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The Impact of Using Seesaw Between Students, Parents, and Teacher in an
Elementary Setting

An Action Research Report

By Andrea E. Jarvis and Zachary A. Martin

The Impact of Using Seesaw Between Students, Parents, and Teacher in an
Elementary Setting

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in fulfillment of final requirements for the MAED Degree

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Date _____

Abstract

This action research project was completed to study the impact that the online communication tool, Seesaw, had on the students, parents, and teacher relationship in an elementary setting. The setting was in two urban schools, one being in Fargo, ND and the other being in Central Minnesota. This study took place with a total of 37 children who are predominantly Caucasian. Data was collected using the following four data sources: Data Notification Tool, Pre and Post-Survey sent to parents, and the 1-4 Star Ratings using the Data Folder for pictures and videos of student work. Samples of student work were uploaded each day for parents to observe, like, and comment on. The results concluded that Seesaw had a positive impact on the students, parents, and teacher relationship. The action plan implications conclude this information would promote conversation between parent and child as well as letting parents know what their child was learning in school.

Keywords: Seesaw, Elementary, and Technology Communication Tools

Communication with parents and teachers.

Problems exist in communication between parents and teachers. Mathern (2009) stated that there is a problem in our educational system with communication between parents and teachers, especially timely communication. The No Child Left Behind Act mandated that all districts maintain communication with parents to encourage their engagement in school activities to enhance student achievement and learning (Gruber, 2016). Many parents want immediate feedback from teachers to track their child's progress, but many teachers find it difficult to communicate with parents beyond their district requirements (Mathern, 2009). Some districts have strict policies on using social media with students to help protect their teachers while others, such as District 128 in Illinois, are allowing "transparent accessible and professional" communication with rules and guidelines to using social media such as Facebook with their students (Todoric, 2011). Bosch et al., (2017) (as cited in Mazza, 2013) stated that many teachers have used various forms of technology to better communicate with parents but are having a difficult time finding one app to effectively communicate to involve all parents in their child's learning. For those reasons, we have decided to focus on the application, Seesaw.

Statement of the Problem

For several years, teacher-parent communication has been a problem in our educational system. With the increased use of technology in our society, many schools and families have access to technology that can benefit communication. Many students have school-issued technology devices (such as iPads) that can aid in the teacher, parent, and student communication. By using Seesaw as a communication tool, we will observe the effect that this tool has on teacher-parent-student communication and relationships.

Action Research Question

- What is the impact of using technology communication tools between teachers and parents in an elementary setting?

Literature Review

According to Gruber (2016), benefits of increased parent-teacher communication and involvement include improved behaviors, increased motivation, improved academic performance, and better attendance in school. Additionally, parents having discussions with their children at home about school activities had the strongest relationship with student success (Mathern, 2009). Bacigalupa (2016) stated that communicating with families enhanced child-adult conversations and increased family knowledge of school activities.

Mathern (2009) indicates that research shows effective communication among teachers and parents increased student achievement and attitudes toward school. Academic student achievement is related positively to the continuous monitoring of achievement (Blau & Hameiri, 2016). By establishing stronger parent relationships with increased communication, it is beneficial to student achievement because a teacher may have an increased positive perception of the student. As a result, this may lead to better grades (Mathern, 2009). However, in order to be successful, it has to include not only the teacher but parents and students as well. This idea is referred to as the School Community of Innovation Model.

Improving parent-teacher communication using digital tools.

Parent-teacher communication is crucial to student success with a well-rounded education. Technology has evolved to better facilitate that communication which positively enhances the parent-teacher relationship (Bosch et al., 2017). In the last 20 years, educators have

begun using computer-mediated communication with parents in all grades. Educators have suggested that the increased use of smartphones have made parent-teacher communication much easier and convenient. Forms of communication depend upon the importance and urgency of the message that needs to be communicated (Thompson, Mazer, & Grady (2015).

Bosch et al. (2017) explain:

Ensuring that parents have a clear understanding of what happens in their child's classroom allows for carryover of learning at home. Digital communication enables teachers to contact parents about a child's learning quickly and conveniently. Parents have the opportunity to read and respond to the message at a time that is convenient for them. (p. 4)

Fleming (2012) reported that many school districts are providing students with technology such as iPads to improve student achievement and communication. Some districts are hiring social media directors to improve communication with digital tools such as Facebook, Twitter, YouTube, and Tumblr.

Cunha, Van Kruistum, & Van Oers (2016) found that cultural-historical activity theory, or CHAT, provides the theoretical concept to understand how mediational tools, such as digital technology, can change human educational practices. From this perspective, groups on Facebook are considered a mediating tool used for communication and learning. It allows students to interact collaboratively and freely in what they are learning, being also responsible for reconstructing, evaluating, and reflecting on their work for a given activity. Although teachers and students follow certain rules for the activity, they can still adapt to those rules to fit their needs and have some degrees of freedom. Variables included in the CHAT theory include the

starting point, or the real-life problem of the students, followed by the process, which is giving the students the autonomy of what they will be taking a video or picture of related to the content being taught. This autonomy also gives the student the ability to have immediate feedback after their content is uploaded on the technology tool. A third variable is an outcome consisting of appropriate solutions that are chosen to convey this material such as a drawings, pictures, or videos uploaded by the mediating tool and gives the students the ability to personalize their own message. Lastly, an important variable to consider is the researcher's role acting as a discussion stimulator for the students. It is the researcher's role to assist in explaining the idea of the content and helping students to use language to explain content as well with the digital tool.

Higgins and Cherrington (2017) stated having an online portfolio, or learning story, helped the parents have more meaningful conversations with their child at home. It also helped extended family members or a parent that did not live locally to connect with their child's learning in school. EPortfolios enhanced parent-teacher communication. These portfolios offered a unique advantage over hard copy portfolios such as being easily shared and contributed to, stored feedback in one area and showed a child's progress and effort in their work (Higgins & Cherrington, 2017). Students can have an alternative approach to presentation, assessment, and instruction in a safer and engaging way. They explain that Seesaw is an online digital portfolio that is student driven and allows students to keep their assignments, videos, pictures, and links to their learning all in one safe and secure place. Using Seesaw allows students to take ownership of their own learning and is an easy way to inform parents of classroom activities and opportunities for them to participate. Parents receive email notifications when their child's

journal has new content uploaded. Seesaw is described as Facebook for the classroom with parents being able to add other family members to the account as well (Jacks, 2017).

Using social media such as Twitter and Facebook to improve students' quality of work at school.

