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# The Efficacy of Classroom Management Software on Parent-Teacher Communication

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# The Efficacy of Classroom Management Software on Parent-Teacher Communication

An Action Research Report

by Michelle Ellis

The Efficacy of Classroom Management Software on Parent-Teacher  
Communication

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In fulfillment of final requirements for the MAED degree

St. Catherine University

St. Paul, Minnesota

Advisor \_\_\_\_\_

Date \_\_\_\_\_

### Abstract

This action research was conducted with the parents of a private Montessori pre-school kindergarten class. The study implemented the use of Montessori Compass software and measured its effectiveness to improve parent-teacher communication. The use of messaging, daily activity reports, and photo albums were implemented within the Montessori Compass classroom management software. The study compared the response times between when the information was sent and accessed by traditional email, messaging, and daily activity reports. Other traditional methods of communication such as person interactions, phone conversation, and paper transmission were studied and compared. Survey responses provided feedback on the effectiveness of the different forms of communication prior to the study and after the study. The common theme that emerged from the research was that communication must be convenient and viewed across various devices. The result shows the positive impact of the use of Montessori Compass as an effective parent-teacher communication tool. Increased communication of the children's daily activities through Montessori Compass software helped to increase parents' feelings of connectedness with their young children. Additionally, the positive impact of the increased effective communication could benefit the students, the parents, the teacher, the school, and the community.

As a preschool-kindergarten teacher, I realized a difficulty that parents experience is a feeling of being disconnected from their young children. It is often the first time the children are away for long periods from the parents. Young children are unable to express what they are doing all day at school. Parents that did not attend Montessori school themselves are unfamiliar with the curriculum. They seek more details about their child's day. I knew that I needed to find a way to help the parents feel connected.

Communication is essential to develop a relationship between parents and teachers. Parent education events provide information parents want. However, according to reports from the National Center for Education Statistics (NCES), and other research, attendance nationwide at these events continues to decline (Bright, 2013; Noel, Stark & Redford, 2013; Carey & Westat, 1996). This was also true of the attendance at our school events. Our first parent event in August had thirteen out of nineteen parents attending. The next event in October had eight parents attending. In December the attendance was five parents. Teachers have general information they want to communicate to parents, but parents want to know specific information about their children. Due to concerns for privacy parent education nights are not the proper forum to discuss individual children. To build better relationships with parents, it's clear there is a need for a better system to communicate detailed information. I researched current communication trends to look for a better solution.

No Child Left behind legislation promotes the importance of parental involvement in schools (Khan, 2011; No Child Left Behind Act, 2001). The Harvard Family Research Project concluded that schools continued to search for which method of communicatio

increased parental involvement (Allen, 2009). Anne O'Brien, the Deputy Director of the Learning First Alliance, explains the results of the National School Public Relations Association (NSPRA) survey indicated methods used to communicate are vital for building relationships (2011). According to the NSPRA survey parents desired information about behavioral changes, progress, curriculum, performance changes, general school, class, and evaluation information (O'Brien, 2011). The traditional methods such as conferences, conversations by phone and in person were still necessary, but the supplementation with more modern techniques provided better communication overall (Brandt, 1986; Grujanac, 2011). The NSPRA survey showed the top methods: phone voice message, email, websites, e-Newsletters, and parent portals (O'Brien 2011).

### **Literature Review**

#### **Preferred Methods of Communication**

**Voice messaging.** Sheninger (2014) increased communication with the implementation of Google Voice messaging service. Sheninger looked at the ability to move parent communication to 21<sup>st</sup> century methods as a positive change. In *Learning & Leading with Technology*, Sullivan (2013) promoted Google Voice as an effective means to increase communication. It gave quick access to contacts and the ability to speak notes into the system and the capacity to communicate with any device at any time. Other voice messaging systems have also proven effective in communicating mass messages that affect the entire class or partial school population (Neely, 2005).

**Email.** The use of email communication had mixed results. Although it was a quick way to communicate, often the intended message and the perceived message would differ. This causes misinterpretation of information, which can be a detriment in

communication. Physical characteristics such as voice inflection and emphasis, as well as body movement, are information that email does not provide (Fagan, & Desai, 2002; Schumacher, 2013). Asynchronous communication of email was cause for misinterpretation and could cause additional issues (Thompson, & Mazer, 2012; Schumacher, 2013). Email was not appropriate for all topics, and some must be addressed through conversation (Dorgan 2005). One positive feature of email is that the originator decides the focus of the agenda and the frequency of interaction. The teacher is not interrupted and can control the response (Thompson, 2008; Jacobs, 2008). According to Neely (2005), the paper trail of email could serve as a safety measure for the teacher. Email communication must occur in a timely manner, be positive, and be clearly understandable, to provide the best methods for building relationship between parent and teacher (Musti-Rao, & Cartledge, 2004).

**Social Media.** Sheninger (2014), successfully implemented an interactive website that utilized Facebook and Twitter. These forms of social media helped to forge communication between parents and teachers (Trevino, 2012). When Sheninger's communication campaign was implemented, parents were educated on how to use the website. The website was a very successful endeavor for this school district. The parents liked the ease of communication, and the satisfaction increased (Sheninger, 2014). Video tutorials on the website explain the teaching methods used in class (Starkie, 2013). The popularity of social media as a form of communication was controversial. Some research indicates a decline in the popularity of the use of Facebook and Twitter (Lengel, 2009). Parents' preference shifted away from social media, with the desire to include resources for curricular instruction (O'Brien, 2011). The selection of a computer based

communication program required the consideration of many diverse aspects. A primary concern was security of information within the system and compliance with the Children's Online Privacy Protection Act, COPPA (2000). The debate over safety continues with the use of social media. Mayers and Johnson (2012) argued that the use of social media was too interactive, and caused difficult legal issues.

