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Increasing Family Involvement with the Use of Technology

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Increasing Family Involvement with the Use of Technology

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Abstract

The purpose of this action research project was to determine if the use of an online application could increase parental involvement, more specifically communication, in a prekindergarten setting. Data was collected through quantitative means using a tally system for each occurrence of communication and which method was used. The classroom setting consist of two groups of students, an AM and a PM group. One class had the application made available to them, along with the other forms of communication, while the other class only had the basic forms of communication (e-mail, face-to-face, or phone calls) available. Analysis of the data collected suggests that in the classroom used for the study, the use of an online application did not increase family involvement.

Increasing Family Involvement with the Use of Technology

Research shows that students with involved families are more likely to earn higher scores, attend school regularly, have better social skills, and graduate (Henderson & Mapp, 2002). Expanding communication and involvement within families is a strategy educators use to affect education in a variety of areas. These areas might include assessment scores, grades, social, behaviors, and more that will be included in the review of literature. These benefits should be motivating factors to educators when finding strategies to include families in their child's education. The researcher completed this action research with the knowledge of these benefits but a lack of strategies in overcoming the barriers behind it.

The researcher is a third year teacher in a district known for its diversity and poverty. After the first two years of teaching, the researcher realized that involvement from families in her setting is not commonly seen. Some of the most notable incidences included zero parent volunteers for class parties the first year and then one the second year. Another notable piece stood out, as there were three book orders placed when given a monthly order form both years. While these are not the most important aspects of family-school involvement, they were the ones most obvious to the researcher. When thinking of overall participation, it was difficult to find families who were willing to come in to volunteer, donate, or act as a guest speaker. It was common for at least two families to miss conferences each semester and when asked to reschedule, families could not be reached. After taking a step back, the researcher thought about the relationships she had with families. Communication was not a priority among them all and that needed to change.

The researcher sought to understand barriers of family involvement as well as attempt to find if using technology, more specifically an online app, would show increase in

communication and overall involvement. The literature review will can act as a motivating piece for those educators who do not understand why involving families is important. The findings of the action research might be effective for educators and school administration when planning ways to make communication more accessible to their families. Data was collected on all the areas of communication and how many times initiated contact was made. The results of action research will be presented and the following question will be addressed: Does the use of an online application increase family communication and involvement in the classroom?

Review of the Literature

Defining Parental Involvement

Parental involvement is found to be an important strategy when providing quality education to students. Involvement or engagement in schools from families come in a variety of methods, frequencies, and forms. Volunteering at schools, attending parent-teacher conferences, collaborating with the community, and planning school events are a few. Families can also be involved without having to be present in the school. Communicating with teachers, helping their child with school work, or donating to the classroom are just a few. For the purpose of this action research project, parental involvement will be defined as consistent, two-way communication through multiple forms where educators and family can collaborate and exchange knowledge (Halgunseth, 2009).

Geert Driessen, Frederik Smit, and Peter Slegers (2005) look at research completed by Vogels. Within his research, he states that there are four grouping types of parents: partners, participants, delegators, and invisible parents. The first two groups, partners and participants, are closely involved in the school. They are active in school-support activities and the learning of their child. Partners tend to have a more formal participation. Delegators and invisible parents

are generally passive in their child's schooling, although the delegators want to, but have had difficulties communication or connecting with their child's school or work and feel powerless in relation. Although the forms of which parental engagement type makes the most difference is unclear, all of the research found that there is correlation between family engagement and academic knowledge, skill development, behavior, and emotional development (Driessen, et al., 2005). "For these reasons, the necessity of providing all parents with opportunities to get involved with the school is continually emphasized" (Driessen, et al., 2005, p. 513-514).

Standards and Policies

While the benefits and effects should be enough to encourage educators to include families in their practice, there are also certain standards that educators must adhere to that involve family involvement. Standards are what drives educators, holds them accountable for teaching certain age-appropriate content, and following certain expectations. All standards are research-based to ensure developmentally appropriate objectives and guidance for educators to follow. These standards also ensure a supportive learning environment. Evidence must be given for all standards, including those that involve families. Evidence could include, but are not limited to, specific assessments, pictures, GOLD Teaching Strategies family access, a notebook back and forth, or an invitation to preschool meetings. There are many different standards that can be used at a state or national level in an early childhood setting. For the purpose of this research, because the setting of the research is in the state of Iowa, standards specific to the state of Iowa will be reviewed.

The first set of standards used is the Iowa Early Learning Standards (2018). The standards state, "Families are children's crucial caregivers and first teachers" (p. 15) and partners in early education. The standards also state that creating partnership with families is essential "to

ensure that children receive the best learning experiences within and outside the home” (Iowa Early Learning Standards, 2018, p. 15). According to these standards, educators must acknowledge that families are equal partners and that there should be opportunities to share observations about their child and that those hold high priority. Maintaining two-way, open communication with families is a crucial element to these standards.