Social media technology allows for the ability of increased communication between teachers and parents, which is essential for student success (Gruber, 2016). The convenience of social media such as Facebook and Twitter can allow parents to view pictures of their child interacting in the classroom. They can also receive announcements throughout the school day along with the ability to have instant messaging communication. Many parents enjoy receiving pictures from teachers via social media and an openness to communicating via Facebook.

Thompson et al. (2015) found teachers posting on Facebook positively affects student performance and motivates students to learn. Teachers using social networking sites (SNS) with their students have shown teachers learning from their students through their discussions and use of the digital media in their classroom (Cunha, Van Kruistum, & Van Oers, 2016).

Fleming (2012) explained:

Through Twitter feeds, Facebook pages, and text messages sent in multiple languages, school staff members are giving parents instant updates, news, and information about their children's schools. Not only that, but a number of districts are also providing parents access to Web portals where they can see everything from their children's grades on school assignments to their locker combinations and what they're served for lunch (p. 1).

Allowing students the freedom to post a comment in a collaborative social networking environment has promoted a culture of positive interactions with increased engagement (Cunha et al., 2016).

Cunha, Kruistum, and Oers (2016) explain:

By using Facebook groups, teachers and students have the opportunity to become partners in learning, not only for a given moment but also for longer time, having the possibility of creating a sustained community of learners, that is, a community in which the participants use such tools regularly and autonomously (p. 229).

Some instructors have already noticed an improvement in reading, writing, information gathering, and communication. For example, students can improve their reading and writing by learning about ideas, punctuation, and word choice. It also encourages shy students to communicate and express themselves without talking in front of others. Students may also improve their work because it is being sent out to an authentic audience that will see it (Morgan, 2014). Using Daily Explorations shows parents what their children are doing every day and why these activities are important. Pictures and descriptions are sent to the parents so they can highlight the best way their child learns and develops through program activities. Children that were encouraged by families to talk about their experiences were developing better language skills needed for school and having richer conversations at home (Bacigalupa, 2016).

Methodology

There are a variety of popular communication tools to use such as Facebook, Remind.com, and Twitter. This study is centered on the online communication tool, Seesaw.

Seesaw was founded in 2013 and has been an ever increasingly popular way for teachers to communicate with parents in the past few years.

This study was conducted in two different school environments. The first being a K-5 elementary school located in Fargo, ND that has 544 students. This classroom consisted of 19 first-grade students with five black students, thirteen white students, and one Hispanic student. This elementary school has 96 students enrolled in the free or reduced price lunch program at 17.6% of the school. This school has 431 Caucasian, 37 Asian, 57 African American, 14 Hispanic, and 5 Native American students in total. The second school environment consisted of 22 sixth-grade students with all of the students being considered white in a 5-12 Middle/High School in central Minnesota. The school district has 57% of students enrolled in the free or reduced-price lunch program.

We collected data using four different data sources; the four data sources included the Seesaw Notification Tool, the Pre and Post Parent Seesaw Survey, the Seesaw Skills 1-4 star rating for videos, and the Seesaw Skills 1-4 star rating for pictures uploaded by elementary students.

The Seesaw Notification Tool is a helpful resource that is included on Seesaw itself. Every Sunday, two emails are sent to the educator in charge of the Seesaw tool concerning the number of comments, likes, new items, and parent visits for that previous week (See Appendix A). Seesaw will also send you the total number of items added to Seesaw, how many items (or work samples uploaded) there are per student, and the number of connected parents since the educator has started using Seesaw up to that point.

We decided to collect data on the Seesaw Notification Tool for four to six weeks. The first-grade classroom did four weeks of data, while the sixth-grade classroom did six weeks of collected data. This would allow us to see week by week if the likes, comments, and visits from parents increased, decreased, or had no effect. Additionally, this tool would let us see how many items were added each week by students as well as giving an overall recap of data from the beginning that Seesaw was started to that specific week. This Notification Tool is sent every week at the exact same time.

The second data source included a Seesaw Pre and Post Parent Survey (Appendix A) to observe how parents felt about Seesaw before we actively started using the tool. After the four to six weeks of data collection and student postings, we gave the same survey to the parents again to see if a change occurred.

This survey consisted of six questions including what parents like about Seesaw, if parents feel that Seesaw is motivating for their child to accomplish excellent work, as well as if Seesaw allows parents to have conversations with their child at home about school. The remaining three questions contained if Seesaw helps parents know more about what is going on at school, as well as how many people in their family have signed up for Seesaw and how often parents check Seesaw each day. These six questions connected to the CHAT Theory by understanding that the mediational tool, Seesaw, can change human educational practices and allows parents to reflect and evaluate what they think about Seesaw. This survey was sent to parents through the private inbox messenger on Seesaw. This ensured that each parent that had signed up for Seesaw was sent the exact same six questions with the same wording. The inbox feature of Seesaw only sends to that particular parent so the answers parents send back are

private and not seen by other parents. Both sets of answers for the pre and post survey were analyzed to determine the effect.

Our last two data sources used the same Data Folder tool from Seesaw but were split into two categories of pictures and videos concerning student work. This Data Folder is a paid additional feature for teachers to use that is private and for teachers alone to use. This feature was a comprehensive way to score student data concerning pictures and videos by assigning each item a star rating of 1-4.

The goal was to have our students upload at least 1-2 pictures or videos each day to the Seesaw website. These pictures and videos had to be approved by us before parents were allowed to view them to ensure that all information uploaded was appropriate. It was then our job to give each uploaded picture or video a star rating of 1-4. A star rating of one would qualify the student's work source as red, meaning the student did not understand what was being asked of them or did not comprehend the material that they were assigned. This would tell us that we needed to go back and reteach or correct a misconception for this student. A star rating of two stars would rate the student's work as yellow. This would signify that they may need additional support and reteaching in order to make sure the student had understood the content being taught or that student may just need additional practice to solidify their understanding. A star rating of three stars would make the work sample light green. This lets the educator know that the student had understood the material being taught and would be able to accomplish their work at an independent level. Lastly, a star rating of four stars would make the student's work dark green. This lets the educator know that the student has understood the content standards at an

exceptional level and can explain it to their peers as well. Again, it is important to know that only the teacher in charge of Seesaw can see these star ratings unless shared in person with parents.

As researchers, we required at least 1-2 pieces of work uploaded a day so that the students were consistently uploading work samples on a regular basis. We also let our students know what work samples we wanted them to upload to ensure that we had enough work samples to fully understand if that student was comprehending the material or not. For example, in the first-grade classroom, the students were required to upload samples of their morning work which is a mixture of reading and math skills, reading quizzes, math-by-self work, sight word practice, and of their monthly packet; also a mixture of reading and math skills. These first-grade students were required over the first two weeks to upload three samples of each category. For example, on Mondays, students would upload a picture of their morning work, on Tuesday they would upload their monthly packet, Wednesday would be sight words, Thursday would be math-by-self, and Fridays would be reading quizzes. That made sure that over the course of two weeks, data uploaded was each week on a specific day. Students were also told to complete this work independently without teacher support. This would prevent any of the work from being biased or inauthentic.

