with parents. Six percent ($n = 5$) of parent respondents indicated their

perception that the classroom teacher is aware of their family background. The following parent response indicates the parent's perception that teachers are trained in how to communicate with families from different cultural backgrounds:

- “I think it would be very easy for the teacher to know more about the cultures of the families the teachers' knowledge of their family's cultural background.”

Similarly, 7% of parents from both English and Hispanic-speaking households ($n = 6$) responded they do not know if the teacher is aware of their cultural background:

- “I don't know. We would have to ask the teacher.”
- “This has never been communicated, or at least to my knowledge.”

These types of responses seem to indicate a lack of communication from the school district to the parent community regarding their desire to understand the potential cultural inhibitors that can impact communication. Research indicates some of these inhibitors might include language barriers or " cultural preferences for face-to-face of communication over technology facilitate communication (Leonardi, 2003; Ono & Zavodny, 2008). While the number of parents who responded, “the teachers are not aware of parents' cultural background” ($n = 11$), does not reflect a majority of parents, it is still important to the discussion of this study. Parent responses included responses that seem to indicate the perception that classroom teachers do not understand the multicultural differences that exist in the district:

- “The teacher does not demonstrate knowledge of our family background.”

- “There is a lack of education and understanding of our traditions and language.”

When parents perceive themselves as misunderstood by schools, they are less likely to engage in activities that support school initiatives (Anderson & Minke, 2007; Howland, Anderson, Smiley, & Abbott, 2006; Miretzky, 2004; Warren et al., 2009). Background research indicates that student achievement is adversely affected when parents are not engaged in activities designed to impact student achievement. So, it is essential that teachers demonstrate their desire to understand the cultural backgrounds of their student’s families (DePlanty et al., 2007; Epstein, 1984).

Data collected from teacher questionnaires indicate that 56% ($n = 38$) of teacher-generated electronic communication often generates additional communication between parents and teachers with little need for clarification. The positive response of 68% of parents ($n = 58$) and 56% of teachers ($n = 38$) to the use of electronic communication as an instrument toward collaboration indicates a willingness on the part of the participants in the community to utilize this tool within the school community. The existence of evidence that electronic communication can be used successfully to support parent and teacher collaborations demonstrates a contradiction in the use of the tools that are currently being used in the school community for communications between parents and teachers.

According to Activity Theory, tools that are introduced as a means to achieve a common goal should be aligned to the values of the members of the community because users’ value systems impact the usage of community tools (Scanlon, 2005). Background

research suggests there may be cultural constraints in existence that inhibit the use of electronic communication by some the members of the multicultural school community. However, data from this study also does not provide enough information to determine if the use of electronic communication by parents or teachers in the district is impacted by cultural constraints (Leonardi, 2003; Ono & Zavodny, 2008).

Board Policy

To better understand the established rules that govern the use of electronic communication as a tool in this district, a copy of the district board policy regarding parent involvement and electronic communication was reviewed. Within Section 4 of the District Board Policy on Operational Services, it states the following regarding electronic communication systems within the district:

- The Superintendent shall ensure the efficient and cost-effective operation of the District's business management using computers, computer software, data management, communication systems, and electronic networks, including electronic mail, the Internet, and security systems. (District Administration, 2010 Section 4:10 subsection 1)

Within Section 6 of the District Board Policy, which includes Instruction, it states the following two points regarding electronic networks:

- Electronic networks, including the Internet, are a part of the District's instructional program in order to promote educational excellence by facilitating resource sharing, innovation, and communication. The Superintendent or

designee shall develop an implementation plan for this policy and appoint a system administrator. (District Administration, 2010, Section 6:10)

- Serves as a communication link between the school and parents/guardians. (District Administration, 2010, Section 6:10)

Within Section 8 of the District Board Policy on Community Relations, the Superintendent is responsible for developing the following statement regarding communication:

Establish effective two-way communication between all families and the Board of Education and District personnel. (District Administration, 2010, Section 8:95 subsection 3)

School board policy states that the district should use electronic communication to assure collaborative relationships between students' families and the members of the school community by facilitating partnerships in education with parents in the district. Board policy establishes the purpose of electronic communication as a collaborations tool through providing an electronic access to classroom-related materials. Specifically, board policy mandates that the superintendent is to develop administrative procedures designed to, as Section 8 of the district board policy says, "Establish effective two-way communication between all families and the Board of Education and District personnel" (District Administration, 2010).

Regarding instruction, the district board policy plan outlines electronic communication as a tool to be used by the school community toward the outcome of

student achievement. The board policy further stipulates that the superintendent is responsible for establishing policies that support collaborative relationships.

Supporting research stipulates that the use of communication technology throughout school districts and school buildings should be led by the district leadership team (Flanagan & Jacobsen, 2003; Perez & Uline, 2003). District leadership should work with the school community as a whole to develop a common vision and a shared purpose for the use of technology (Flanagan & Jacobsen, 2003). These plans should have a clear focus, be revisited regularly, and be adapted to reflect the way technology use develops in order to support the school community (Yuen, Law, & Wong, 2003). Some issues that should be included in a plan for how to use technology for any purpose in a school district include:

1. How the technology will be used.
2. How it will be used by the whole community.
3. Equity issues in the district.
4. Steps to provide appropriate training for the individuals who will use the technology. (Flanagan & Jacobsen, 2003)

The published plan for the district that participated in this study stipulates that the technology used throughout the school district should support collaborative relationships between members of the school community. The policy used in this study does not stipulate who will initiate the relationships, how these collaborative relationships will be developed or supported, or how collaboration supports the mission of the school district as a whole. Board policy also establishes the purpose of electronic communication as a

collaboration tool through providing an electronic access to classroom-related materials. According to board policy, “Electronic networks, including the Internet, are a part of the District’s instructional program in order to promote educational excellence by facilitating resource sharing, innovation, and communication” (District Administration, 2010, section 6:235).