Another set of standards used in our district preschool is the Iowa Quality Preschool Program Standards (2017). Building relationships with families has its own standard and is listed as the very first domain. Standard 1.1 Building Positive Relationships Among Teachers and Families states “Teachers work in partnership with families, establishing and maintaining regular, on-going, two-way communication” (Iowa Quality Preschool Program Standards, 2017, p. 1). In order to meet this standard, educators must first establish a way of communication that works best for all parties and creates a positive and supportive relationship that makes on-going communication part of the classroom norms. Educators must also provide evidence that this is occurring in their setting. Evidence could include a log of phone calls, saved e-mails, invitation to meetings and conferences, or an online application.

Special Education and Family Involvement

Because the researcher teaches in an inclusive setting, special education and parental involvement was reviewed. Parents of students with disabilities may feel more stress when looking at the education their child is getting and communicating with schools. Building relationships with the school and teachers is crucial in the development their child’s plans; including assessment, placement, progress monitoring, and meeting the needs of their child (Wellner, 2012). There is often hesitation from the families at first with a wide range of emotions. Some are looking for a cure while others might not think their child has a disability at

all. Some are angry at themselves or even the school systems. Those first encounters can be what makes or breaks the relationship and team.

Collaboration between schools and families is a requirement when developing and following an Individualized Education Plan (IEP). Team meetings take place with all who are involved. Some parents have said that these meetings feel threatening, as they sit around a large table with people they don't know. "Trust between parents and educational leaders are necessary for effective long-term partnerships" (Wellner, 2012, p. 16). These partnerships are in the best interest of the child and will ultimately lead to support and improved teaching and learning practices. When there are differing perspectives, relationship can be the deciding factor between coming up with better solutions or parents exercising their due process rights.

Factors that contribute to unstable relationships include lack of communication, lack of collaboration, poor listening skills, and professionals' unwillingness to consider new ideas and perspectives (Wellner, 2012). The more resistant staff are to family request and perspectives, the more difficult the meetings and the overall education seem to be. In order to break those barriers, trust needs to be established. Specific trust actions include, but are not limited to, establishing rapport, listening with empathy, inviting parents to partner on the team, creating safety for open discussion, and ensuring there is access to two-way communication in a way that works best for them (Wellner, 2013). "Effective communication is at the heart of building and growing trust (Wellner, 2013 p.16).

Effects and Benefits

Parental involvement is something that is often overlooked in the education setting. Expanding involvement is an important strategy to provide more benefits in the school and with students. Greenwood and Hickman (1991) restates the evidence of effects. Their analysis of past

research state that in general, parental involvement contributes to the following: student achievement, student sense of well-being, student school attendance, student-parent perception of classroom and school climate, positive student attitudes and behavior, student readiness to do homework, increased time spent with parents, grades, higher education aspirations, and parent satisfaction with teachers (Greenwood & Hickman, 1991). Family discussion about school experiences, class content, grades, and plans after schooling have a “sizable effect on school achievement” (Greenwood & Hickman, 1991, p. 137).

There is evidence from past research to show that family involvement effects multiple aspects of the child, school, and community. One study for the American Psychological Association compiles a list of benefits of families who are more involved in school. It is clearly supported that families who are more involved in their child’s schooling have students that display higher achievement levels and benchmark standardized test scores. Not only that, family involvement has been proven to effect feelings, attitudes, and self-efficacy of children, in turn, promoting academic performance (Dearing, McCartney, Weiss, Kreider, & Simpkins, 2004). There is also evidence that high levels of family involvement in elementary school are associated with decreased rates of dropping out in high school and increased probability of graduation on time (Dearing et al., 2004).

John Hattie, a professor of education and author of *Visible Learning*, spent 15 years researching influences on achievement in school-aged kids. He studied research on both negative and positive effects on student learning, problem-solving, and acceleration, grouped them, and ranked them. Parent Involvement scored a .51 effect size. “Parent aspirations were the most important influence on student achievement whereas external rewards, homework surveillance, negative control and restrictions for unsatisfactory grades. Overall the higher hopes/expectations

of parents the greater the students' academic achievement (Hattie, 2009, p. 28). According to this score, parental involvement rates as the potential to accelerate student achievement.

When families are involved in their child's education, they are more likely to be informed of disciplinary codes, as well as the school rules and classroom expectations. When families know and understand these procedures, they are able to talk about them at home and even reinforce or implement the same expectations in their homes. For examples, if the classroom expectation to follow through with a task before they are allowed to go play with a preferred item and the student does not have to do so at home, it might create more of a struggle in the classroom. The student might know that throwing a fit and destroying the room gets them what they want at home but will not get them what they want at school. Being consistent with expectations gives the students that structure and routine they need to be successful and they can generalize those skills in all settings. With families supporting school expectations, decreased disciplinary incidences have been recorded with those that have a high number of family-school interactions. Overall, parental involvement is proven increase student safety and a more positive community outlook of the schools. While we can all understand the research that is out there stating the benefits and effects, educators and school administration are often let unsure of how to accomplish such as task in which families feel safe, comfortable, and that their communication and involvement is important. Those educators and school personnel might not be aware of all the barriers when trying to create that two-way, positive communication piece essential to successful family involvement.