The last two weeks of data collection for first-grade students were focused on students uploading video samples of their work. We were looking for a few required pieces during these videos. One being that their work corresponded to their audio. Another requirement being they were able to describe what it is they learned and to give an example of it. These videos were uploaded into various categories as well. For example, reading and writing samples were one way for students to take a picture of their writing and then give an audio reading of the same

page. This was accomplished in the first-grade classroom when students wrote a story about the pumpkin life cycle. The student would take a picture of each page and then use their voice to read the page to their parents and teacher. The teacher would then give an assigned 1-4 star rating on the verbal and written explanation of the pumpkin life cycle. This allowed parents to see what their child was learning in school and gave them an insight into their reading and writing skills.

With these four data sources completed, we felt confident that we had used Seesaw as a communication tool to accurately see the change in thoughts and feelings that parents felt towards Seesaw in our pre and post survey. Additionally, we were able to see on a week-by-week basis how involved parents were using the Seesaw Notification Tool and to let parents know how their child was progressing using the Data Folder 1-4 star ratings.

Analysis of Data

Analysis:

The first tool we are using to collect data is our data notification tool. For 4-6 weeks we collected specific data on our students. The data collected includes the number of new items added to Seesaw each week, the number of likes and comments given by parents that week, and the total number of parents visits for that week. Other data includes weekly reports from Seesaw which includes the number of items/student since Seesaw has been started by the teacher, the total number of items submitted to Seesaw for the class, as well as the number of connected parents to Seesaw. This raw data will be listed in week by week installments so that readers can see the difference in what parents liked and commented on. The data will be color-coded by the classroom in order to allow for easier analysis. When analyzing this data we will be looking for

relationships between the number of new items, likes, comments, and parent visits. The analysis will aim to see if the number of new items affects the number of parent likes, comments, and parent visits each week.

To analyze the pre and post survey, the researchers decided to combine their data. The researchers felt they didn't want the data repeating itself multiple times so they combined the data for each question. When the pre-survey and post-survey were sent to parents, the responses were returned in the private messenger inbox of Seesaw. For question one, the open-ended question was "What do you as a parent like about Seesaw?" This allowed us to collect qualitative data while giving parents the freedom to be honest with their responses while being anonymous to the researchers. After the data collection, the researchers found that there were nine common themes among the parents' responses. The nine themes included: seesaw promotes discussion at home, it encourages parental involvement, Seesaw is easy to access and get updates on, allows parents to see the teacher every day, parents getting reminders and updates, Seesaw acting as a student motivator, being able to see student work or results, Seesaw is an easy way to communicate with the teacher, and being able to see the homework assignment. Some parents' answers included one or more themes. When analyzing this data we will be looking for a relationship between what parents liked about Seesaw from the beginning of data collection to the end of data collection.

The remaining five questions to the pre-survey/ post-survey had answers that consisted of yes/no or multiple choice. Below are the remaining questions to the pre-survey/ post-survey.

1. Do you feel that Seesaw is motivating for your child to accomplish excellent work?
2. Does using Seesaw help you to have conversations with your child at home about school?

3. Do you feel that Seesaw helps you know more about what is going on in your child's classroom?
4. How many people in your family have signed up for Seesaw?
5. How often do you check Seesaw?

The researchers will analyze this qualitative and quantitative data to see if parents opinions have changed during the data collection period.

The third and fourth pieces of data collection centered on student work examples using the 1-4 star rating in the Data Folder of Seesaw. A student rating of 1 correlated to not meeting the standard, 2 correlated to partially meeting the standard, 3 correlated to meeting the standard, and 4 correlated to exceeding the standard. The work examples consisted of photographs as well as videos from our students. The work samples were chosen randomly and we labeled them as Student A, B, C, and D. It is not possible for a video to be shown on paper in our project, so in the case of a video, a picture of the video was uploaded. The table of a certain student was uploaded and the numbers are explained in detail. A red, yellow, and green work example(s) show the difference between the expected level of work by the teacher. Private teacher notes were also included to see what the teacher will do with the students that are on yellow or red now that their work has been uploaded, scored, and evaluated. This 1-4 star rating scale allows parents to see the work their child is completing in the classroom along with how well their child has met the standard.

Findings:

The purpose of this study was designed to see the impact that Seesaw had between teachers and parents in an elementary setting. A pre and post-survey, data notification tool and a

Data Folder with 1-4 star ratings for photographs and videos on student work were used to determine the impact of this online communication tool on the teacher-parent-student relationship. The subjects in this study consisted of 19 first-grade students in a K-5 elementary school in Fargo, ND and 22 sixth-grade students in a 5-12 Middle/High School in central Minnesota. This study also included the parents of these first-grade and sixth-grade students as the researchers collected data on the parents as well.

The Impact of Seesaw

The research question was, “What is the impact of using technology communication tools between teachers and parents in an elementary setting?” To answer this question the researchers focused on a six-question pre and post survey sent out to the students’ parents to see what they thought about the online communication tool, Seesaw. This would allow us to see the parents’ opinion on Seesaw in the beginning before actively using Seesaw and over the course of 6 weeks after using Seesaw in the classroom every day. The Data Notification Tool also helped us answer our research question by observing the changes in likes and comments throughout the six weeks of using Seesaw and the impact it had on student work. Lastly, the Data Folder with 1-4 star ratings encouraged parents to see their child’s work samples through photographs and videos and to observe how well their child was meeting the first or six-grade standard listed. The following four data sources are listed below with a description of how the data source was used and the data that was collected.

Data Source #1: Seesaw Data Notification Tool

This data source was collected every Sunday at the same time. This weekly report was generated by Seesaw and showed a collected list of each classroom’s work samples, likes,

comments, and parent visits for that week. Seesaw also generated a report each week on the number of work samples that had been uploaded ever since the teacher had started using Seesaw, how many work samples there were for each student, and how many total connected parents there were. The following below shows the data collected of students and parents over four weeks for the first-grade classroom (Classroom 1). This means that first-grade students uploaded a sample of work each day of that school week and parents had that week to like and comment on the work samples. This data also shows six weeks of data collected from students and parents for the sixth-grade classroom (Classroom 2).