Again, board policy does not stipulate how collaboration will be achieved in terms of classroom activities, does not articulate who will use technology as a tool toward collaboration, or stipulate how these individuals will be trained in the use of technology. The board policy regarding electronic networks was implemented in 2005 and last updated in Fall 2008. While the board policy is broad, it is also vague and does not address how technology should support the current use of technology as a collaborations tool among members of the school community or as a tool to support classroom instruction. This vagueness may be a contributing factor to the use of electronic communication by parents and teachers throughout the district.

The study results suggest electronic communication between parents and teachers in the district is sporadic and only fully supports a small number of respondents to this study. According to Engstrom’s (2001) interpretation of Activity Theory, when a small number of the members of a community are using a new tool to achieve an outcome, the deviation in behavior may elicit a review of the established methods by other members of the community. In order for the community to adopt a new tool, community members need to complete a collective review of the new tool to determine its effectiveness to facilitate the desired outcome.

While the school board policy states electronic communication should be used to facilitate communication and collaboration between parents and teachers, it does not specify electronic communication as the only means of communication. Through this structure, teachers are able to differentiate their communication methods to support the needs of their students' families while still adhering to the rules established for the school community by the school board.

Discussion

The primary research question being addressed in this study examined how electronic communication is used between parents and teachers regarding student achievement. This study examined the ways parents and teachers utilize electronic communication to invite one another to participate in activities designed for student academic achievements (Anderson & Minke, 2007). The study also concentrated on the ways parents and teachers communicate, and the frequency of internet facilitated communication. The district used for this study is located in a large, suburban metropolitan city, which is comprised of an ethnically and socioeconomically diverse set of parents. Electronic communication forms are available to parents and teachers throughout the district at every grade level. Some electronic communications form can be used as a method for displaying information. Other available electronic communication forms that are available can be used to elicit collaboration between parents and teachers. The district studied also has a published technology plan that can be used to guide technology use.

When considering how communities collaborate with one another toward the completion of a task, it is necessary to consider the instruments, subject, rules, community, division of labor, as well as the outcome of the collaborative process involved (Engeström, 2004). Objectively, the district used in this study has all the elements needed to effectively use electronic communication as a means of supporting student academic achievement. The district is comprised of parents and professionals that report their desire to work together toward the academic achievement of district students. The district provides the means for internet facilitated communication to members of the professional school community. The online district policy stipulates the use of the technology network for parent-teacher collaboration, and as a tool to support classroom instruction. Parents and teachers demonstrate, through the use of non-electronic means of communication, a shared understanding that parental involvement in student learning has a positive impact on student achievement. While all of the elements are present to support collaborative parent-teacher partnerships through electronic communication, the research results do not reflect this actual practice.

Three themes emerged from the analysis of the results of this study. Classroom teachers predominantly use non-electronic communication means with the parents of their students. Teachers use electronic communication methods to a much lesser degree than non-electronic communication methods. Parents also predominantly use traditional, non-electronic communication forms with classroom teachers. When parents use electronic communications forms, it is to gather information more often than to ask a teacher to collaborate with them regarding student achievement. Finally, data from this

study indicates that study respondents felt that understanding minority culture is not important. These issues can be addressed through an analysis of the needs of the members of the school community.

Theme I—Teachers’ use of electronic communications forms is inconsistent

Teacher responses indicate an inconsistent use of technology to communicate with the parents of their students. This trend could be either because the teachers in this district are unable or unwilling to use electronic communication forms with parents. These data suggests the frequency of use of electronic communication is inconsistent throughout the district. This leads the researcher to conclude there may not be a clear understanding regarding an effective use of electronic communication as a collaborations tool between parents and teachers in the district. If electronic forms of communication tools do not fit the needs of the teachers in the district, the teachers will not use it as their tool for communication (Engeström, 2004; Miretzky, 2004).

Teachers will implement new communication practices if they have administrative support to implement the new procedures (Miretzky, 2004). The published administrative documentation on communication methods between parents and teachers seems to make broad suggestions regarding what types of tools to use for communication. As a consequence, the community is using a variety of forms of communication tools. However, data from this study suggest there is no clear rationale for how or when these communication forms are used. Based on findings from prior research, the district involved in this study should participate in a needs assessment to determine why teachers use traditional forms of non-electronic communication forms when working with parents

with more frequency than their use of electronic forms of communication (Jackson et al., 2008; Merkley, Schmidt, & Dirksen, 2006; Ramirez, 2001). If non-electronic communication forms are fulfilling the district and teachers' objectives regarding parent-teacher collaboration, teachers should be encouraged to consider how electronic tools might benefit collaborative processes between teachers and parents with regards to student achievement. With an understanding of how electronic tools can support communication between parents and teachers, classroom teachers can begin to explore possible professional development that will help with the use of electronic communication forms.

Activity Theory states that tools are used most effectively in communities when all of the members of the community adopt the use of the tool with the motivation to achieve a common outcome (Engeström, 2004). In order to establish communication tools that support the needs of all members of the community, board policies should be developed with the input of all members of the school community. According to this school district's board policy, it is the responsibility of the district's superintendent to develop and implement plans regarding the use of communication and collaboration tools. When developing a plan that includes the input of all of the members of the school community, the district superintendent takes on the role as the community leader who sets the vision documents district policy for the use of electronic communication throughout the school district (Flanagan & Jacobsen, 2003; Yuen et al., 2003).

Yuen et al. (2003) suggests a leadership strategy for administration to use, which will support effective implementation and use of technology that is aligned with the

mission and goals of the school district. Yuen et al.'s strategy includes the development of a plan to ensure the teachers in the district reach a minimum level of competency with regards to the use of electronic communication. The plan should set target competency levels with a timetable for acquisition of these skills. Finally, the district strategy should include an implementation date where teachers implement electronic communication with district parents.