Barriers

While we now know the importance of families being active in their child's schooling, some might wonder why not all families are all equally involved. First, educators must recognize

that all families are involved in their child's well-being and learning in some way, but then work towards increasing that involvement into a more collaborating and meaningful role. Halgunseth (2009) states that "educators may feel frustrated by perceived low levels of engagement with some families they serve" (p. 56). While completing the research to find benefits, it was also found that a number of specific barriers effect those levels of engagement. It is important for educators to know those barriers and be aware of the barriers they might be creating themselves so that they can then figure out ways to overcome. These barriers include, but are not limited, to attitudes, abilities, work, health, administration, time, culture, and language.

One barrier that prevents families from being involved is the attitudes and abilities of parents. These families might have a mindset that schooling should be left up to the experts; they believe it is their job to parent while it is the teacher's job to teach. Others might feel powerless compared to the knowledge that the teachers have or do not feel like their strategies of teaching would be beneficial. There are also cases where parents have had negative experiences with school themselves. For example, there was once a parent of a child in the researcher's class who never learned to read. When the parent was young, school continued to get more difficult for her as there was a lack of understanding and support back when she was in school. She had negative feelings about teachers who did not help her and instead pushed her aside. It was not until she was comfortable enough to share those experiences with her child's educator that the school could meet her needs and find ways for her to be involved in her own child's education. It might be difficult for families to form a positive relationship with the educators due to those feelings and memories.

Another barrier involves work and health. Research by Leitch and Tangri (1999) studied barriers surrounding involvement of parents. He found that employed families tend to be more

involved than non-employed, although the main reason given for not participating included work and health. He believed the correlation came from the education levels of families, rather than their jobs. Families who put work before their child's education tend to do so with positive intentions. Missing work for a school function could lead to lost wages, less food on the table, and even losing their job. Other research showed similar findings and state that lower-earning parents were less likely to be involved. This may be due to lack of motivation, longer working hours or more jobs, lack of knowledge, or transportation challenges (Greenwood & Hickman, 1991).

Attitudes of teachers and administrators are other barriers. Some educators do not know how to begin to involve parents while some even fear that their attempts would fail. Some educators see working on family involvement as a task that they do not have time for. There are even fears that the parents would become overly involved (Deslandes, Potvin, & Leclerc, 1999). In some cases, teachers and administrators have difficulty with creating the positivity needed for a relationship and two-way communication. Often, phone calls to families are only made for behaviors or disciplinary actions. Positive relationships are important and only conversing about negative behaviors do not create that climate.

During a study by Chavkin and Williams (1993), a survey was given to educators with an emphasis on teacher education programs. They found that only 4% of teacher education classes were devoted to involving parents, 15% had a part of the course devoted to the subject, and 37% stated that only one class period covered family involvement. Both teachers and principals agreed that a course should be required in order for educators to be well informed on practices and strategies (Greenwood & Hickman, 1991). These classes could cover a variety of topics. Public speaking is one that would assist families in feeling comfort when talking in front of

others but also that general communication demeanor. Other classes should cover empathy and ways to understand certain situations and feelings, along with strategies when working with families going through certain situations.

Some teachers have difficulties connecting with families and leaving judgments out of the practice. A barrier created by teachers might be that they have a difficult time looking past or understanding the family dynamics when there is limited educational or language background. They also might not be flexible with times or days when a family has child care, transportation, work, or other difficulties. Giving one way to communicate, such as a phone call, could create barriers for those families who do not have working phones or need a translator. Another teacher-initiated barrier is tension in the relationship. When an educator only reaches out when there is bad news, the families might feel unwelcome, that communication is a one-way system, or that they are to blame (Blazer, 2005).

Culture and language can also be a factor that acts as a barrier for involving families in their child's schooling. For example, certain Latino cultures view that "teachers are highly respected and any interference from parents may be considered rude and disrespectful" (Tinkler, 2002, p. 8). Teachers are told to view families who ask questions about assignments and grades as a sign of caring or concern for their child's education, Latino parents may believe as that is inappropriate for them to do. There is also the aspect of language that might act as a barrier for family involvement. While translators can be used, it may hinder that initial trust and relationship needed for ongoing communication.

Lastly, lack of involvement of families could be a result of a mismatch in the communication style (Caplan, 2000). This can be due to culture, socio-economic status, language, or child-rearing styles. There are multiple methods to ensure communication that can

be utilized in a school setting. These include face-to-face, electronic mail (e-mail), phone calls, written notes, and other technology integration. Barriers might include lack of access to those types of communication. If a student's only transportation method is the bus, this eliminates the face-to-face communication opportunity. Email and other technology requires the use of data or internet, which may not be available to all families. It is important for educators to incorporate multiple methods of communication in their daily routine so that all families have opportunities for that two-way, ongoing communication.

Implementation and Strategies

Experts agree that the role of parents in education must change from passive to active (Pattnaik, 2003). Research has been done to share practices that educators can implement in order to increase those involvement rates. Greenwood and Hickman (1991) list possible solutions. They suggest that research and rationale be provided to administration and teachers to educate them on importance and provide suggestions on how to make it happen. It also states that teachers need to be taught techniques for involving parents. Attention needs to be given on the attitudes of teachers and encourage them to change their mindsets that this is a critical piece to student education.