**Instant messaging.** The comfort level of all the users should be considered when implementing a web-based communication plan (Grujanac, 2011). Classes and tutorials provided training that gave parents and teachers instruction on how to navigate the system (Starkie, 2013), which provided more efficient communication capabilities (Dosaj, 2003). Individual, parent-teacher communication was in the form of live chat features like instant messaging, email, text, and Skype. Sorenson (2013) studied the use of instant messaging systems and found they provided an opportunity for parents to network with one another. The ability to see the topics of concern emerged more clearly through instant messaging than through other communication methods. Internet offered a convenient platform for information and interactive resources.

**Parent Portal Website.** Research showed improvement in communication through the use of this technology. The use of websites was overwhelmingly effective (Has technology improved your home-to-school connection? 2008; Nelms, 2005). Mathern (2009) found that interactive grade books provided essential information to the parents that they were seeking. Individual class portals provide parents with access to the teacher (Starkie, 2013). The parent portal provided privacy with information given only to individual parents.



There are still limitations to digital communication techniques. Families that are unable to access a computer will be at a disadvantage (Kilgore, 2010; Sorenson, 2013). They would not receive the information when it was purely web-based. Families without a computer would not interact with the resources provided by the teacher on the website (Kilgore, 2010). Teachers often felt they were unable to provide the information fast enough to meet the demand of the parents (Trevino, 2012; Dorgan 2005).

The North American Center for Montessori Teacher Training website promotes the use of technology to increase parent involvement (2013). The computer based information system Montessori Compass included a parent portal with private information access for the parents. Montessori Compass had a place to display photos, address behavioral issues, contact the teacher, assess progress and understand curriculum. Feedback given by teachers at the 2013 International Montessori Congress found that Montessori Compass provided essential information to parents (2013, August 5). Montessori Compass provided all the information that the National School Public Relations Association (NSPRA) survey listed that parents desired about their children (O'Brien, 2014).

After completing a full review of the literature, I choose Montessori Compass because it supported all of the essential elements necessary to efficiently provide information through the use of technology. The purpose of my research was to see if Montessori Compass could provide more detailed information parents seek and increase parent-teacher communication.

### **Description of the Research**

I conducted this action research at a private Montessori school that serves students ranging from three months to twelve years of age. The participants were the parents of the students from my preschool-kindergarten class. Nine out of the nineteen parents agreed to participate in the study. The nine participating parents had experience with our Montessori school program ranging from novice, (first year in our school) to intermediate, (having six years in our school). The communication method I had been using with these parents had been through traditional email, phone calls, face-to-face conversations and paper transmission sent with the child. An anonymous online survey was sent out to the participants at the onset of the research (see Appendix A). This quantitative information offered a baseline for understanding what information parents' wanted about their children and how they felt about a variety of communication methods. The action research project took place over a four-week period.

Montessori Compass was an existing online classroom management software system. The system provided record keeping and information transmission with access from any Internet accessible device. Montessori Compass had a variety of functions such as daily activity reports, messaging and photo albums to communicate with parents through the use of technology. After I purchased access to Montessori Compass, I input the required parent and student information.

The Daily Activity Report feature in Montessori Compass provided a communication tool that was individualized to each of the children. The Montessori classroom has many areas of curriculum including Practical Life, Sensorial, Math, Geography, Culture, Language, Science, Art, Music, and Movement. The children move freely and follow

their interests in selections of activities from throughout the curriculum. Parents wanted more detailed information about what their children were doing. I accessed and recorded information about each student's daily activity such as, social interaction, lessons given, materials practiced, funny anecdotes, any information the parent might like to know about their children's day. I provided information about the name of the curriculum area from where their children were working. I used the Montessori names for the activities the children selected so the parents could research the information further in the Parent Resource feature in Montessori Compass. The Parent Resource section provided simple explanations of the lessons and the significance for the children. Through the Daily Activity section, parents could login and see information that I provided about their children. The Daily Activity Report provided daily contact with each of the parents regarding their children. I explained that the communication was not a comprehensive list of all the children had done, just a small snapshot of their day.

Montessori Compass provides the ability to track the timestamp on the Daily Activity information sent to, and accessed by, the parent. In accordance with my configuration settings, Montessori Compass granted parents access to the information each day at 5:00 p.m. The parents received notification emails to their personal accounts indicating there was new information about their children in Montessori Compass. The email also served as a reminder to parents to access Montessori Compass. The parents then accessed the system via their device of choice using a login feature with password protection. I tracked the time it took for each Daily Activity report to be accessed by the parents (see Appendix B).

The Photo Album application of Montessori Compass gave the parents access to photos of their children working in the classroom. Photos were taken throughout the day when children had lessons and practiced their work. Candid photos provided an observational view of the children. I would provide captions to the photo when needed to clarify the name of work the children were doing. The parents could access curricular information in the parent resource section in Montessori Compass. Notification emails were sent to the parents telling them a new photo was added to their child's photo album.

Montessori Compass also provided a messaging feature. Messaging works much like email but is accessed through the Montessori Compass login. If a message was sent to the parent's in Montessori Compass, they would receive a notification email to their personal email account to alert them of the new messages. Messaging could also be tracked by timestamp of sent and read.

The Calendar application in Montessori Compass provided a platform for broad class information about upcoming events. It also allowed information to be given to a smaller segment of parents and not the entire class. The information kept parents connected to school and class information. Notification emails let parents know about new calendar information in Montessori Compass.