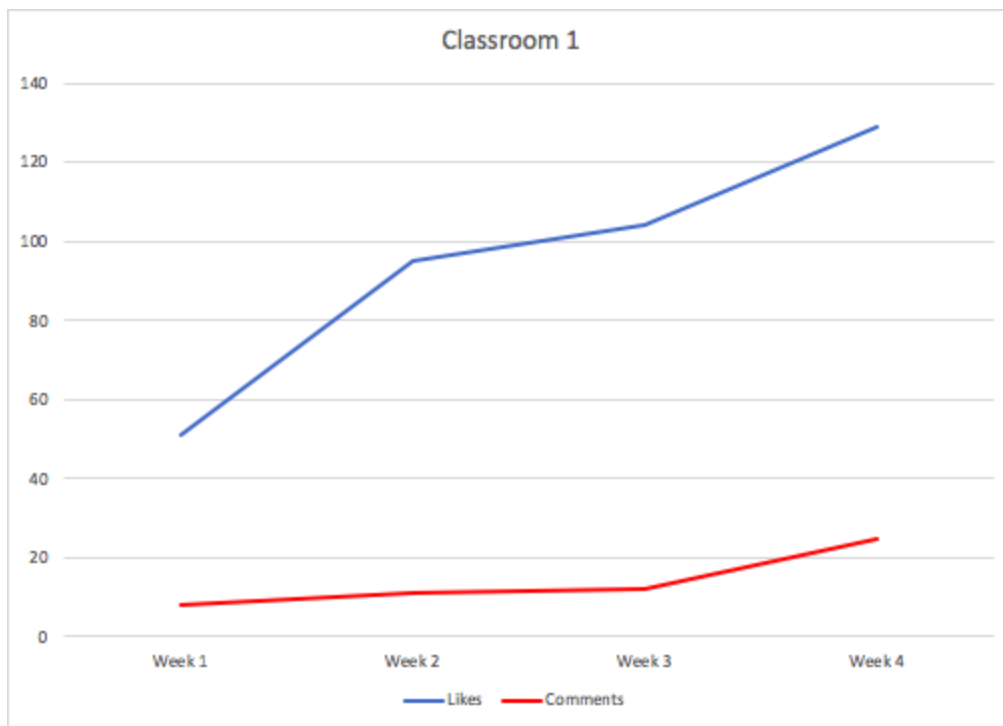


Figure 1. This information shows the likes and comments over a 4 week time period for the first-grade classroom data.

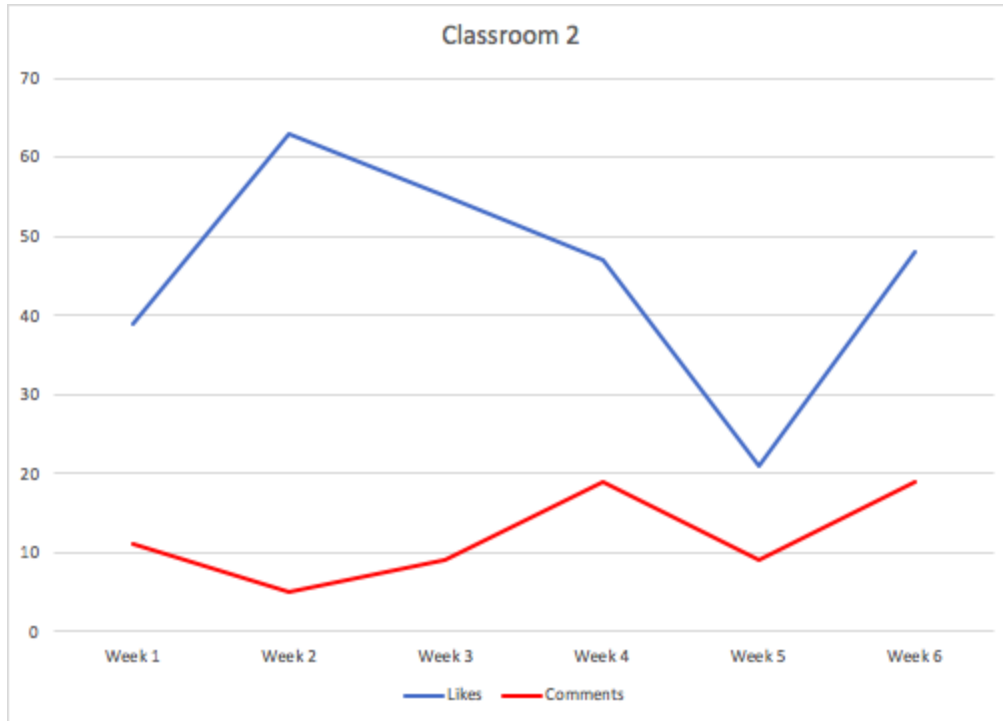


Figure 2. This information shows the likes and comments over a 6 week time period for the sixth-grade classroom data.

Data Source #2: Pre and Post Survey for Parents

The second data source was a survey that both researchers sent out to parents before they had started using Seesaw on a consistent basis. This pre-survey had parents sharing their opinions on Seesaw through a six-question survey. After using Seesaw every day for four to six weeks, the post-survey was sent out consisting of the same six questions. Classroom 1 (first-grade students) and Classroom 2 (sixth-grade students) combined their data for this information. The data is shown in the graphs and tables below starting with the pre-survey response followed by the post-survey response.

- Classroom 1: A total of 12 parents took the pre-survey out of 22 parents signed up for Seesaw. A total of 14 parents took the post-survey out of 22 parents signed up for Seesaw.
- Classroom 2: A total of 13 parents took the pre-survey out of 22 parents signed up for Seesaw. A total of 11 parents took the post-survey out of 22 parents signed up for Seesaw.

Question 1: What do you as a parent like about Seesaw?