The researchers, Greenwood and Hickman (1991) also believe courses involving parent involvement should be taught even before a teaching job is given, rather in graduate programs. These courses need to provide educators with grade-level content and techniques, as well as practicum opportunities. Hands-on practice and real-life observations of schools in action would assist in making these future educators comfortable with the idea. Interacting with families need to be embedded into all areas of teaching, rather than feel like extra work. This process should be

common practice for all. After the initial class, it is recommended that the programs and professional development be provided on an on-going basis (Greenwood & Hickman, 1991).

Halgunseth (2009) also shares his recommendations for practice. Within his research, he believes that educators should integrate culture and community by accepting all families. There should be a welcoming environment with staff available to greet and answer any questions. Parents should be addressed by name and given information specific to their child when appropriate, rather than just generic school or classroom information. Educators should also be responsible in creating clear, continuous channels of two-way communication between families in a way that works best for everyone.

It can be concluded, based on research, there are multiple benefits of family involvement in a child's education. We know the barriers that affect this and realize that some can be overcome by teacher actions. It is apparent that educators are expected to provide a way for two-way communication that works best for families, but recent research cannot answer the question of which one of those methods might be most beneficial for each classroom setting. There must also be an understanding as to why some methods might work best for one classroom but not in the other. A beneficial method would be one that reaches all families despite their barriers and it is possible that no two classrooms will be alike when finding those. Because of the barriers discussed, multiple or specific methods should be used in order to find what works best for the demographics of the classroom.

Technology is one way that teachers can develop a positive, two-way relationship with families and establish a consistent involvement in their child's education. "Accessing school database by teachers, students, and parents from mobile devices promotes data-driven educational interactions based on real-time information" (Blau & Hameiri, 2017, p. 1232). Using

technology, specifically an online application, has multiple benefits, including ease of accessibility. Families have access to technology on their phone or computer and can check them during times of day that may not be the same hours as a school day. Another benefit is that both families and educators can be immediately notified of changes or student performance, as it sends directly to the device without a risk of having it lost in a backpack, daycare, or on the bus. Some devices or applications translate all content, removing the language barriers of other communication types. Integration of technology for the purpose of family communication aligns with standards of 21st century skills (Network Support, n.d.).

The purpose of this action research is to examine a preschool classroom and collect data on family communication efforts after introducing a tool of an online application. The researcher will examine what method is being used the most often and if these numbers will be increased after introducing the application. SeeSaw is an application that can be downloaded on a smart phone or accessed via the internet. This program provides a quick and simple way for communication with parents. Educators can use it to share updates, have two-way feedback, and to provide opportunities for participation (Johns, Troncale, Trucks, Calhoun, & Alvidrez, 2017). In conclusion of the research the question, “Does the use of an online application increase family communication and involvement in the classroom?” will be answered.

Methods

Community Background

The action research was conducted in Marshalltown, Iowa. Marshalltown is a city with a population of around 27,000 from which 85.3% are citizens. The city is often known for their diverse population. In the 1980's, Swift and Company, a meatpacking facility in Marshalltown, expanded its factory attracted some Hispanic families to seek new opportunities (Woodrick,

2015). The immigration to Marshalltown continued throughout the years. Currently, an estimated 27% of Marshalltown's population is Hispanic or Latino (United States Census Bureau, 2017). Marshalltown is also made up of 4.4% Asian residents, many of which are refugees from Burma (United States Census, 2017). Marshalltown also has a poverty rate of 13.5%. This is higher than the average cities in the state of Iowa. All of these are factors educators should be aware of when communicating with families.

Participants

The preschool classroom that was subject of this action research consists of eighteen students. The students are divided into a morning and an afternoon class, nine students in each. The morning class is held from 8:20-11:00 am and the afternoon class is held from 12:20-3:00 pm, both classes five days a week. Students have the option of pick-up and drop-off or riding the bus. This decision is requested by parents during registration and determined by the preschool coordinator and transportation director. Infinite Campus, the schools registration system, was reviewed when describing the demographics of the classroom. Each class has two students on an Individualized Education Plan (IEP) for either behavior or academics and one in each class on a speech-only IEP. The morning class has five students who are Hispanic with two of those students and their families only Spanish speaking at both home and school. There is one student who identifies as white/Caucasian, one as Indian, and one student who is half-Caucasian and half African American. The afternoon class consists of six Hispanic students with only one of those students and the family speaking Spanish only in both the school and at home. There are two students who identify as white/Caucasian students and one student who identifies as African American.

Variables

There was a number of variables that could have influenced the results of the study. On the first week of data collection, two new students were added to my class. This resulted in numerous face-to-face questions with one student's family who attended the afternoon class. The other student was in the morning class and a Hispanic, Spanish-speaking only family. His communication, along with the other Spanish speaking families, would require us to schedule a translator. Translators should be requested and scheduled with at least one day's notice, but if the family requests one or if the teacher has an immediate need for one, the teacher can meet the family in the front office and have the secretary act as translator. While this is not protocol, it can be utilized if needed. Another variable included the downloading of the application. While every family who was offered the application at the beginning of the year during home visits stated they wanted updates and that they had access to a smart phone or the internet, it took the complete four weeks of the study to have every family sign-up.