Any policy change should be accompanied by professional development for the teachers in the district (Flanagan & Jacobsen, 2003). Many times, technology is introduced into school districts without the appropriate funding to provide adequate professional development regarding the technology implementation. As a result, teachers are not trained how to effectively use technology and, as a consequence, they resist its use (Flanagan & Jacobsen, 2003). To facilitate teacher use of electronic communication with parents, district administration should consider conducting a needs study to determine the skills or structures that are lacking in order to facilitate the use of electronic communication with district parents. The school leadership should develop an implementation plan designed to develop the technology competencies of district teachers. Finally, the district should provide adequate professional development to facilitate the new policy for technology implementation.

When considering this theme within the framework of Activity Theory, it is necessary to establish how the elements of the theory interact with one another. Activity Theory states that members of communities use commonly agreed upon tools and rules toward achieving a common outcome (Engeström, 2004). This research examines the use

of electronic communication between parents and teachers toward impacting student achievement. The school district involved in this study has provided the necessary tools to support electronic communication between parents and teachers. Responses from both parents and teachers indicate the tools are being used to facilitate communication between parents and teachers in the school district. Study results also indicate there are some parents and teachers who are communicating by non-electronic means rather than using the electronic tools provided by the school district. This deviation in the use of the tools in the community has provided an opportunity to complete a collective review of the tools used and the rules that govern those tools by the school community (Engeström, 2001). Background research states the implementation and use of technology tools should be driven by the school community, but established practices should be guided by the school leadership (Flanagan & Jacobsen, 2003). Similarly, district policy states that the design and implementation of communication methods should be led by the district superintendent. As a result of data gathered in this research study, the superintendent has an opportunity to address the inconsistent use of electronic network tools as a communications method between parents and teachers.

Theme II—Parents prefer non-electronic communications forms over electronic communications forms

The second theme that emerged from this research concerns parent use of electronic communication. Parent responses reflect their preference for using primarily traditional non-electronic communication forms with classroom teachers. Parent respondents indicate fulfilling their communication needs with teachers through

traditional non-electronic formats such as face-to-face meetings or personalized communication. Parents in this school district are primarily from Anglo or Hispanic households. Parents of both English-speaking and Spanish-speaking households participated in this study. Parents also are from diverse socioeconomic backgrounds with 60% of the student population from low-income homes.

Background research states that families from Hispanic cultures view the use of electronic communication differently than Anglo families (Cleary et al., 2006; Leonardi, 2003; Ono & Zavodny, 2008). There is a social envelope that surrounds technology tools (Cleary et al., 2006). Computers are perceived to hinder the highly interpersonal relationships found in Hispanic households (Leonardi, 2003). People from immigrant households are less likely to have access to the internet or use it for any purpose. This gap has widened over the past decade while most other cultural gaps have narrowed (Ono & Zavodny, 2008). Research regarding technology use with respect to cultural diversity might impact how the district articulates its policies regarding internet facilitated communication.

Given the cultural and economic diversity of the school district, the board policy should articulate how technology will be made available to community members from different cultural backgrounds, as well as diverse socioeconomic status. Families with less education and with less income tend to use electronic communication less often than families from higher socioeconomic backgrounds or with more education (Cleary et al., 2006). The potential digital divide might be somewhat mitigated through providing access to electronic communication throughout the community in public spaces such as

the public library (Valadez & Duran, 2007). The lack of access can also lead to a lack of skills so it is necessary for the community to provide training to potential users of electronic communication (Valadez & Duran, 2007). This training should meet the unique needs of the community as well (Kvasny & Keil, 2006). Parent responses mimic the research cited above. Parents asked for both more access to computers, as well as courses in how to use technology to communicate with the teachers at school. Parent responses in this study did not reflect a cultural gap in the use of technology however; parents and teachers did identify parent inaccessibility to technology as a reason for not using electronic communications methods in order to collaborate regarding student achievement.

If parent needs are being met through non-electronic communication methods, the parents in the district will not have any reason to adopt new methods of filling their communication needs (Selwyn, 2004). Sometimes, it is more difficult to learn how to use computer technology and, as a consequence, the difficulties in learning the new skill outweigh any benefits that might come from using the new technology. In order for all members of the school community to use electronic communication tools in collaborative ways, the school district should conduct a needs assessment with parents to find the barriers block parental use of electronic communication forms.

When considering the second theme that emerged from this research in light of Activity Theory, it is important to consider why members of communities use the different tools available to them toward achieving their desired outcomes (Engeström, 2004). Members of communities begin activities toward achieving a goal through the use

of the tools available to them within that community (Hung & Chen, 2002). Data from this research study suggest that there are multiple tools in existence in the school community, which all can be used by parents to communicate with teachers about student achievement. Each of the available tools to community members supports community members' needs in different ways—and all of the tools available to community members have the potential of providing similar desired results. For example, parents and teachers can use electronic mail to communicate quickly regarding student achievement, but parents can also gather or send the same information through handwritten notes. According to Activity Theory, the rules in the community usually dictate the way the tools are used to achieve outcomes (Engeström, 2001; Scanlon, 2005). Rules for the use of electronic communication for this school community should be found in the Board Policy. However, rules and policies regarding technology use throughout the school district are very general and do not specify any regulations regarding how electronic communication tools are to be used. As a result of the non-specific guidelines governing technology use, members of the school community gravitate to whatever communication methods they have become accustomed to in order to achieve the goal of communication toward student achievement. The members of the educational community should evaluate the rationale for the use and the frequency of use of each type of communication tool within the school community. From that evaluation, the educational community should determine if the community's use of communication tools towards the goal of collaboration are aligned with district perceptions regarding community use of tools.