The active consent form told all parents about a tutorial session for Montessori Compass. Using the existing class email address and the messaging section of Montessori Compass, I invited everyone to the tutorial session to demonstrate the navigation of Montessori Compass. Eleven parents attended the event. I asked parents to bring their Internet accessible devices to the meeting. I provided two tablets for use by the parents that did not bring their devices. I showed how to navigate the system and gave

time for the parents to ask questions. Upon the conclusion of the tutorial session, I asked all the parents if they understood the navigation of Montessori Compass and they all agreed that it was user-friendly and had no additional questions about the system.

I created a Communication Journal spreadsheet to record communication interactions with parents (see Table 1). I logged general information in the Communication Journal when parents began to access Montessori Compass. I recorded every interaction with parents in the Communication Journal during the four-week study.

Student ID	Date	Comm. Type	Comm. Class	Originator Comm.	MC Verified	Resp. Date	Effective Communication	Desc	Out-Come
XXX	MM / DD / YY	1-Email 2-InPerson 3-Phone 4-Paper 5-MC	1-Photos 2-Progress 3-Curriculum 4-Behavior 5-Illness 6-Misc	1-Teacher 2-Parent	0-No 1-Yes	MM / DD / YY	0-No 1-Yes	Free Text	Free Text

Table 1. *Sample of Communication Journal*

An anonymous post-study online survey was given to the parents at the conclusion of the study period (see Appendix C). The survey results provided information about the satisfaction with Montessori Compass and additional information sought by parents. This information would help me determine if Montessori Compass is a viable option for my class to improve communication. It would determine if I would continue to provide information to the parents through Montessori Compass.

### **Analysis of Data**

The implementation of Montessori Compass software provided the platform to employ various communication methods including messaging, daily activity reports, and

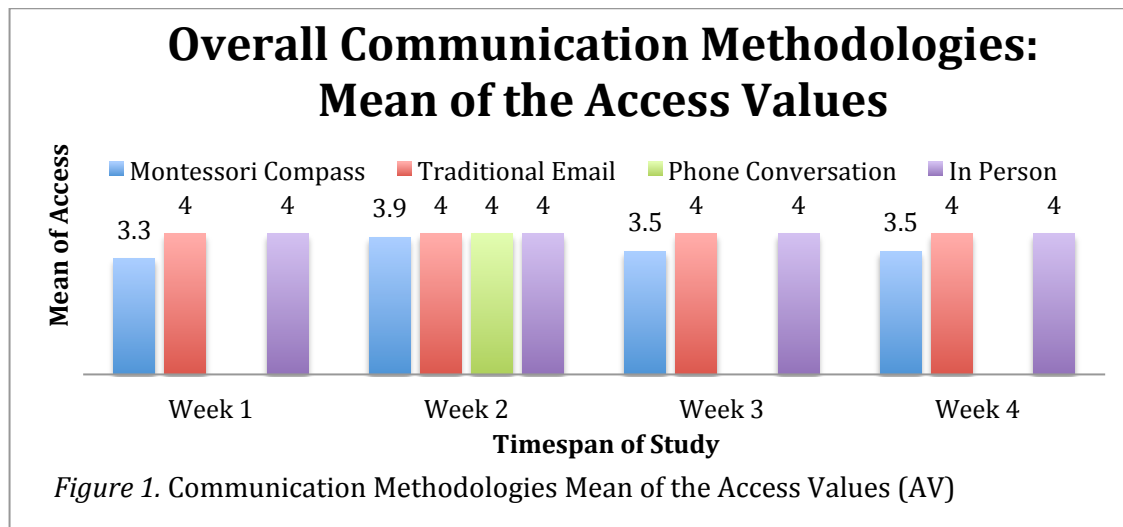
photographs. Traditional communication methods such as email, phone conversations in-person and written communication were also tracked in the communications journal. For the purpose of this action research project, access to the information was measured in twenty-four hour increments from the time the communication was initiated by the teacher to the time parents accessed the information. I tracked the time stamp verified access provided by Montessori Compass and Microsoft Outlook. I then assigned access values (AV) (see Table 2). If the parent accessed the information within the first twenty-four hours it was sent, the access value of four was assigned. Access that fell between twenty-four and forty-eight hours was notated and given an access value of three. An access value of two was applied for responses acknowledged between forty-eight and seventy-two hours. The access to communication that occurred after seventy-two hours was given an access value (AV) of one. Communication that was never accessed was given an access value (AV) of zero.

Parents Access Time	Up to 24 Hours	24-48 Hours	48-72 Hours	After 72 Hours	No Response
Value Assigned	4	3	2	1	0

Table 2. *Access Value (AV) Assignment*

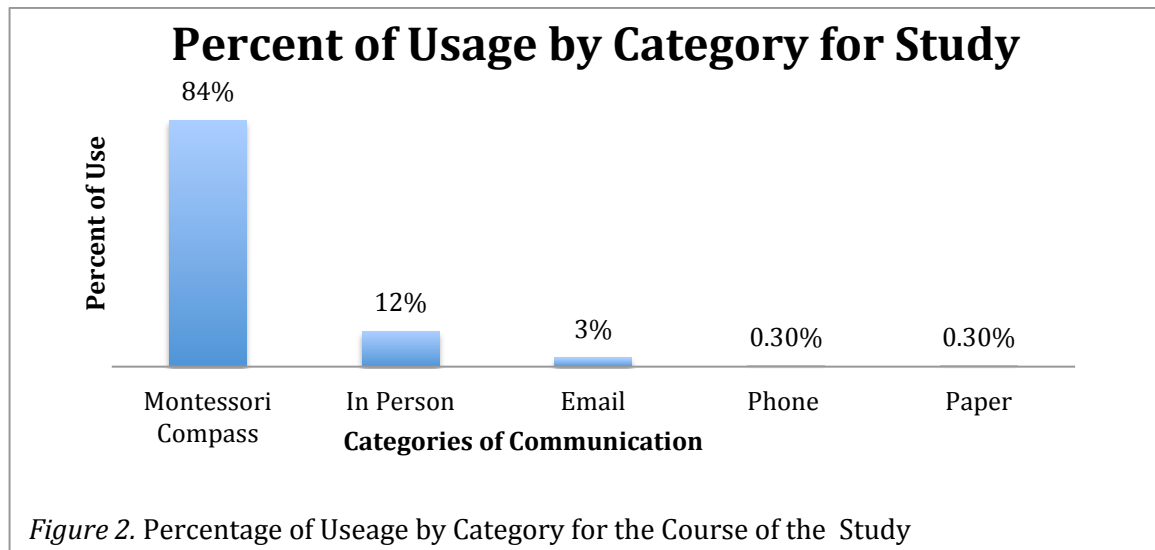
The results showed that phone and traditional email transmission, provided immediate response with the access value (AV) of four, Montessori Compass showed slightly lower access values (AV). The access values were assigned, and the mean of the values were calculated for the span of the study. The first week Montessori Compass received a mean access value of 3.3. The second week Montessori Compass had a mean access value of