One variable that made face-to-face communication a barrier was bussing. The morning class had two students who were on the bus to and from school and two more who only rode the bus home. The afternoon class also had two students who rode the bus to and from school with one who only rode home. Face-to-face communication was not an option for these families unless scheduled ahead of time. Positive relationships with these families tend to be more difficult to establish without the in person discussions. The only opportunities for communication are through a phone call, notes, or a technology piece such as SeeSaw or e-mail.

Data Collection

Data collection was completed in order to collect quantitative data on family initiated communication. For four weeks, starting with the first full week of school, the number of

initiated questions, comments, or concerns from families for each communication method used was tallied. These include face-to-face, email, phone calls, and written notes. The morning class had access their child's SeeSaw page. SeeSaw is an online application in which families can view and comment on pictures, posts, activities, and messages from their child and his/her teacher. Anyone can download the application, but in order to see a certain child's page the teacher must invite and accept the person. The teacher has the ability to approve any comments made by family on their child's page before it is posted. Families also have the option to receive and send private messages to the teacher. The login for SeeSaw was given at home visits at the beginning of the year, then again each week for those who had not signed up. Communication counts were then gathered using the data collection tool when the application was used for an initiated questions, comments, or concerns.

In order to keep the data valid, it was ensured that the same number of pictures and/or posts was submitted for each student every week. Pictures were taken of students playing during centers, but also during work time such as journaling and math. Class announcements were also sent out using the application, but only for content that would also be available on hand outs that were sent home. This included book order due dates and picture day reminders. If variables occurred, they were noted in comment section of the data collection tool. These variables could have been due to behaviors, health, IEP's, etc. Initial contact made by a teacher was not tracked on the data collection tool.

Analysis

Data was collected from September 24, 2018 to October 19, 2018 for a total of four school weeks. The families who had the application made available to them were given their access code during home visits, weeks before data collection started. For the families who had

not signed up by the time data collection began, handouts with their access code and instructions were sent home each week. The first week of data collection showed that only half of the families had signed up. Coincidentally enough, this was the week with the most SeeSaw activity. Two separate families used the application to reach out about picture day and how to send their money. There were also three face-to-face inquiries making a total of five family-led communication pieces in the morning class. The afternoon class had a total of eight tallies, all in the face-to-face column. The variable with this week was that a student started his first week of school and families were very inquisitive about the program, his days, and how he was adjusting.

Table 1

Week 1 Data Collection per Student

Week 1- AM					
Student	SeeSaw App	Face-to-Face	E-Mail	Phone	Notes
Student 1					
Student 2	1	1			
Student 3	1				
Student 4					
Student 5					
Student 6					
Student 7					
Student 8					
Student 9		2			

Week 1- PM					
Student	SeeSaw App	Face-to-Face	E-Mail	Phone	Notes
Student 10					
Student 11					
Student 12		2			
Student 13					
Student 14		1			
Student 15					
Student 16					
Student 17		1			
Student 18		4			

Note. In the morning class, the SeeSaw app was used by two families, one time each. There were three face-to-face itneractions, two from one family and one from another. The afternoon class had eight face-to-face interactions from four different families.

During the second week of data collection, the SeeSaw application was not used for communication, even though all but three families signed up for the application. Photos were taken of all students working on journals as well as playing in centers. There was a total of four communication pieces in the morning class for the week, all face-to-face. The afternoon class also had four pieces of data, all in the face-to-face column. It was noted that almost all questions this week were about their scheduled conference times, except one being about their child being able to ride the bus.

Table 2

Week 2 Data Collection

Week 2- AM					
Student	SeeSaw App	Face-to-Face	E-Mail	Phone	Notes
Student 1					
Student 2					
Student 3					
Student 4		1			
Student 5					
Student 6					
Student 7		1			
Student 8					
Student 9		2			

Week 2- PM					
Student	SeeSaw App	Face-to-Face	E-Mail	Phone	Notes
Student 10					
Student 11					
Student 12		2			
Student 13					
Student 14					
Student 15		1			

Student 16					
Student 17					
Student 18		1			

Note. In the morning class, three families used face-to-face communication to initiate. One family had two, while the other two had one. The afternoon class have three families use face-to-face method as well with one family using it twice and the other two just one.

In the third week, there were zero tallies made in the morning class communication log, but all but one family had signed up for SeeSaw. Conferences were held during the week and families were able to talk and discuss any questions or concerns there. The SeeSaw application was used to remind families of conference times as well as for the weekly picture. This was not the case for the afternoon class, as there was a total of six communication pieces in the face-to-face column. Three of those were to confirm or reschedule conference times while the other three was from the family of the new student who continues to ask if each day was getting better.

Table 3

Week 3 Data Collection

Week 3- AM					
Student	SeeSaw App	Face-to-Face	E-Mail	Phone	Notes
Student 1					
Student 2					

Student 3					
Student 4					
Student 5					
Student 6					
Student 7					
Student 8					
Student 9					

Week 3- PM					
Student	SeeSaw App	Face-to-Face	E-Mail	Phone	Notes
Student 10					
Student 11					
Student 12					
Student 13					
Student 14		2			
Student 15		1			
Student 16					
Student 17					
Student 18		3			

Note. There were zero initiated communication in the morning class. The afternoon class used face-to-face methods six times from three different families.