Theme III—Inconsistent perceptions about how culture impacts communication practices exist throughout members of the school community

The third theme that emerged from this research concerns teacher interactions with parents in regards to family culture. Research states that teachers and parents have difficulty with communication if they are from different cultures (Eberly, Joshi, & Konzal, 2007; Joshi et al., 2005). Also, research states that when classroom teachers understand the cultures of their students, they are more likely to form meaningful collaborative relationships with their students' parents (Joshi et al., 2005). With regards to communication, it is important to understand culture because what is acceptable practice in one culture may not necessarily be acceptable in another culture (Lupi & Tong, 2001). Data from this study indicate that respondents felt that understanding minority culture is not important. Teacher responses to questions regarding how culture impacts communication did not reveal trends regarding teacher understanding of culture. A recurring theme regarding parent trust with respect to culture was that teachers ($n = 27$) do not feel parents have the background information or training to use electronic communication. The majority of parents responded that teachers do not need to know about students' cultural backgrounds. This could be because parents feel the school culture is more important than the family culture, regarding education (Eberly et al., 2007). There seems to be a discrepancy regarding how parents and teachers perceive cultural impacts on communication. Parents do not feel their cultural background impacts the way teachers communicate with them. Background research regarding the cultural use of technology indicates culture does impact the use of technology across cultures (Eberly

et al., 2007; Leonardi, 2003; Ono & Zavodny, 2008). Additionally, teacher responses suggest they may think that the parents in their classrooms are reluctant to use electronic communication. Given this teacher perception, their responses suggest they do not consider parents 'cultural constraints regarding electronic communication because teachers attribute the lack of parental use to factors other than culture.

The results of this research study suggest that both electronic and non-electronic sets of tools are being used for communication throughout the school district. Both of these tools allow parents and teachers to achieve their goal of communication regarding student achievement. While the rules of regarding electronic networks specify their use toward facilitating parent-teacher communication; the rules do not exclude the use of traditional non-electronic communication forms. While accessibility and training may be factors that limit parental use of electronic networks; parent responses also seem to indicate a preference for traditional non-electronic communication for cultural reasons as well. The district could consider investigating parent and teacher attitudes toward the impact of different cultures on communication methods to better serve its school community members.

Limitations of the Study

The following are recognized as limitations to this study:

1. This study is not generalizable because only one district was asked to participate. While the district invited to participate is comprised of an ethnically and socioeconomic parent base, the results should not be generalized to all districts. Technology use may be limited by the

socioeconomic or cultural backgrounds of parents, but this conclusion cannot be determined from the study of one district. Undiscovered mitigating circumstances may be present in this district that contributed to the research outcomes.

2. Some study participants may not have been comfortable answering the questionnaire in English. An alternate version of the parent questionnaire was delivered to parents in Spanish. However, the researcher needed to use a translator to understand the Spanish responses to this study. Therefore, meaning behind some of the answers may have been misconstrued during the process of translation.
3. Research may be biased as a result of the researcher's background. The researcher maintained a journal to gather reactions and impressions during the study. As a professional with experience in training faculty and parents in the use of technology as a tool, the journal helped the researcher maintain objectivity in analyzing the presented data.
4. The questionnaire did not ask participants about their access to technology. Some participants suggested a lack of access to technology limits their use of electronic communication. The instrument used for this survey did not include questions regarding family access to technology so conclusions regarding access could not be made based upon these data compiled.
5. A small percentage, 2.17% (n = 85) of the total number of parents in the district participated in this research and 30.33% (n = 64) of the total number

of teachers in the district participated in this research study. Responses of these individuals should not be generalized to the whole district population.

6. Parents were not asked if they have a computer in their home. The availability of electronic communication in the home has the potential to significantly limit the use of technology as a communication tool.
7. The study instrument included the word “use” throughout both the teacher and parent questionnaire. This meaning of the word “use” was not clearly defined in either questionnaire. As a result, participants’ interpretation of the word “use” is an unknown to the researcher.
8. The distribution of this study was from the researcher to the school office. The school office was to distribute survey packets to classroom teachers. Classroom teacher were to distribute parent surveys to the individual backpacks of the students in the classroom. There is no guarantee that all of these steps were completed once the surveys were delivered to the school. As a consequence it is not clear if all intended parents were given the opportunity to participate in this research.

Recommendations for the Sample District

This study focused only on one school district using the method of a qualitative questionnaire. The following are suggestions for further research based on these data presented:

1. Conduct a study that analyzes parent and teacher use of electronic communication toward student success in another district with similar demographics to determine if these findings are consistent.
2. Convene a focus group of educational leaders at the district level to investigate whether the *school board policy* regarding the use of electronic networks and programming to support parent and teacher communications support the mission and goals of the district.
3. Convene a focus group of educational leaders at the district level to investigate whether the *school implementation plan* regarding the use of electronic communication to support parent and teacher communications support the mission and goals of the district.
4. Convene a focus group of building administrators from each of the schools to review the current established practices regarding the use of electronic communication between the school and the district's culturally-diverse parents to determine if the current use is meeting the community's needs.
5. Convene a focus group of teachers from each building in the district to investigate the ways that electronic communication is being used as a tool for collaboration within the school community and if any changes are necessary.
6. Convene a focus group of parents with students from varying grade levels to discuss district communication policies and if any changes are necessary.

7. In order to connect district practices more closely with different cultural communication practices, initiate community classes focusing on understanding cultural differences for all members of the school community.

Considerations for Further Study

1. In order to determine the effectiveness of internet facilitated communication as a communication model, a study should be conducted to determine if traditional or electronic forms of communication are more effective in building partnerships with parents.
2. Parents and teachers communicate differently across grade levels. A longitudinal study should be conducted within a consolidated school district that follows parent and teachers' use of digital and traditional forms of communication to determine the delivery methods that elicit effective two-way communication at each grade level.
3. A study should be conducted to further investigate the ways parents and teachers choose to follow up with one another in response to different communication messages. Teacher and parent rationale for their actions should be investigated.
4. School districts should consider their philosophy behind the use of electronic forms of communication in light of the existence of families from different socioeconomic backgrounds who participate in the school community. A study should be conducted that investigates the effectiveness of digital

communication in light of the challenges regarding access to technology for families of lower socioeconomic status.