3.9. The third and fourth weeks Montessori Compass’ mean access values were 3.5. This data indicated that Montessori Compass was just as efficient as in person or phone conversation with response time within a twenty-four hour time period. Phone conversations and in person interactions always provided immediate access an AV of four, but were infrequently used. The access time of paper transmission was impossible to track. The combined data provided by Montessori Compass software and the communication journal provided insight to which communication methodology worked best for the parents. Data collected from the communication journal provided several key points. I tracked the number of uses per category of communication. The result reflected the preferred communication method for the duration of the study. I also developed a medium for collecting and tracking communication methods not provided by Montessori Compass such as in-person, traditional email, telephone communication, and written communication.

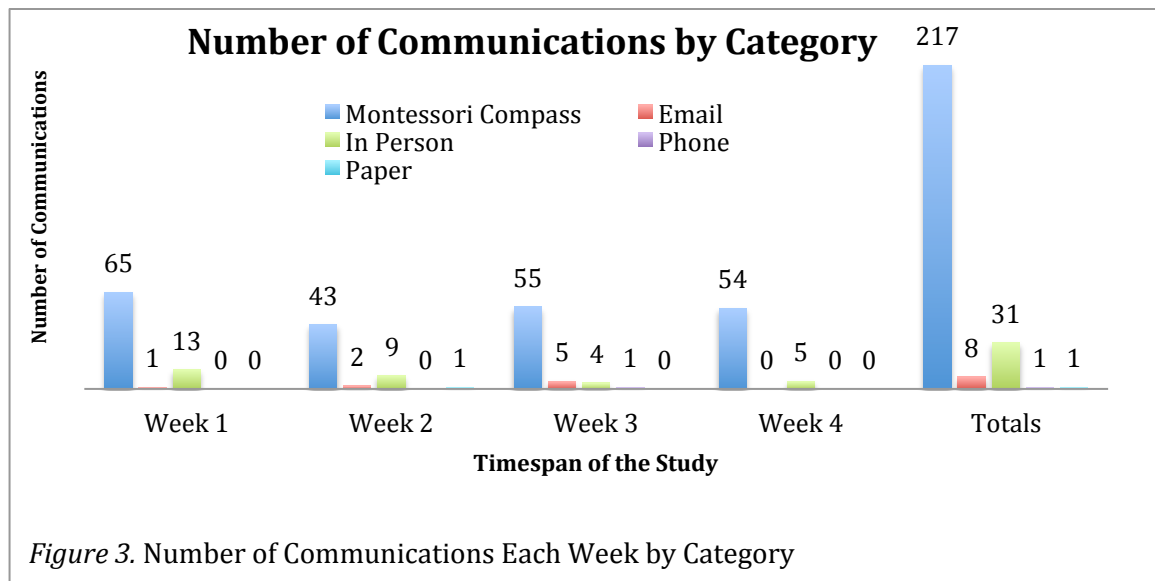


The communications category that was used most over the study was Montessori Compass communication with 84% usage over the span of the study. The next highest

ranked method of communication was in-person with 12% usage over the course of the study. The third was traditional email at 3% usage over the span of the study. The least used methods were phone and paper each with .3% usage over the span of the study (see Figure 2).



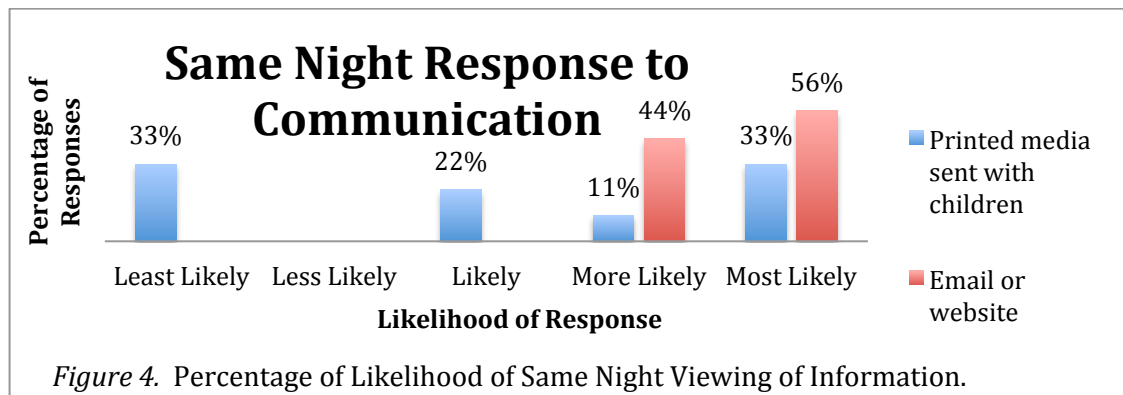
The order of ranking held steady throughout the study (see Figure 3).