The fourth and final week of data collection continued with the recent trends. Although all families were signed up, the SeeSaw application was used one time to notify the teacher of a change in pick-up. There were three face-to-face incidences, two of which were a general check-in of “How did he do today?” while the other was to share medical records. In the afternoon class there was a total of five face-to-face incidences, all with the question of “How did today go?” and one e-mail.

Table 4

Week 4 Data Collection

Week 4- AM					
Student	SeeSaw App	Face-to-Face	E-Mail	Phone	Notes
Student 1	1		1		
Student 2					
Student 3					
Student 4					
Student 5		1			
Student 6					
Student 7					
Student 8					
Student 9		2			

Week 4- PM					
Student	SeeSaw App	Face-to-Face	E-Mail	Phone	Notes

Student 10					
Student 11					
Student 12					
Student 13			1		
Student 14					
Student 15		2			
Student 16					
Student 17					
Student 18		3			

Note. SeeSaw was used by the morning class by one family one time. Face-to- face communication was the preferred method with a total of three times by two different families. E-mail was used one time. The afternoon class had five face-to-face interactions from two different families and at one time e-mail was used.

Discussion

Limitations of the Study

One of the limitations of the study was the amount of participants signed up to the SeeSaw application. Time was given for families to sign-up, but even after a few weeks not all families had access. If all families were signed-up at the beginning of data collections results may have varied. It may have been that through the use of the application and its pictures and updates, the families felt as though they had enough information about their child’s education and did not have further questions. Another limitation was that data was only collected on initiated contact. The teacher made phone calls, posts on the app, and sent e-mails to families

which may have turned into a more in depth conversation about their child and what they were learning. Those events were not collected as a part of this study. The results may have also been affected by the makeup of the class. As noted, the class was diverse with a variety of languages and socioeconomic status.

While the data collection tool was only used to collect the initiated communication, the researcher believes positive things came from the use of the application. It was noticed that on every picture posted of their child, at least one member of their family ‘liked’ the picture. This shows the teacher that the posts are being seen. At one conference, with the use of a translator, a Spanish-speaking only family told the teacher that the pictures are helpful and are used as a talking point at home. The pictures that the teacher uploads make conversation with their child easier since the mother cannot ask the teacher what they did that day without the use of a translator. Similar conversation occurred at a conference with another Spanish-speaking only family.

Sharing pictures with families is an effective tool to use when building relationships with families. When families can visualize their child being engaged in positive approaches to learning in all areas, it lends itself into a positive relationship with the teachers and school. Using pictures can act as a discussion point for face-to-face conversations in which the barrier for families who cannot read are eliminated. As mentioned, the pictures can also act as a conversation tool for families with their children about what they are learning. It is typical for preschoolers to go home and share with families that the only thing they did the whole day was play. With pictures, there is a lead into the academic events of that day.

The barriers that were addressed in the literature review section were also seen in the classroom. As mentioned, all families were eventually able to access to the application. Poverty

levels, language barriers, culture, or work schedules were not a barrier to this initial step. It cannot be determined which barriers were interfering with families when collecting data and summarizing the number of times initiated contact was made. A survey at the end of each school year is given to families. This survey asks questions such as: “Do you feel as though you have enough communication from teachers about your child?” and “Is there any more information or opportunities you wish you had during the school year?” This survey is used as a reflection piece for educators surrounding family involvement and what next steps might be.