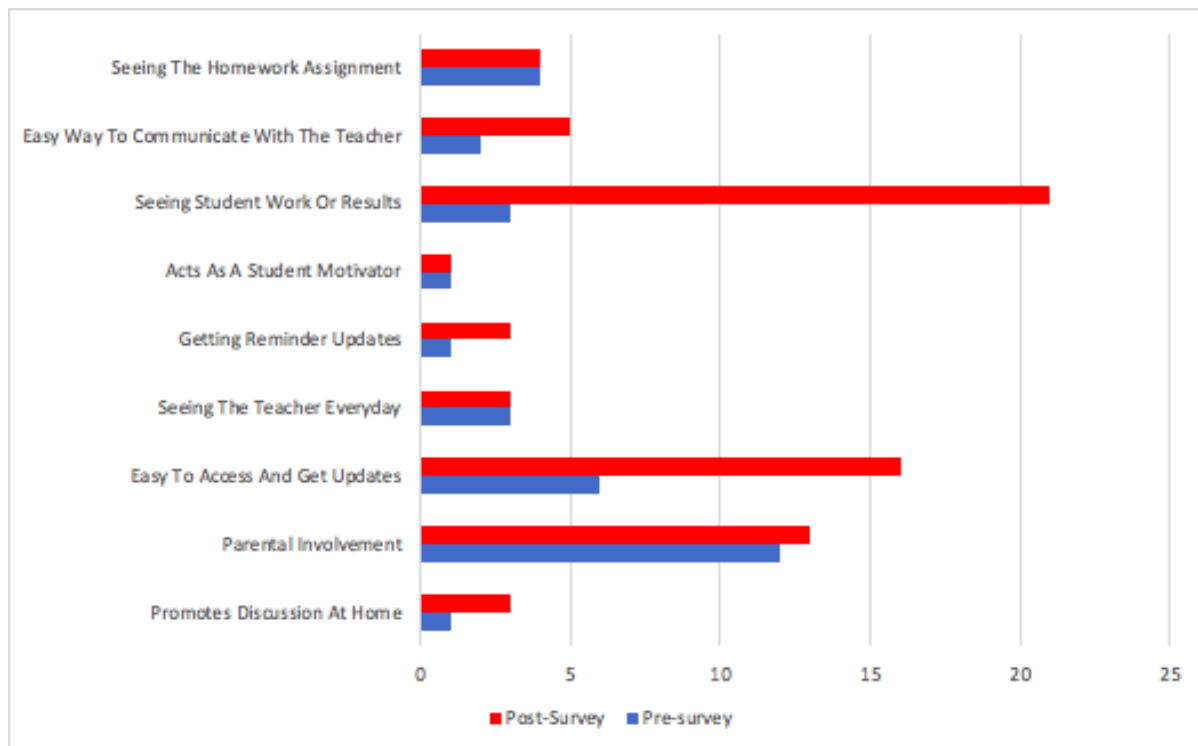


Figure 3. Responses to the pre-survey and post-survey separated into nine themes.

One notable parent response was, “I like knowing what the kids are working on. It helps me stay connected. Kids aren’t always great at communicating and this helps me know exactly what they should be doing. I like getting pics of the kids doing different things and notifications of events happening at school.”

The only negative response to the opened-ended response from a parent was, “Knowing how they are performing. What I don’t like is getting 3 or 4 notices per day. It is a good communication tool.”

Question 2: Do you feel that Seesaw is motivating for your child to accomplish excellent work?

	Yes	No
Pre-survey	23	2
Post-survey	18	7

Question 3: Does using Seesaw help you to have conversations with your child at home about school?

	Yes	No
Pre-survey	25	0
Post-survey	25	0

Question 4: Do you feel that Seesaw helps you know more about what is going on in your child’s classroom?

	Yes	No
Pre-survey	25	0
Post-survey	25	0

Question 5: How many people in your family have signed up for Seesaw?

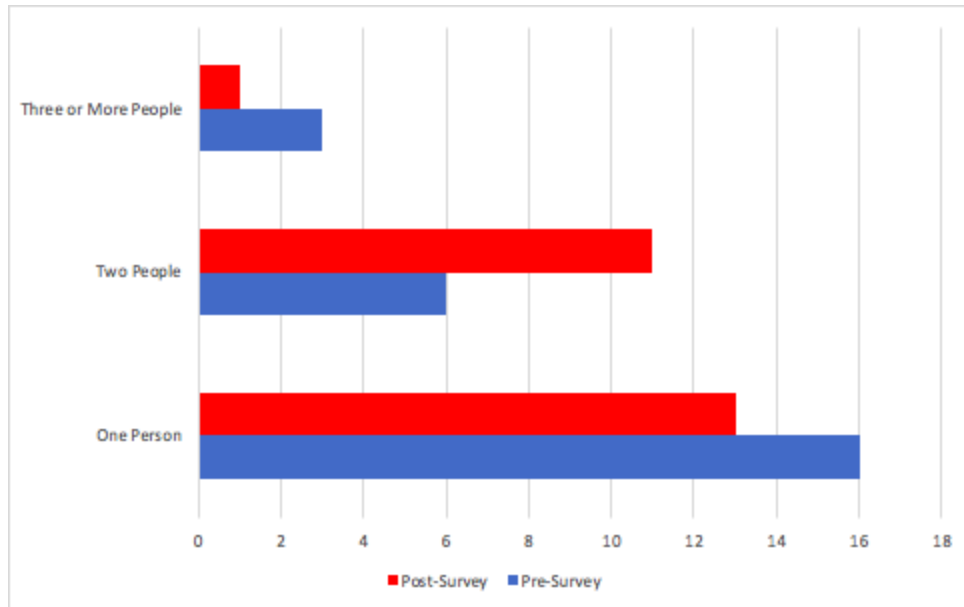


Figure 4. Pre and Post-survey information on how many parents signed up for Seesaw within one family.

Question 6: How often do you check Seesaw?

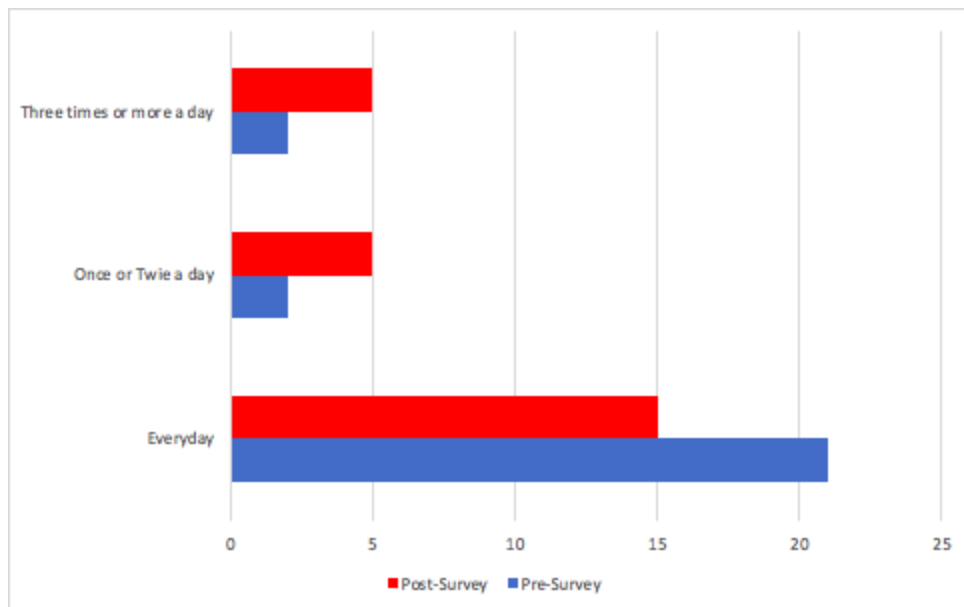


Figure 5. Pre and Post-Survey information on how often parents check Seesaw each day.