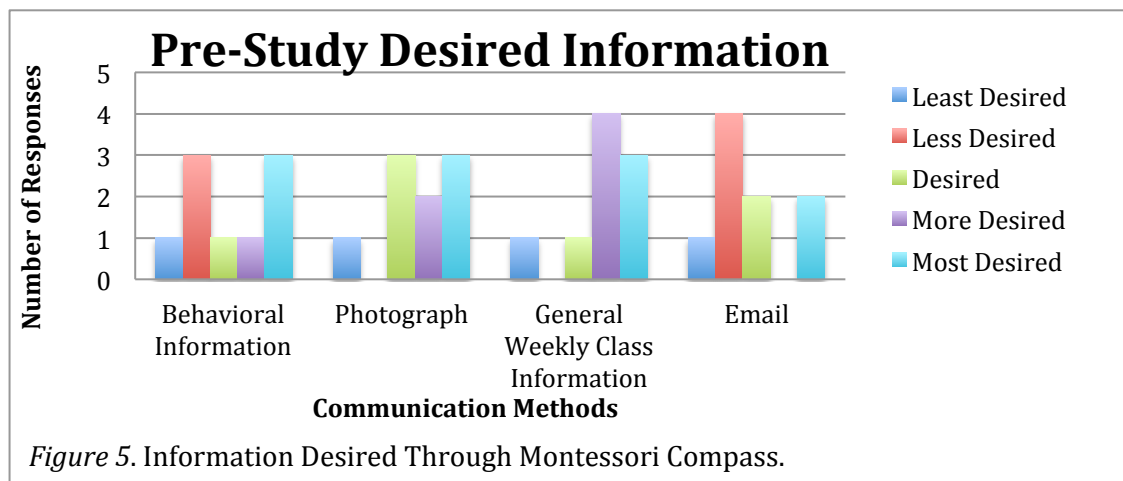
The pre-study communication methods implemented were traditional email, in-person, telephone conversation, and written paper transmission. The pre-study survey (see Appendix A) indicated the need for more effective means of communication. The intent of the pre-study survey was to collect a baseline of information assessing how parents preferred to communicate with the teacher. The pre-study survey assisted with determining if Montessori Compass would be an acceptable medium for communication. The post-study survey (see Appendix C), assisted in determining whether or not Montessori Compass met parent communication needs. Data collected from the pre and post-study surveys defined the types of communication suspected to be effective and what was effective.

The pre-study survey indicated that the use of an electronic source to communicate information would provide the greatest likelihood of responding within a twenty-four hour period 44% said most likely and 56% responded most likely to respond the same night. The same night response to printed media sent with children had mixed result with lower overall values of 11% for more likely and 33% most likely to respond. The remaining 33% responded least likely and 22% indicated likely to respond within a twenty-four hour time span (see Figure 4).



When asked specifically if they thought a website would improve communication the results unanimously indicated (by 100% yes response) that parents supported the implementation of Montessori Compass.

The pre-study survey listed the information accessed through Montessori Compass, and a ranking system was given to determine the parents’ priorities. The result indicated by parents showed that behavioral information, weekly class information, and photos ranked as most desired. Messaging was the least desired communication through Montessori Compass (see Figure 5).



The post-study survey (see Appendix C) concluded, that implementation of Montessori Compass, addressed and adequately provided the best method of communication that the parents indicated a they needed to feel more engaged their children’s daily activities.

Data collected from the pre and post-study surveys defined the types of communication suspected to be effective, and what was effective.

The answers to the pre-study survey question seven (see Table 3), and the post-study survey question five (see Table 4), indicated a slight shift. On the post-study survey, the

parents had greater desire for photographs and behavioral information. Parents had less desire for daily activity reports and messaging provided in Montessori Compass. Although parents like the daily activity reports they indicated greater desire for behavioral information than in the initial survey. Feedback indicated that the log in procedure delayed information from directly reaching the parent. The traditional email provided an immediate access to the new information.

7. What methods would you like to access from Montessori Compass?					
	Ranked First	Ranked Second	Ranked Third	Ranked Fourth	Ranked Fifth
General Weekly Information	3	4	1		1
Photography	3	2	3		1
Behavior Information	3	1	1	3	1
Email	2		2	4	1
The above numbers indicate the amount of responses for each ranking					
Table 3. <i>Pre-study Survey Question 7</i>					

5. What information did Montessori Compass provide that was most important?					
	First Choice	Second Choice	Third Choice	Fourth Choice	Fifth Choice
Weekly Class Information	1	8			
Photograph	8	1			
Behavior Information				2	
Messaging					9
The above numbers indicate the amount of responses for each ranking					
Table 4. <i>Post-study Survey Question 5</i>					

Questions five and six from in Pre-study survey, and questions three and four in the Post-study survey (see Table 5), indicated that parents unanimously agreed (by 100% yes response) that the use of Montessori Compass was an effective method to improve communication. Both survey results concluded that the use of the Daily Activity Reports with photographs increased the parents’ feeling of engagement in their children’s education.

5. Do you feel a user friendly, private, secure computer based website such as Montessori Compass would be an effective tool to improve communication between parents and teacher?
6. If the teach was able to provide glimpses of your child’s weekly activities and a short summary of your child’s progress, would that help you feel more engaged in your child’s educations?
3. Do you feel that Montessori Compass is an effective tool to improve communication between parents and teacher?
4. Do you feel the individual information on your child’s progress and weekly activities helped you feel more engaged in your child’s education?
Table 5. <i>Questions 5 and 6 from the pre-study survey and question 3 and 4 from the post-study survey</i>

Both survey results also were in 100% agreement with the need for easy access to information from any web accessible device (see Table 6).