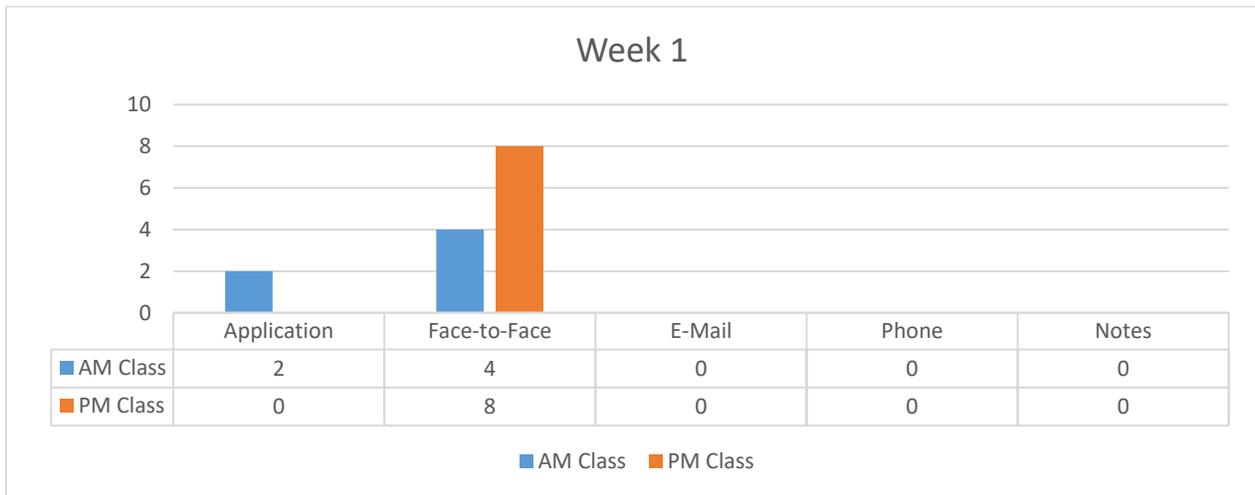


Figure 2.1. Summary of week one data collection results per class, per method of communication. The figure shows that face-to-face communication in the PM class was the preferred method of communication with a total of 8 PM student families using it. Although PM Class Application use states zero it should be reminded that they were not given the option of using the application.

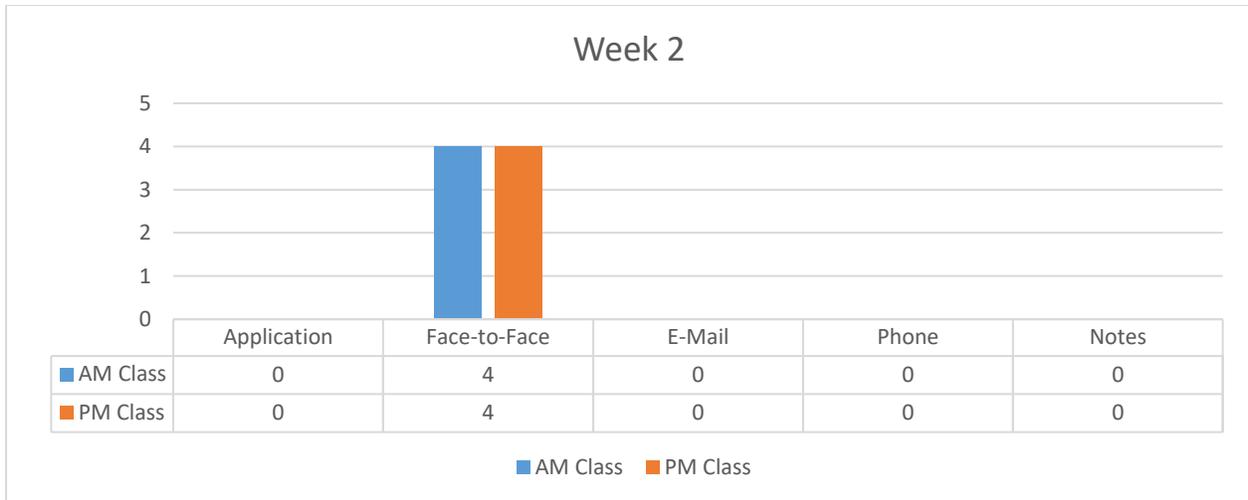


Figure 2.2. Summary of week two data collection results per class, per method of communication. The figure shows that face-to-face communication was again, the preferred method of communication for both classes. Four incidences in each class were recorded. Although PM Class Application use states zero it should be reminded that they were not given the option of using the application.

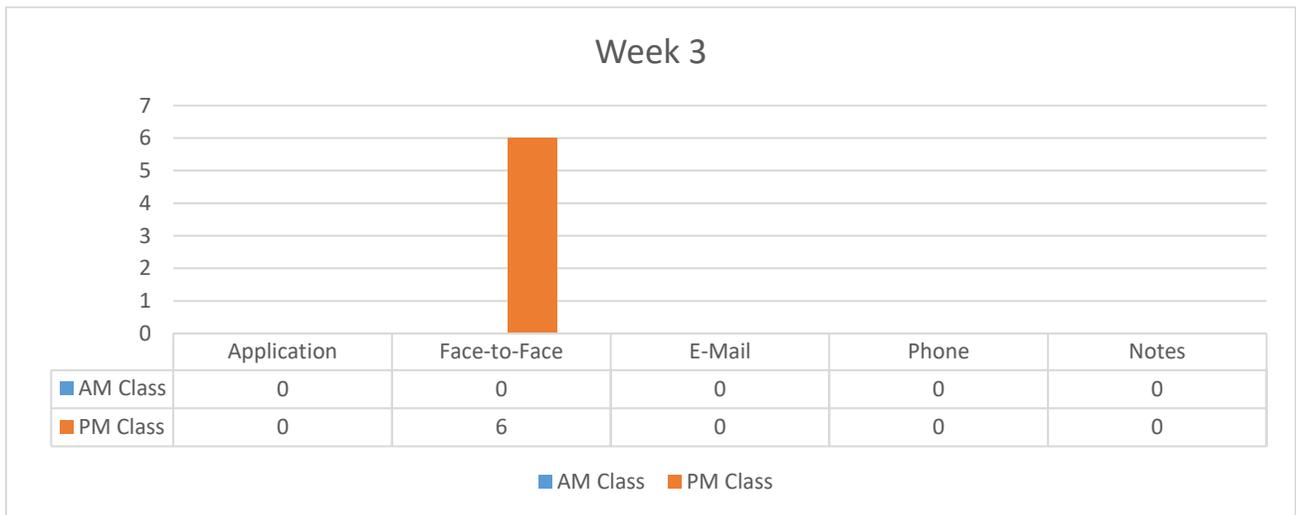


Figure 2.3. Summary of week three data collection results per class, per method of communication. The AM class had zero initiated communication and the PM class had six face-

to-face initiations. Although PM Class Application use states zero it should be reminded that they were not given the option of using the application.