Implications for the Field

Schools continue to explore different methods of engaging parents in partnership activities that provide academic support for students. The *No Child Left Behind* standards require that schools involve parents in the planning and implementation activities designed to improve student academic achievements. Schools are also mandated to implement programs designed to lessen parental obstacles and enhance parental participation in partnership activities (U.S. Department of Education, 2001). Constraints on time and doubts regarding self-efficacy skills exist for some parents currently not involved in home-school relationships (DePlanty et al., 2007; Hoover-Dempsey et al., 2005). To introduce new programs intended to persuade uninvolved parents to participate in school activities, it is prudent to further develop the collaboration methods already in place in the school community.

This study used Activity Theory (see Figure 93) to understand how electronic communication impacts parent-teacher communication regarding student academic achievement. Activity Theory can be used to study how members of a specific community use the tools within the community and the rules that govern the use of the tools, to achieve a mutually agreed upon outcome. Within this study, parents and teachers interact within a school community using various electronic and non-electronic communication forms to collaborate with one another regarding student academic

achievement. These interactions are governed by the policies set forth in the school board policy.

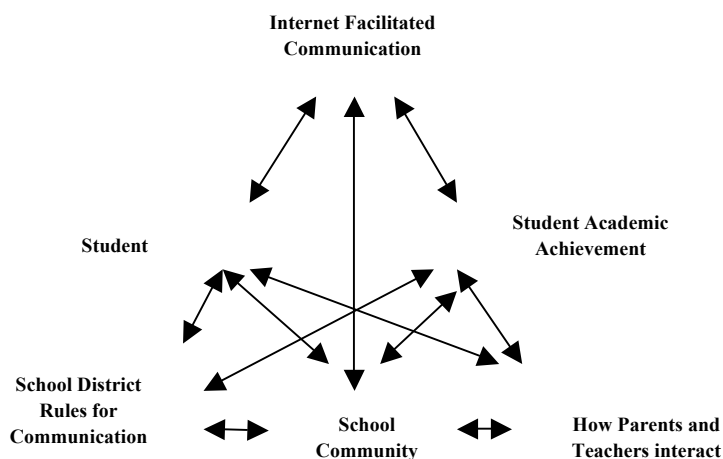


Figure 93. Activity Theory Diagram Aligned to this Study

After using Activity Theory to analyze the use of electronic communication within this school district, the researcher suggests the following for better curricular implementation:

- Consider the whole school community and build permanent school partnerships through the process of including parents in any curricular initiative including ground floor planning. If schools are going to expect parents to be a part of the school curriculum, school leadership needs to assess the parents' abilities to implement initiatives as partners in the curriculum. School leadership should also assess parents' abilities and resources to properly implement partnership activities.
- With the understanding of including the entire school community in any curricular initiative, parents should have input in curricular design. Parent

input should be reflected in curricular decisions, as well as in implementation plans.

- It is crucial to train teachers to use technology in a relevant manner to communicate with the school community. With this training, teachers should have the background information necessary to use the electronic communication available within the district as an effective two-way communication tool. This has the potential to allow productive collaborations between teachers and the rest of the school community.
- It is crucial to train the school community in how to implement a consistent use of technology. In order to take advantage of teachers' understanding of the needs and limitations of their students' families, it would be wise to engage classroom teachers as technology trainers for the school community. With classroom teachers as trainers, the district can provide personalized technology instruction for the community, and the school leadership can expect consistency in use through that personalized instruction.

Final Thoughts

The relationships between student success and home-school partnerships have been widely researched (Anderson & Minke, 2007b; Becker & Epstein, 1982; Berger, 1991; De Gaetano, 2007; Epstein, 2001; Lee & Bowen, 2006; Sheldon, 2007). When schools partner with parents, and both parties share responsibility for student learning, students' performance in school improve. Parents also become more involved in school and begin to feel more comfortable working with school community members toward a

student's academic achievement and the overall success of the school (Jeynes, 2005; Lee & Bowen, 2006).

Schools have been looking for communication forms that will support collaborative and personal relationships between parents and teachers. Schools also want these communication forms to allow for flexibility in the delivery and response to communication. Internet facilitated communication is a good solution because it supports collaborative relationships between parents and teachers and also allows for flexibility with respect to delivery and response times (Anderson & Minke, 2007; Hurst, 2007). While internet facilitated communication is becoming a common tool used to facilitate communication, it may not be the best tool because not all members of the community have the same level of comfort with its use (Britto, Fish, & Throckmorton, 2002; Flanagan & Jacobsen, 2003; Owen & Demb, 2004).

Additionally, schools are diverse populations with families from different cultures and different socioeconomic backgrounds. These cultural and economic differences impact the way parents and students interact within the school culture (De Gaetano, 2007; Eberly et al., 2007; Horvat, Weininger, & Lareau, 2003). It is the responsibility of the school administration to find ways to support collaborations and communications between parents and teachers through efficient methods while respecting the cultural backgrounds of these individuals.

This study found that administrative support should consider the following circumstances:

- In spite of the prevalence of technology throughout the school district, parents and teachers predominantly rely on traditional non-electronic communication forms that do not allow for flexibility in delivery or response for the sender or recipient. Participants in this research study confirmed the use of electronic communication forms, but these data indicate a preference from both teachers and parents for traditional communication methods—regardless of the student’s age, the cultural background of a family, or a teacher classroom experience.
- Technology can be integrated into the curriculum and districts can spend money to design, publish, and maintain elaborate websites. But, until districts spend the necessary money on professional development for teachers in the use of effective communication techniques, and the school community clarifies its expectations for the use of technology as a communications tool, teacher practices will remain the same.
- School administrators should envision electronic communication as a two-way street. It is not enough to just train teachers in how to use technology to communicate. If schools expect communication through electronic means, they must also provide training for the parents in the district as well.
- Schools must provide a means for parents to access the technology in order for electronic communication to support collaborative relationships within the school community.