Question 8 from the pre-study survey:
8. What would keep you from taking full advantage of your child’s class website?
All resulted in (100%) response if it was not available from any web accessible device.
Question 7 in the post-study survey:
7. What id you like best about Montessori Compass?
All responses indicated (100%) that information was available by any web accessible device.
Table 6. <i>Pre-study survey question 8 and post-study survey question 7</i>

Armed with the data provided by the Montessori Compass, the communication journal and the pre and post-study surveys, the results supported that the Montessori Compass provided a more efficient mode of communication. The parents also agreed (with 100% yes response) that they would like to see a glimpse into their child's daily activities to feel more engaged in their children's education. The communication the software provided filled the void that parents had for information about their children's daily activity.

Key measuring indicators such as the access values (AV), the results from the percentage of use by communication categories, and the post-study survey preferences offered insight into the viability of the software. It was possible to provide a measurable perspective of effectiveness by compiling and analyzing the access value (AV) data. Taking the data supplied by the timestamp in the software, the information contained in the communications journal and aligning the results from the post-study survey data revealed significant information. The parents with associated higher numeric value are the parents that see the value in the use of non-traditional communication methods and encourage the use of Montessori Compass.

Communication was most effective when it was convenient for everyone to access and was user friendly. Montessori Compass met both requirements. It provided a vehicle for effective parent teacher communication. The convenience in communication was very important to the parents.

### **Action Plan**

Parents have a strong need to understand what their young children are doing while at school. My research revealed that the implementation of Montessori Compass filled the

void of information that existed previously. The result of the study showed the increased feeling of connectedness by the parents through the information provided by the implementation of Montessori Compass. Montessori Compass increased parent-teacher communication and proved effective in the delivery of information.

Understanding of the impact of this research on my practice as a teacher is vital to my growth in the teaching profession. The result of this action research project indicated the importance of the parents' comfort level and connectedness with knowing what their children are doing while at school. I will continue to provide more information to parents on a consistent basis. The implementation of Montessori Compass had a positive impact through increased communication. Increased information transmission resulted in a stronger parent-teacher partnership. The impact of this research on student learning is through the support and partnership with the parent. The partnership with parents and teachers provides the best educational opportunity for the children. Previously parents expressed that their young children provided limited or no information about what they had done at school. The photographs provided a visual reminder to the young children of what they were doing at school. When more information was provided to the parents about their children's daily activities there was a better understanding of what their children did at school. There was an increase in transparency in what occurs in the classroom. The parents had more information about curriculum. The information provided an opportunity for the parents to open conversation about the classroom activities with their children. The parents feeling of connectedness with their children was fostered in this increased communication. Several parents felt so comfortable and confident in what their children were doing through the information provided by

Montessori Compass they did not feel parent–teacher conferences were necessary. I would continue to use Montessori Compass even at my personal cost.

The impact of strong parent-teacher communication can have a prolonged effect on the school. When parents are happy with their children’s experience they typically have positive feelings in general about the school. They discuss their experiences with other parents. Most schools’ growth is directly affected by word of mouth communication. Happy parents have a relationship with the larger school community and invest in the ongoing success of the student and the school. The effective communication provided by Montessori Compass improved and strengthened the parent-teacher relationship. Parents and teachers are partners in the education of their children. This indirectly increases their positive feelings about the school as a whole. The growing school has a greater impact on the community and the graduates learn the effective communication skills that have been modeled by the positive relationships of teachers and parents. The students carry the effective communication skill and positive feeling for education on to the next generation of students and the impact continues.

The impact of the software could transform the long-term success of students, schools, and communities. There are several areas to obtain additional data to understand the long-term effects. Going forward research could continue with a greater population of participants to provide a larger data sample to increase the validity of the use of the software. Greater exploration of the data collection could determine if the effectiveness continues over all age groups or is only significant for the younger population. Further research could see if a correlation exists between long-term use of Montessori Compass and the retention of students in a private Montessori school setting. Increased retention

will continue to strengthen active communication in the students and impact their future.

There is immense value in increasing the effectiveness of communication to strengthen the relationships within the school to impact the larger community.



## References

- Allen, J. (2009). Effective home–school communication. *Family Involvement Network of Educators FINE Newsletter*, 1(1), Issues topic: Home -school communication. Harvard Family Research Project Retrieved from: <http://www.hfrp.org/family-involvement/publications-resources/effective-home-school-communication>
- Brandt, R. (1989). On parents and schools: A conversation with Joyce Epstein. In *Educational Leadership*, 47(2), 24.
- Bright, L. M. (2013). *Alternative methods of communication to improve parents' involvement in and knowledge of the curriculum* (Doctoral dissertation). Available from Pro Quest Dissertations and Theses Global. (UMI No. 3599517)
- Carey, N. & Westat, E.F. Inc. (October, 1996) *National Center for Educational Statistics in Brief: Parents and Schools Partners in Learning: Parent Attendance at School Events* (NCES 96-913). National Center for Educational Statistics, U.S. Department of Education Office of Educational Research and Improvement. Washington, D.C.
- COPPA -Children’s Online Privacy Protection Act. (2000). Retrieved from <http://www.coppa.org/comply.htm>
- Dorgan, E.H. (2005). *Teacher perceptions of E-mail as a method of communication with parents* (Doctoral dissertation). Available from Pro Quest Dissertations & Theses Global. (UMI No. 3177503)
- Dosaj, A. (2003). *Teachers' communication practices with parents* Available from Pro Quest Dissertations and Theses Global. (UMI No. 3107142)