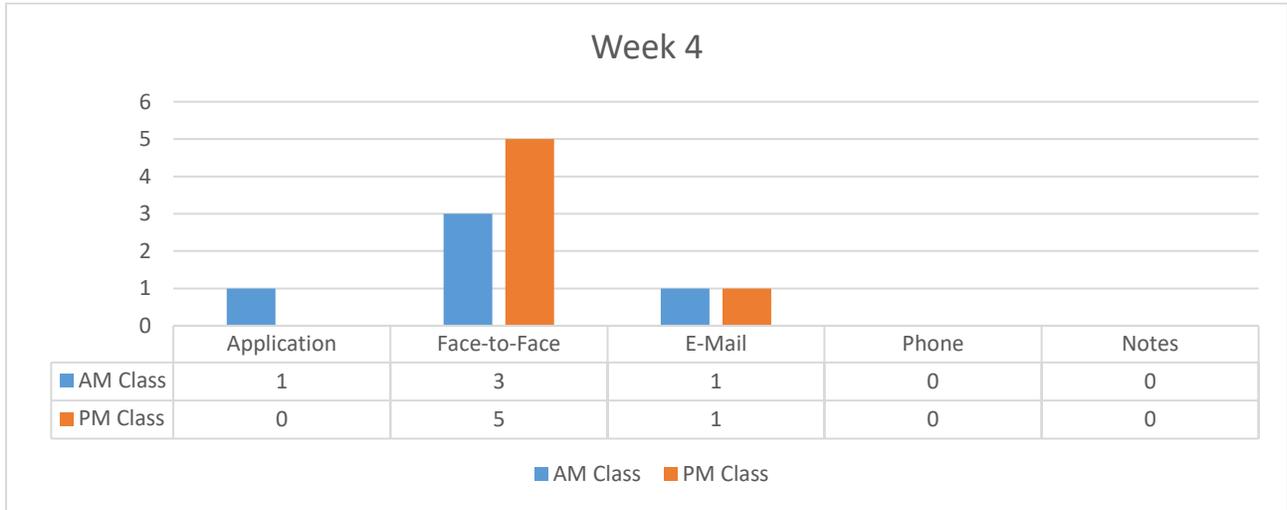


Figure 2.4. Summary of week four data collection results per class, per method of communication. The SeeSaw application was used one time by the AM class. Face-to-Face initiated communication occurred three times in the morning and five in the afternoon. There was one e-mail sent by a family in each class. Although PM Class Application use states zero it should be reminded that they were not given the option of using the application.



Figure 2.5. Summary of the total data collection results per class, per method of communication for all four weeks. The totals show that the action research utilizing an online application did not increase family involvement in the area of initiated communication. Face-to-face was the highest method in both classes with 13 in the AM class and 23 in the PM class. Variables can be found in the variable section as to why this may have occurred. Although PM Class Application use states zero it should be reminded that they were not given the option of using the application.



Figure 3. Screenshot of the teacher mode of the SeeSaw app. SeeSaw allows teachers to share photos of the whole class or just specific students. Under the picture shows who has seen the picture, liked, or commented.

Conclusion

Family involvement in a child's education is not just an important strategy, but an expectation in the school systems. From volunteering in the classroom to making phone calls, involvement should always be a two-way street where educators and families can collaborate, problem-solve, and share knowledge. Research has been done over and over again and each time the results prove the many benefits that are seen when families are involved. With more involvement from families, students are able to display higher achievement levels and score higher on standardized tests. There is also an increased probability of graduating on time and a decrease in behaviors. Benefits in the area of social-emotional skills are also present when families are involved in their child's education. With all of this knowledge, educators must find a way to overcome that barriers of having reoccurring contact with families. As mentioned, these

barriers include: language, culture, attitudes, socio-economic status, technology, views, and values of both the school system and families.

It was important to discuss the classroom demographics in any action research projects that revolve around family involvement. All classrooms have unique characteristics that would act as variables when conducting similar research. The time of year, class size, community, and barriers are factors that can influence results. Language barriers were described as one barrier for this project, as well as the possible lack of established relationships between teacher and families. It must also be noted again that data was only collected on initiated contact for four weeks. Any teacher calls, comments, or notes were not collected as part of this research.

Technology is all around us. We live in a society where most families have multiple devices throughout their home or work. Using technology for involvement seemed to be the most logical answer to providing a two-way communication system with their child's schooling. When looking at the results and graphs, face-to-face communication was the preferred method for both the morning and afternoon class. These results were based on one classroom and given the variables, results could be different for any school or classroom. It was concluded that in the following classroom, when taking the given demographics and variables into consideration, technology was not the way to increase family involvement in the classroom.

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