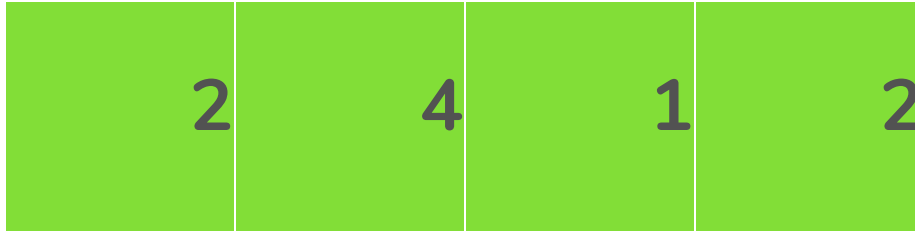
Data Source #3: Videos

The third data and fourth data sources consisted of student work samples that were both photographs and videos. Each day the students would upload a sample of their work to Seesaw. After this work sample was approved by the teacher, the teacher would assign the sample a star rating of 1-4. This rating would have both a number and a color-code. If the student received a 1, their work sample would be red and would mean they did not meet the standard listed. A work sample of 2 would make the sample yellow and would signify to the teacher that the standard is only being partially met. If a student received a rating of 3, their work would become light green meaning they had met and understood the assigned standard. Finally, if a work sample was given a 4, it would turn dark green meaning the student beyond met the standard and expectation of the assignment. Work samples with color-coded star ratings along with private teacher notes are included below. The students have been labeled Student A, B, C, and D for confidentiality.

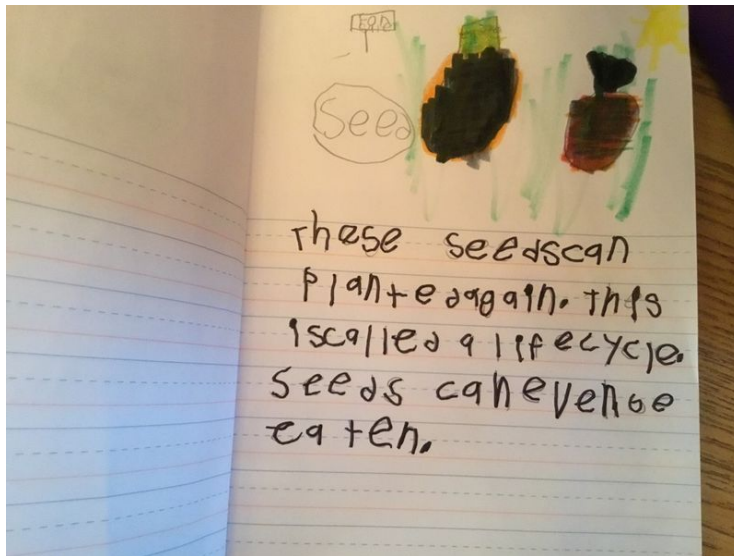
Examples of Video Star Ratings from Seesaw Student Work

The videos that were taken by students A and B included videos on the pumpkin life cycle and on a reading and writing pumpkin life cycle book. A photo of the video has been shown below. This numbered table below shows a variety of data pieces. The number in the colored box tells how many work samples of each item have been uploaded by a particular student. For example: 2 pumpkin life cycle videos have been uploaded. The color corresponds to the average of the star rating given. Student A has four green boxes, which means he has understood the content learned and can show it independently up until this point.

Pumpkin Life Cycle	Sight Word Practice	Steel Drum Band	Writing and reading
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Student A

This is one particular video sample that was uploaded by Student A:



Writing and reading - 3★ This is a

picture of a video uploaded by

Student A concerning a reading and

writing project called "All About

Pumpkins". The goal was for students

to state in a three-page story what

pumpkins have, what they are, and

what pumpkins can do. This picture from Student A is the third page of his story. This page

explained that when pumpkins have been carved and used, the seeds from that pumpkin can be

used and planted again to start another life cycle. Student A also discussed that pumpkin seeds

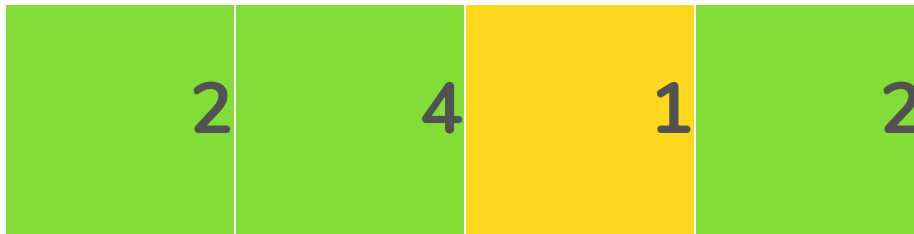
can be eaten in addition to being planted. Throughout this video, Student A explained all three

key pieces of what pumpkins have, what they are, and what pumpkins can do as well as having

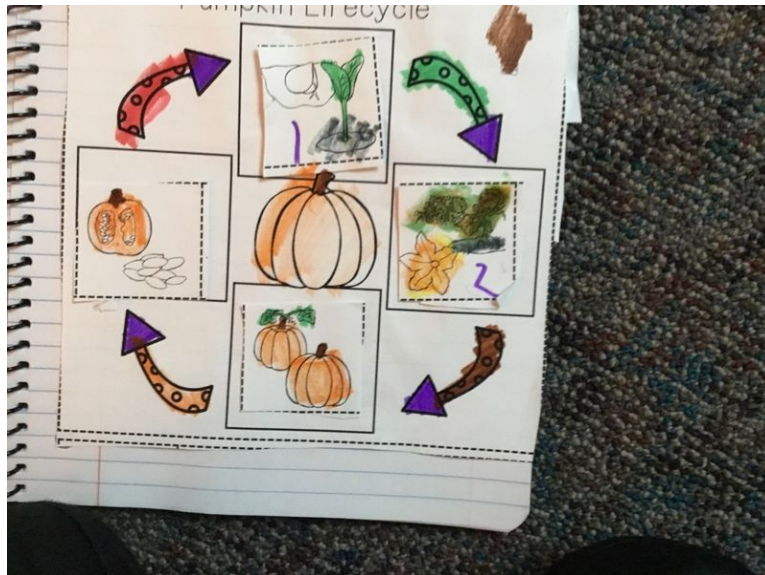
the appropriate writing features such as capital letters and periods. Lastly, Student A was able to

read each part of the story in his video as well. This is what gave him the requirements in order to earn a star rating of 3, which made his work sample light green. This color shows that Student A fully understood what was expected of him and understood the content being taught.