- Fagan, J. & Desai, C. (2002). Communication strategies for instant messaging and chat reference services. In L. Katz (Ed.), *The reference librarian* (38, 79-80, 121-154). NY: Routledge. doi: 10.1300/J120v38n79\_09
- Grujanac, M. (2011). *How does internet-facilitated communication impact teacher and parent partnerships?* (Doctoral dissertation). Available from Pro Quest Dissertations and Theses database. (UMI No. 3454999)
- Has technology improved your home-to-school connection? [Reader poll] (2008, May). *Learning & leading with technology*, 35(7), 6. Retrieved August 1, 2014, from: [http://go.galegroup.com/ps/i.do?id=GALE%7CA197802340&v=2.1&u=clic\\_stkate&it=r&p=ITOF&sw=w&asid=7bc4d51585cda000fa15376886277d2b](http://go.galegroup.com/ps/i.do?id=GALE%7CA197802340&v=2.1&u=clic_stkate&it=r&p=ITOF&sw=w&asid=7bc4d51585cda000fa15376886277d2b)
- Jacobs, B. A. (2008). *Perspectives on parent involvement: How elementary teachers use relationships with parents to improve their practice* (Doctoral dissertation). Available from Pro Quest Dissertations and Thesis Global; Pro Quest Education Journals. (304563383) (UMI 3341396)
- Kilgore, A.J. (2010). *Teachers' perspectives on using E-mail to communicate with parents* (Doctoral study). Available from Pro Quest Dissertations and Theses Global. (UMI No. 3418344)
- Khan, F. (2011). *The effects of school home communication and reading fluency in kindergarten children* (Doctoral dissertation). Available from Pro Quest Dissertations and Theses Global. (UMI No. 3481049)
- Lengel, L. (2009). Computer-mediated communication. In W. Eadie (Ed.), *21<sup>st</sup> century communication: A reference handbook*. (543-550). Thousand Oaks, CA: SAGE Publications, Inc. Mathern, M. (2009). *The relationship of electronic grade book*

- access to student achievement, student attendance, and parent-teacher communication* (Doctoral dissertation). Available from Pro Quest Dissertations and Theses Global; Pro Quest Educational Journals. (UMI No. 3431768)
- Mayers, R.S. & Johnson, G.R. (2012). Should public schools promote themselves on social networking sites, such as Facebook and Twitter? In C. J. Russo, & A. G. Osborne, Jr. (Series Eds.), & K. Brady, C. Russo, & A. Osborne (Vol. Eds.), *Debating Issues in American Education: Technology in schools* (194-208). CA: SAGE Publications, Inc.
- Montessori Compass (2013, August 5). Re: Thank you to the Montessori Congress attendees! [Web blog post]. Retrieved from <http://montessoricompass.com/blog>
- Musti-Rao, S. & Cartledge, G. (2004). Making home an advantage in the prevention of reading failure: strategies for collaborating with parents in urban schools. *Preventing School Failure, 48*(4), 15-21.
- Neely, E. (2005). Communication with parents: It works both ways. *Leadership, 34*(5), 24-27.
- Nelms, E. (2005). *The effects of a teacher –created web page on parent communication: An action research study* (Action research study). Available from ERIC database.
- No Child Left Behind Act (2001).
- Noel, A. Stark, P. & Redford, J. (2013, August). *National Center for Education Statistics: Parent and Family Involvement in Education, from the National Household Education Surveys Program 2012: First Look* (NCES 2013-028). National Center for Educational Statistics, Institute of Education Science, U.S. Department Education. Washington, D.C.

North American Montessori Center Montessori Teacher Training (2013, April 12).

*Increasing parent involvement in your Montessori school: the answer may surprise you.* [Web blog post]. Retrieved from <http://montessoritraining.blogspot.com/2013/04/increase-parent-involvement-montessori-school.html#VDsFhOfbado>

O'Brien, A. (2011, August 31). What parents want in school communication. *Teacher Leadership*, [Edu Topia Website]. Retrieved September 21, 2014 from:

<http://www.etutopia.org/blog/parent-involvement-survey-anne-obrien>

Schumacher, S. (2013). *The dangers of electronic communication: Communicating too much by E-mail may cause a lot of misunderstandings.* *General OneFile*. [Web document 19 Sept. 2014.] Document URL

[http://go.galegroup.com/ps/i.do?id=GALE%7CA328942963&v=2.1&u=clic\\_stkat&it=r&p=ITOF&sw=w&asid=40298f953dfe70849ab890b3206d288f](http://go.galegroup.com/ps/i.do?id=GALE%7CA328942963&v=2.1&u=clic_stkat&it=r&p=ITOF&sw=w&asid=40298f953dfe70849ab890b3206d288f)

Sheninger, M. E. (2013). *A case study in online parent community in an educational environment* (Doctoral dissertation). Available from Pro Quest Dissertations and Theses Global. (UMI No. 3604735)

Starkie, B. (2013). Data sharing through parent portals: An exploration of parental motivation, data use, and the promise of prolonged parent involvement. *Family Involvement Network of Educators (FINE) Newsletter* 5(2). Harvard Family Research Project. Retrieved from <http://www.hfrp.org/publications-resources/publications-series/family-involvement-research-digests/data-sharing->

[through-parent-portals-an-exploration-of-parental-motivation-data-use-and-the-promise-of-prolonged-parent-involvement](#)

Sullivan, L. M. (2013). Use Google voice to improve school communication. *Learning & Leading with Technology*, 41(1), 36.

Thompson, B., (2008). The characteristics of parent -teacher E-mail communication.

*Communication Education*, 57(2), 201-223. Routledge: Taylor & Francis Group.

Trevino, R. (2012). *Examining parent-teacher communication in school systems through the use of emergent technologies* (Doctoral dissertation). Available from Pro Quest

Dissertations and Theses database. (Order No. 3524591) 202.