APPENDIX A

PHONE INTRODUCTION SCRIPT FOR DISTRICT PARTICIPATION

PHONE INTRODUCTION SCRIPT FOR DISTRICT PARTICIPATION

Introduction:

Hello, my name is Mara Grujanac and I am a doctoral student from the School of Education at Loyola University in Chicago. May I have a moment of your time?

If YES, go to Purpose and Title of Study.

If NO, when is a better time for me to call you? Can we set up a telephone appointment?

Purpose and Title of Study:

Thank you for your time. I am writing my dissertation on how internet facilitated communication impacts parent and teacher partnerships. I'm calling you about your district because:

- Your district is close to my university.
- You have clear district demographics (primarily Caucasian and Hispanic families).
- I am familiar with your district's comprehensive technology plan.

This background makes your district perfect for my research.

May I continue?

If NO, thank you for your time.

If YES, proceed.

Great! Thank you. I am interested in completing a qualitative survey of the teachers and parents in your district. I intend to send each teacher a questionnaire to be delivered to them in their mailboxes. I would also like to send the classroom parents of each of those teachers a questionnaire that asks about their individual use of the internet to communicate with teachers about their student achievements. If you allow me to complete my research in your district, will I need to provide each principal with a letter of cooperation as well?

To maintain respondent anonymity, I will ask each participant to return their questionnaire to me to a post office box in a self-addressed, stamped envelope.

Do you think you would like to take part in this research?

If NO, Thank you for your time. Have a restful summer.

If YES, Thank you. May I have your email address to send a confirmation and the details of the study?

Do you have any questions I can answer for you at this time?

If NO, Thank you for your time. I will send you a letter of cooperation and the detail of my study. I appreciate your time.

If YES, answer any questions.

APPENDIX B

LETTER OF COOPERATION TO DISTRICT SUPERINTENDENT

LETTER OF COOPERATION TO DISTRICT SUPERINTENDENT

Project Title: How does internet facilitated communication impact teacher and parent partnerships?

Researcher: Mara Grujanac

Faculty Sponsor: Dr. Marla Susman Israel

Purpose:

The purpose of this study is to determine how internet facilitated communication impacts parent and teacher partnerships. Of interest are the ways parents and teachers communicate and the frequency of internet facilitated communication.

Introduction:

You are being asked to take part in a research student being conducted by Mara Paich Grujanac for a dissertation project under the supervision of Dr. Marla Susman Israel at Loyola University, Chicago.

You are being asked to participate because your School District is located in Northern Illinois, and because your district has been identified through the Illinois District Report Card as having a diverse student body. You have also been chosen for your districts approach to technology use throughout the schools. A copy of your district parent communication plan will be required to complete this research. The schools in your district will be asked to participate in this study. Classroom teachers and the parents of the students in those classrooms will be asked to complete a questionnaire on internet facilitated communication for this study.

Please read this form carefully and ask any questions of the researcher you wish before agreeing to participate in the study. You may contact the researcher at 847-924-9370.

Procedures:

If you agree to participate in this study, school faculty and classroom parents will be asked to:

- Give permission for the researcher to distribute questionnaires to all teachers and parents of each building selected.

- Provide direction to the building principal for the research to have permission to distribute questionnaires in teacher mailboxes and to the classrooms of students for distribution by the classroom teacher into folders home. Questionnaires will be coded by classroom and will have no other identifying factors

Voluntary Participation:

Participation in this study is voluntary. At any time during your participation, you may withdraw your participation.

Confidentiality:

Data will be coded by classroom. No other form of identification will be utilized. Access to the data will be by the researcher only.

Risks/Benefits:

There are minimal risks involved in participating in the research beyond those experienced in everyday life. Each school will be coded so that the triangulation of data can be utilized. Classroom teachers and parents from each classroom will be connected. Confidentiality will be ensured.

There are not direct benefits to you from participation, but the results will help to better inform the educational field as to the benefits of utilizing internet facilitated communication to discuss individual student achievement.

Contacts and Questions:

If you have any questions about this research, please feel free to contact:

Dr. Marla Susman Israel at misrael@luc.edu

Mara Grujanac at maragrujanac@comcast.net

If you have any questions about your rights as a research participant, you may contact the Compliance Manager in Loyola University's Office of Research Services at 773-508-2689.

Statement of Consent:

Your signature below indicates that you have read and understand the information provided above, have had an opportunity to ask questions, and agree to participate in this research study. You will be given a copy of this form for your records.

Superintendent Signature

Date

Researcher's Signature

Date

APPENDIX C

LETTER OF COOPERATION TO BUILDING PRINCIPAL

LETTER OF COOPERATION TO BUILDING PRINCIPAL

Project Title: How does internet facilitated communication impact teacher and parent partnerships?

Researcher: Mara Grujanac

Faculty Sponsor: Dr. Marla Susman Israel

Purpose:

The purpose of this study is to determine how internet facilitated communication impacts parent and teacher partnerships. Of interest are the ways parents and teachers communicate and the frequency of internet facilitated communication.

Introduction:

You are being asked to take part in a research student being conducted by Mara Paich Grujanac for a dissertation project under the supervision of Dr. Marla Susman Israel at Loyola University, Chicago.

You are being asked to participate because your School District is located in Northern Illinois, and because your district has been identified through the Illinois District Report Card as having a diverse student body. You have also been chosen for your districts approach to technology use throughout the schools. A copy of your district parent communication plan will be required to complete this research. The schools in your district will be asked to participate in this study. Classroom teachers and the parents of the students in those classrooms will be asked to complete a questionnaire on internet facilitated communication for this study.