Student B



Video sample uploaded by Student B:



Pumpkin Life Cycle - 3★ This is a picture of a video uploaded by Student B concerning the pumpkin life cycle. Student B received a star rating of 3, which made his video a light green work sample. The rating showed that Student B understood how the pumpkin life cycle worked and used the correct

vocabulary in his pumpkin life cycle video. The words Student B used that had him receive a 3-star rating included: vine, stem, pumpkin, leaf, tendril, and life cycle.

Video samples were more accurate for the researchers to observe because a picture can be seen of the work, but an audio explanation was also required. These videos were more accurate as well because the samples allowed us to experience if the student knew what they were talking

about in relation to the content being taught. These videos ranged anywhere from a minute in length or longer depending on how long the student wanted to explain and how in depth they discussed the material. We found that the longer the video explanation was, the more in-depth the student was with their thoughts, which resulted in a higher rating scale.

Data Source #4: Photographs

Examples of Photograph Star Ratings from Seesaw Student Work

	DJ Reading Quizzes	Math by Self	Monthly Packet	Morning Work Lessons	Sight Word Practice
Student C	3	3	3	3	4

This table of Student C above shows a variety of data pieces. The number in the color-coded box tells how many work samples of each item has been uploaded by Student C. For example: 3 Reading Quizzes have been uploaded. The color corresponds to the average of the star rating given. Student C has four green boxes, which means he has understood the content learned and can show it independently. However, when it comes to his monthly packet, he has a

star rating overall of yellow.



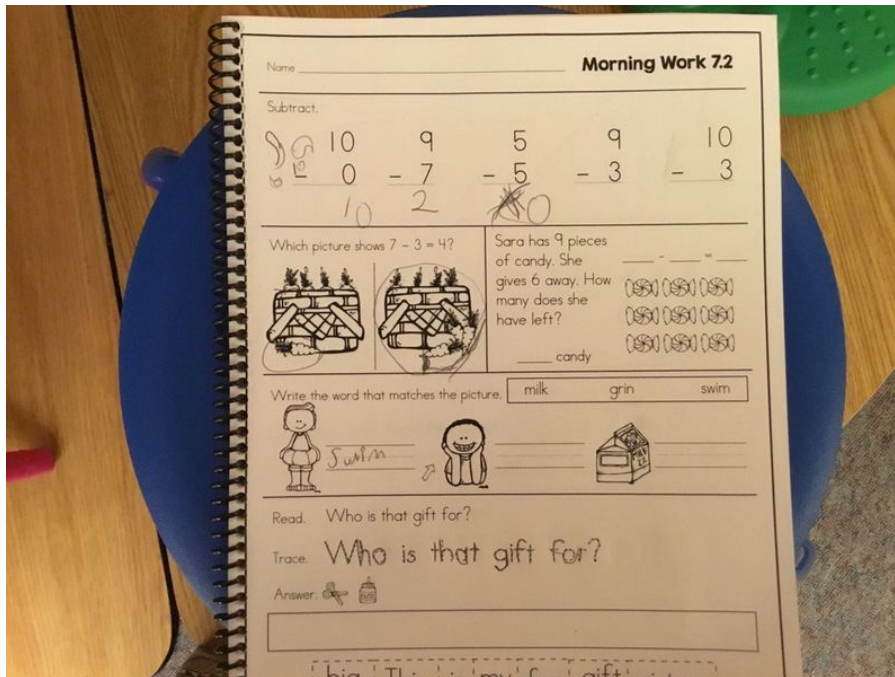
Monthly Packet - 2★

Private Teacher Notes: Student C needs help in knowing what

number is less than 50 or more than 50. A number chart would help him complete his Monthly Reading and Math Packet more independently and provide him with a visual.

Work samples for Student D:

	DJ Reading Quizzes	Math by Self	Monthly Packet	Morning Work Lessons	Sight Word Practice
Student D	3	3	3	3	4

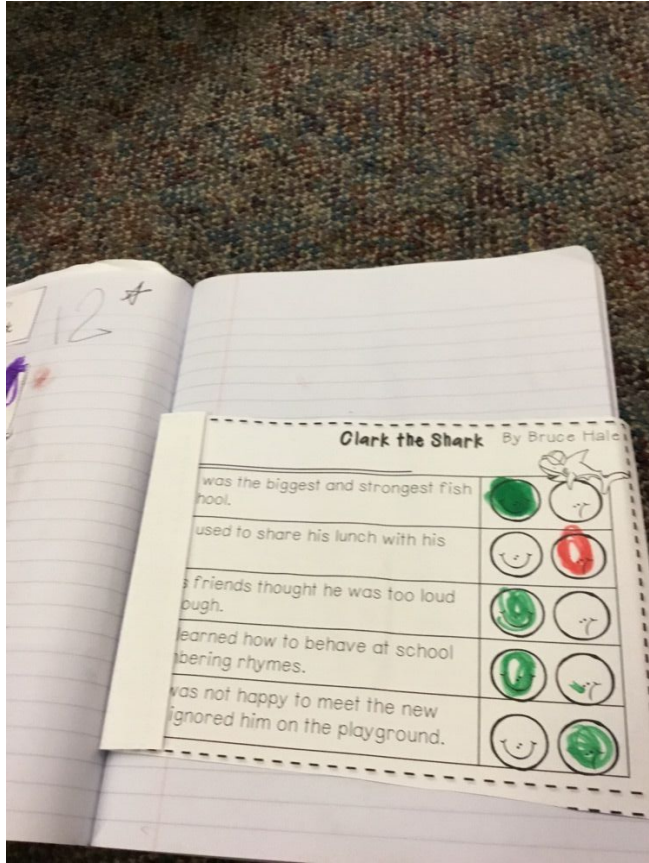


Morning Work Lessons -

1★

Private Teacher Notes:
 Student D has difficulty completing work on his own. He feels like he needs a teacher with him at all times in order to complete his work. This could also be due to a

lack of confidence. Giving him small goals and checking in with him seems to help him get his work accomplished in pieces.



DJ Reading Quizzes - 3★

Private Teacher Notes: Student D shows success when he is able to have the reading quiz being read out loud to him. This gives him confidence that he hears what is expected of him and he can accurately mark his answer using picture clues.

Conclusions and Action Plan

The purpose of this study was designed to see the impact that Seesaw had between teachers and parents in an elementary setting. The research question was, “What is the impact of using technology communication tools between teachers and parents in an elementary setting?” After 4-6 weeks of data collection, we have discovered our research did have a positive impact on the teacher, parent, and student relationship.