Thompson, B., & Mazer, J. (2012). Development of the Parental Academic Support

Scale: frequency, importance, and modes of communication. *Communication*

*Education*, 61(2), 131-160. Routledge: Taylor & Francis Group.

## Appendix A

### Pre-Study Survey

By completing this feedback form, you are giving your consent to participate in this study. Completing this feedback form is completely voluntary and you may quit at any time. Completion of these questions is confidential and no identifiable information will be collected or used in association to the originator at any time.

1. How likely would you be to review all printed media sent home with your child the night the information was provided?

1    2    3    4    5

Least Likely      Most Likely

2. How likely would you be to review electronic transmitted information (via email or website) the day the information was provided? \*

1    2    3    4    5

Least Likely      Most Likely

3. How effective do you feel e-Newsletter would be to disseminate information between parents and teacher for their individual class? \*

Based on recent research, parents have identified the following Methods of communication as their preferences. They are: 1. Email 2. Social media (Facebook or Twitter) 3. Voice Messaging 4. e-Newsletter 5. Website 6. Paper. In answering the following questions please use this as a guide for how you answer the following questions

1    2    3    4    5

Least Effective      Most Effective

4. How confident do you feel integrating Social Media (Facebook and Twitter) into the overall communication methodology to disseminate information between the parents and teacher? \*

1    2    3    4    5

Least Effective      Most Effective

5. Do you feel a user friendly, private, secure computer based website such as Montessori Compass would be an effective tool to improve communication between parents and teacher? \*

- Yes
- No

6. If the teacher was able to provide glimpses of your child's weekly activities and a short summary of your child's progress, would that help you feel more engaged in your child's education? \*

- Yes
- No

7. What methods would you like to access from Montessori Compass? \*  
Please rank the choices from 1-5 . Rank 1 = the most desired and Rank 5 = the least desired

	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General Weekly Class Information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Photos of Children Working	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behavioral Information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. What would keep you from taking full advantage of your child's class website?

9. How likely would you be to utilize information about your child's curriculum if it was provided on your child's class website? \*

1   2   3   4   5

Most Likely      Least Likely

10. This curriculum information identified in this question will provide specifics on the lesson presented, the benefits of the lesson, and the fundamental philosophy behind the lesson. The teacher may also be able to provide hints how to help your child at home. \*

1    2    3    4    5

Least Likely                  Most Likely

### Appendix B

#### Sample of Daily Activity Report Access Speed and Assigned Access Values

		Date	# of Days	Access Value Assigned	Average Access Value Per Week
Week 1	Date Sent	Accessed	to Access		
	2	2.5.15	2.5.15	Same	4
	3	2.5.15	2.5.15	Same	4
	5	2.5.15	2.5.15	Same	4
	6	2.5.15	2.5.15	Same	4
	4	2.5.15	2.5.15	Same	4
	12	2.5.15	2.5.15	Same	4
	15	2.5.15	2.5.15	Same	4
	19	2.5.15	2.9.15	4 days	1
	14	2.5.15	2.6.15	1 day	3
	2	2.6.15	2.7.15	2 days	2
	3	2.6.15	2.6.15	1 day	3
	4	2.6.15	2.7.15	1 day	3
	5	2.6.15	2.6.15	Same	4
	6	2.6.15	2.6.15	Same	4
	12	2.6.15	2.6.15	Same	4
	14	2.6.15	2.9.15	3 days	1
	15	2.6.15	2.7.15	1 day	3
	19	2.6.15	2.9.15	3 days	1
	2	2.9.15	2.10.15	4 days	1
	3	2.9.15	2.10.15	4 days	1



5	2.9.15	2.10.15	4 days	1
4	2.9.15	2.10.15	4 days	1
6	2.9.15	2.9.15	Same	4
12	2.9.15	2.9.15	Same	4
14	2.9.15	2.9.15	Same	4
15	2.9.15	2.10.15	1 day	3
19	2.9.15	2.9.15	Same	4
2	2.10.15	2.10.15	1 day	3
3	2.9.15	2.10.15	1 day	3
4	2.10.15	2.10.15	Same	4
5	2.10.15	2.10.15	Same	4
6	2.10.15	2.10.15	Same	4
12	2.10.15	2.10.15	Same	4
14	2.10.15	2.10.15	Same	4
15	2.10.15	2.10.15	Same	4
19	2.10.15	2.10.15	Same	4
2	2.11.15	2.11.15	1 day	3
3	2.11.15	2.11.15	1 day	3
4	2.11.15	2.22.15		3
5	2.11.15	W		
6	2.11.15	2.17.15		1
12	2.11.15	2.11.15	Same	4
14	2.11.15	2.11.15	Same	4
15	2.11.15	2.11.15	Same	4
19	2.11.15	2.11.15	Same	4

Average Access  
Value Week 1 =3.18

## Appendix C

### Post-Study Survey

1. How would you prefer to receive newsletters \*

- Paper
- E- Newsletter
- Other

2. Do you feel that after using Montessori Compass your understanding of the Montessori Curriculum has increased? \*

1 2 3 4 5

Yes Greatly!      Not at all

3. Do you feel that Montessori Compass is an effective tool to improve communication between parents and teacher? \*

- Yes
- No

4. Do you feel the individual information on your child's progress and weekly activities helped you feel more engaged in your child's education? \*

- Yes
- No

5. What information did Montessori Compass provide that was most important? \*

	First Choice	Second Choice	Third Choice	Forth Choice	Fifth Choice
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General Weekly Class Information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pictures of your child working	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on lessons presented	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behavioral information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. What information did you desire that was not met through Montessori Compass capabilities? \*

7. What did you like best about Montessori Compass? \*

8. What other communication do you desire from your child's teacher? \*

9. Which method of communication is most effective? \*

- Montessori Compass
- Class Email
- Phone conversation
- Face-to-face interaction
- Other