Please read this form carefully and ask any questions of the researcher you wish before agreeing to participate in the study. You may contact the researcher at 847-924-9370.

Procedures:

If you agree to participate in this study, school faculty and classroom parents will be asked to:

- Give permission for the researcher to distribute questionnaires to all teachers and parents of each building selected.

- Provide direction to the building principal for the research to have permission to distribute questionnaires in teacher mailboxes and to the classrooms of students for distribution by the classroom teacher into folders home. Questionnaires will be coded by classroom and will have no other identifying factors

Voluntary Participation:

Participation in this study is voluntary. At any time during your participation, you may withdraw your participation.

Confidentiality:

Data will be coded by classroom. No other form of identification will be utilized. Access to the data will be by the researcher only.

Risks/Benefits:

There are minimal risks involved in participating in the research beyond those experienced in everyday life. Each school will be coded so that the triangulation of data can be utilized. Classroom teachers and parents from each classroom will be connected. Confidentiality will be ensured.

There are not direct benefits to you from participation, but the results will help to better inform the educational field as to the benefits of utilizing internet facilitated communication to discuss individual student achievement.

Contacts and Questions:

If you have any questions about this research, please feel free to contact:

Dr. Marla Susman Israel at misrael@luc.edu

Mara Grujanac at maragrujanac@comcast.net

If you have any questions about your rights as a research participant, you may contact the Assistant Director for Research Compliance in Loyola University's Office of Research Services at 773-508-2689.

Statement of Consent:

Your signature below indicates that you have read and understand the information provided above, have had an opportunity to ask questions, and agree to participate in this research study. You will be given a copy of this form for your records.

Superintendent Signature

Date

Researcher's Signature

Date

APPENDIX D

LETTER OF CONSENT TO SCHOOL TEACHERS

LETTER OF CONSENT TO SCHOOL TEACHERS

To: (Name)

From: Mara Grujanac

Date: January 5, 2010

Re: Consent to Participate in Research

Project Title: How does internet facilitated communication impact teacher and parent partnerships?

Researcher: Mara Grujanac
Loyola University Chicago

Faculty Sponsor: Dr. Marla Susman Israel
Educational Administration and Leadership Department
Loyola University Chicago

Purpose:

The purpose of this study is to determine how internet facilitated communication impacts parent and teacher partnerships. Of interest are the ways parents and teachers communicate and the frequency of internet facilitated communication.

Introduction:

You are being asked to take part in a research study being conducted by Mara Paich Grujanac for a dissertation project under the supervision of Dr. Marla Sussman Israel at Loyola University Chicago.

You are being asked to participate because your school district is located in Northern Illinois, and because your district has been identified through the Illinois District Report Card as having a diverse student body. You have also been chosen due to your district's approach to technology use throughout the schools. A copy of your district parent communication plan will be required to complete this research. The schools in your district will be asked to participate in this study. Classroom teachers and parents of students in those classrooms will be asked to complete a questionnaire on internet facilitated communications for this study.

Please read this form carefully and ask any questions of the researcher you wish before agreeing to participate in the study. You may contact the researcher at 847-924-9370.

Procedures:

If you agree to participate in this study, the following will occur:

- An expectation to answer the attached questionnaire on your specific communication practices with parents or guardians of the students in your classroom.
- School faculty will receive the questionnaire through teacher mailboxes. Classroom parents will receive the questionnaire via their youngest child's backpack sent home in a folder.
- Questionnaires will be returned to researcher via a pre-labeled envelopes.

Voluntary Participation:

Participation in this study is voluntary. At any time during your participation, you may withdraw.

Confidentiality:

Data will be numerically coded by classroom. No other form of identification will be utilized. Access to the data will be accessed by this researcher only.

Risks/Benefits:

There are minimal risks involved by participating in this research beyond those experienced in everyday life. Each school will be coded so that the triangulation of data can be utilized. Classroom teachers and parents from each classroom will be connected through numerical identifiers on classroom surveys. Again, as noted above, confidentiality will be ensured.

There are no direct benefits from participation but the results will help to better inform the educational field as to the benefits of utilizing internet facilitated communications to discuss individual student achievements.

Contacts and Questions:

If you have any questions about this research, please feel free to contact:

Dr. Marla Susman Israel at misrael@luc.edu

Mara Grujanac at maragrujanac@comcast.net

If you have any questions about your rights as a research participant, you may contact the Compliance Manager in Loyola University's Office of Research Services at 773-508-2689.

I would greatly appreciate your participation in this project. If you are willing to participate, please keep this letter for your records, and complete and return the attached questionnaire in the self-addressed, stamped envelope.

Thank you for your consideration.

APPENDIX E
TEACHER QUESTIONNAIRE

TEACHER QUESTIONNAIRE

Project Title: How does internet facilitated communication impact teacher and parent partnerships?

Researcher: Mara Grujanac

Faculty Sponsor: Dr. Marla Susman Israel

TEACHER QUESTIONNAIRE:

1. What is your gender?
 _____Male _____Female

2. How long have you been a teacher?
 - a. Total years of teaching? _____ years
 - b. In this district? _____ years
 - c. In this building? _____ years

3. What grade are you currently responsible for teaching?

4. How many students are enrolled in your classroom (if you have multiple classes, please give the average class size)?

5. List the ways and frequency of the methods of communication between yourself and the parents of the students in your classroom.

Never	Daily	Weekly	Monthly	Quarterly	Annually	COMMUNICATION METHOD
						District Website
						Classroom Website
						Classroom Newsletter (Paper)
						Classroom Newsletter via Internet

						Individualized Student Reports
						Personal Communications Individualized to Parents Regarding Student (Paper)
						Email Communications to Individual Parents Regarding Specific Subject Matter About Student
						Face-to-Face Meetings Regarding Student Progress
						Informal Face-to-Face Interactions With Parents
						Homework Help Page
						Online Grade Book

6. How do you and your students' parents communicate to address student successes or concerns?

7. How often do you receive email from parents as an offer to participate in an activity specifically designed to impact student achievement?