The first-grade classroom (Classroom 1) had success when it came to parents liking and commenting on postings each week. Every week of data that was collected had parents liking and commenting more than the previous week. This led to parents visiting the Seesaw website

more frequently. The data from the Data Notification tool also showed that each child had more items/student uploaded each week. For example, Week 1 had 8.2 items/student, Week 2 had 15.5 Items/Student, Week 3 had 23.8 Items/Student, and Week 4 had 29.4 Items/Student. This shows that the first-graders were actively using Seesaw to upload their work content for the parents to observe. Over the course of these four weeks, there was an average of 116 postings each week by the first-graders. Parents were visiting the Seesaw website each week in order to see new items being uploaded. By the end of Classroom 1's data collection, there had been 559 items uploaded to Seesaw.

When it came to the sixth-grade classroom (Classroom 2), we found our data to be more random. On average each week, sixth-grade students were uploading 53 work samples to Seesaw. The parents' likes and comments did not consistently go up or down depending on the week. The data ranged from 39 likes and 11 comments in Week 1, 63 likes and 5 comments in Week 2, 55 likes and 9 comments for Week 3, 47 likes and 19 comments for Week 4, 21 likes and 9 comments for Week 5, and 48 likes and 19 comments for Week 6. However, this data still showed that parents were involved in liking and commenting on the sixth-grade work samples throughout all 6 weeks of data collection. By the end of Classroom 2's data collection, there had been 371 items uploaded to Seesaw.

We had a total of 25 parents take our pre-survey out of 44 parents signed up for Seesaw. When it came to our first question of what parents enjoyed most about Seesaw, our top three responses in the pre-survey included: Seesaw promoting parental involvement (48% of parents), Seesaw being easy to use and get updates on (24% of parents), and being able to see the homework assignment (16% of parents). After 4-6 weeks, the post-survey was sent out

consisting of the same six questions. Parents again answered these questions in their private Seesaw inbox. The post-survey question asking what parents most liked about Seesaw this time around consisted of the three top responses: Seesaw promoting parental involvement (52% of parents), the fact that Seesaw is easy to use and get updates on (64% of parents), and seeing student work or results (84% of parents) as our top three answers. We found that seeing student work increased from 3 parents pre-survey to 21 parents post-survey, which is a 72% difference. This was the biggest increase in our pre and post-survey responses. Additionally, we had 14% of parents say during pre-survey that they checked Seesaw one, two, or three times a day compared to 20% of parents post-survey.

This means that we had parents viewing Seesaw as an encouraging and realistic way to see their child's work in a private online portfolio. Parents appreciated how easy Seesaw was to use and knew what was going on in the classroom on a daily basis. We had all 25 parents agree post-survey that Seesaw helped parents communicate with their child at home concerning what was being learned at school. We also had all 25 parents post-survey state that they believed Seesaw helped parents know what was going on in the classroom each day. We found our findings in our literature review to be correct in Bacigalupa (2016) stating that communicating with families enhanced child-adult conversations and increased family knowledge of school activities. .

Additionally, we found that more people signed up for Seesaw post-survey. When the pre-survey was completed, we had 6 parents (13%) respond that they had two people signed up for Seesaw. Post survey we found that we had 11 parents (25%) respond that they had two

people signed up, which is an increase of 12%. This showed that more people signed up to use Seesaw as our data collection went on.

When it came to the 1-4 star ratings of student work, we found that if students did not understand the content being taught or received a star rating that was less than three, then it was our responsibility to go back and reteach as well as correct any misconceptions. For example, Student D needs to start using a strategy in order to solve his morning work. The first five questions are subtraction problems using numbers ten or smaller. Student D needs to learn a strategy that works for him in order to independently solve these problems. One effective strategy might be using his fingers to practice take-away problems. However, when he gets past ten, he's going to have to develop a different strategy. Another effective strategy would have him drawing an accurate picture. He could start by drawing the total number of circles and then crossing out the circles that need to be taken away. Picture clues are going to be a key instrument in this child succeeding in his work independently. It is for this reason that we found private teacher notes to be so effective in taking next steps with students.

We did find that videos were a more effective way for students to upload their work samples. When a picture is uploaded, it tells some information to the educator. However, when a video is uploaded, it also tells the thoughts of the student in their effort to explain their work accurately. It is recommended that the students are given a rubric of what is expected of them in their video description. For example, a length of video would be recommended, vocabulary that should be used, as well as an explanation of what they learned and why it is important in life. A rubric would better help students make a more efficient video of what they have learned and make it easier for the educator to rate the video.

Another recommendation includes private teacher notes being able to be shared with parents relating to work samples. It is a great idea for parents to be able to see work samples, but the parents also need to know what their child is doing correctly and what their child needs to improve on. By sharing these teacher notes with parents next to the work sample, parents would have a more realistic picture of what their child is learning in school and how to help them improve. That way, when meetings or conversations with the teacher and parent happen, both parents and teacher will have a realistic image of how the student is doing in school and will both be on the same page.

Overall, this information above relates to our action research question specifically concerning the impact that Seesaw had on teachers and parents in an elementary setting. We were able to have students upload information each day on what they were learning in school on a consistent basis. This information would promote conversation between parent and child as well as letting parents know what their child was learning in school. These work samples on Seesaw allowed teachers to communicate with students on how they could continue to improve their work. This technology communication tool also allowed teachers to let parents know how their child was doing in school compared to where they should be at the first and sixth-grade standards. In conclusion, Seesaw had a positive impact on the student, parent, and teacher relationship.

Appendix A

Week of Sept. 16-Sept. 23 (Week 1)

63 New Items, 51 Likes, 8 Comments, 59 Parent Visits

All-Time: 156 New Items, 8.2 Items/Student, 22 Connected Parents

Seesaw Pre and Post Survey

1. What do you as a parent like about Seesaw?
2. Do you feel that Seesaw is motivating for your child to accomplish excellent work?
 - a. Yes, I do.
 - b. No, I do not.
3. Does using Seesaw help you to have conversations with your child at home about school?
 - a. Yes, Seesaw helps me have conversations with my child at home.
 - b. No, Seesaw does not help me have conversations with my child at home.
4. Do you feel that Seesaw helps you know more about what is going on in your child's classroom?
 - a. Yes, Seesaw helps me know what is going on in my child's classroom.
 - b. No, Seesaw does not help me know what is going on in my child's classroom.
5. How many people in your family have signed up for Seesaw?
 - a. One person.
 - b. Two people.
 - c. Three or more.
6. How often do you check Seesaw?
 - a. Everyday
 - b. Once or twice a day.
 - c. Three times or more a day.

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