Very Often	Often	Sometimes	Almost Never	Never
5	4	3	2	1

a. How often does the initial email communication facilitate more communication?

Very Often	Often	Sometimes	Almost Never	Never
5	4	3	2	1

b. How often is clarification needed?

Very Often	Often	Sometimes	Almost Never	Never
5	4	3	2	1

c. How often is a personal email needed for follow-up?

Very Often	Often	Sometimes	Almost Never	Never
5	4	3	2	1

8. To what extent do the conversations between yourself and your students' parents accomplish the outcome you intend to achieve toward addressing your concern regarding student successes or concerns?

Very Effective	Somewhat Effective	Effective	Somewhat Ineffective	Completely Ineffective
5	4	3	2	1

9. How has electronic communication facilitated trust in your culturally diverse community?

10. How has electronic communication facilitated collaboration in your culturally diverse community?

APPENDIX F

LETTER OF CONSENT TO DISTRICT PARENTS

LETTER OF CONSENT TO DISTRICT PARENTS

Dear Parents,

You are being asked to take part in a research study being conducted by Mara Paich Grujanac for a dissertation project under the supervision of Dr. Marla Susman Israel at Loyola University Chicago. The project title for this research is: How does internet facilitated communication impact teacher and parent partnerships?

The following letter invites you to participate in the research project being conducted at your child's school.

Purpose:

The purpose of this study is to determine how internet facilitated communication impacts parent and teacher partnerships. Of interest are the ways parents and teachers communicate and the frequency of internet facilitated communication.

Procedures:

If you agree to participate in this study, school faculty and classroom parents will be asked to answer the attached questionnaire on how you and your child's classroom teachers contact each other. The research questionnaire will be delivered to you through the use of your child's Friday folder. Completed questionnaires will be returned directly to researcher using a pre-labeled envelope.

Voluntary Participation:

Participation in this study is voluntary. At any time during your participation, you may withdraw your participation.

Confidentiality:

Data will be coded by classroom. No other form of identification will be utilized. Access to the data will be by the researcher only. After the data have been collected, all questionnaires will be labeled with code numbers, not with any names, and completed questionnaires will be stored in locked cabinets. Only the code numbers, not names, will be used when the information is analyzed on the computer. In these ways, the information obtained will be kept confidential.

Risks/Benefits:

There are minimal risks involved in participating in the research beyond those experienced in everyday life. Each school will be coded so that the triangulation of data can be utilized. Classroom teachers and parents from each classroom will be connected. Confidentiality will be ensured.

While there are not direct benefits to you from participation, but the results will help to better inform the educational field as to the benefits of utilizing internet facilitated communication to discuss individual student achievement.

Contacts and Questions:

If you have any questions about this research, please feel free to contact Dr. Marla Susman Israel at misrael@luc.edu or Mara Grujanac at maragrujanac@comcast.net. If you have any questions about your rights as a research participant, you may contact the Compliance Manager in Loyola University's Office of Research Services at 773-508-2689.

I would very much appreciate your participation in this project. If you are willing to participate, please keep this letter for your records and complete and return the attached questionnaire in the stamped envelope.

Thank you for your consideration.

APPENDIX G
PARENT QUESTIONNAIRE

PARENT QUESTIONNAIRE

Project Title: How does internet facilitated communication impact teacher and parent partnerships?

Researcher: Mara Grujanac

Faculty Sponsor: Dr. Marla Susman Israel

PARENT QUESTIONNAIRE

1. What is your gender? _____ Male _____ Female
2. What is your home language?
3. What is/are the ages of your children?

Child:
Age _____
Grade _____

Child:
Age _____
Grade _____

Child:
Age _____
Grade _____

Child:
Age _____
Grade _____

Child:
Age _____
Grade _____

Child:
Age _____
Grade _____

4. List the ways you gather information about the academic achievement of your child(ren)?

Never	Daily	Weekly	Monthly	Quarterly	Annually	COMMUNICATION METHOD
						District Website
						Classroom Website
						Classroom Newsletter (Paper)
						Classroom Newsletter via Internet
						Individualized Student Reports
						Personal Communications Individualized to Parents Regarding Student (Paper)
						Email Communications to Individual Parents Regarding Specific Subject Matter About Student
						Face-to-Face Meetings Regarding Student Progress
						Informal Face-to-Face Interactions With Parents
						Homework Help Page
						Online Grade Book

5. How do you communicate with your child(ren)'s teacher (s) to address your child's successes or concerns?

Never	Daily	Weekly	Monthly	Quarterly	Annually	Communication
						District Website
						Classroom Website (how frequently is this updated?)
						Classroom newsletter
						Classroom newsletter via internet
						Individualized student reports
						Personal communications individualized to parents regarding student on paper
						Email communications to individual parents regarding specific subject matter about student
						Face-to-face meetings regarding student progress
						Informal face-to-face interactions with parents
						Homework help page
						On-line grade book

- a. How often does the initial email communication facilitate more communication?

Very Often	Often	Sometimes	Almost Never	Never
5	4	3	2	1

- b. How often is clarification needed?

Very Often	Often	Sometimes	Almost Never	Never
5	4	3	2	1

c. How often is a personal email needed for follow-up?

Very Often	Often	Sometimes	Almost Never	Never
5	4	3	2	1

6. What could be done differently to improve these electronic conversations?
7. How does your child/children's teacher(s) demonstrate knowledge of your family's cultural background when communicating with you via the internet?
8. How comfortable are you using technology when addressing your concerns regarding your child's academic achievements?

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