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Flipped Classroom Effects on Upper Elementary and Middle School Student Motivation Inside and Outside the Classroom

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Flipped Classroom Effects on Upper Elementary and Middle School Student Motivation Inside and Outside the Classroom

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By

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ABSTRACT

This action research study focuses on the effects the Flipped Classroom Model has on student motivation in the classroom, as well as at home. Two research questions are utilized in this study and the two research questions are the following: How does the Flipped Classroom Model (FCM) enhance student motivation at home, as well as in the classroom? What obstacles can educators and students face pertaining towards motivation with the Flipped Classroom Model (FCM) and how can they overcome those challenges? The study on the Flipped Classroom and student motivation took place in a 5th grade classroom consisting of 21 participants. The assessments that were used in this study to collect data were the following: Student Motivation Questionnaire, Teacher Observation Checklist, Student Interviews and a Student Survey. Many students enjoyed learning through the Flipped Classroom Model and most students reported that their motivation increased in the classroom and at home. However, a significant amount of the student feedback resulted in comments of wishing the Flipped Classroom Model was implemented in just one or two subjects instead of all subjects. In all subjects, it was a bit overwhelming for this group of students. This is believed to play a factor on some of the feedback collected from students who didn't like the Flipped Classroom Model. In the future of students learning through the Flipped Classroom Model at this level of students, I plan to use it in just one or two subjects.

CHAPTER 1

INTRODUCTION

Introduction

As an educator who has tried to adjust and create new ideas to deliver instruction effectively to students during a current pandemic, I strive to promote effective teaching instruction through a model that helps increase student motivation while learning in the classroom and at home. New learning models that students and teachers are currently adjusting to are hybrid-learning and distance learning because of the pandemic. Due to the importance of motivating students to learn and complete their school work at home and in the classroom, the Flipped Classroom Model (FCM) is a model I have implemented into my classroom instruction for all subject content areas. The FCM is a teaching model that allows students to access school materials outside of the classroom using a technology device. Within this instructional model, teachers assign students to complete short assignment tasks involving watching a video pertaining to the skill or topic that will be taught the next day in class. The goal of the video is to help students come to class prepared with the appropriate knowledge. Then, the instruction time in class is student-centered and used for hands-on learning, one-on-one teacher to student interaction and peer communication (Karabatak & Polat, 2020). My goal with the FCM is to enhance my students' motivation to learn no matter where they are. For this study, the focus is placed on one group of fifth grade students who are learning through traditional instruction with some technology used. This group of twenty-one students will first be given a motivation questionnaire about each student's own personal motivation towards learning and school work. The FCM will then be applied to my teaching instruction in all subject content areas in my self-

contained classroom and student feedback will be collected on how the FCM affects their motivation towards school by the individual student interviews and a survey. As the educator, I will also record observations relating to student motivation.

The research that has been written about the effectiveness of the Flipped Classroom Model (FCM) on student motivation suggests that students need e-learning readiness for student learning and motivation to be successful. “E-learning readiness is the ability of individuals to utilize e-learning resources and multimedia technologies to improve the quality of learning” (Yilmaz, 2017, pp. 252). The FCM allows for learners to become more independent and responsible of their learning, which can motivate them to complete to pre and post work to prepare for the next day of class. For students to be successful at the independent aspect of the Flipped Classroom Model, students need to be informed and trained with the knowledge pertaining to the technology that is used for the FCM to positively impact student motivation and learning. If students do not receive the proper e-learning readiness, anxiety and stress can play an effect on the motivation of students (Karabatak & Polat, 2020). Students will show an increase in motivation towards both at-home and in-person learning if they are comfortable and confident with the use of technology sources (Yilmaz, 2017). Joshua W. Winter (2018) conducted a study in his sixth-grade social studies class with the implementation of the FC model. He concluded that there was an increase in student engagement and motivation, but only within a technology-supported environment. Using information from the variety of literature and studies, I have determined that e-learning readiness is an important factor to the success of the Flipped Classroom Model (FCM) on student motivation and learning. I will elaborate on this focus of student motivation through the FC model and will collect data that furthers the understanding of how effective the FC model is if students have the appropriate e-learning readiness.

Statement of the Problem

My research problem measures what the impact of the Flipped Classroom Model (FCM) has on student motivation given any subject area. As an educator, I feel that student motivation is a critical piece to successful learning. If a student isn't engaged or confident in a skill, the determination and motivation of that student will not be at the potential it should be. Especially since distance and hybrid-learning are more familiar this school year, I strive to discover the best way to motivate each of my students as they learn at home and in class. Therefore, I will conduct a research study with the flipped classroom model within my own classroom to positively enhance student motivation at home and in the classroom. I have also researched what obstacles educators and students may face with motivation during the flipped classroom model and how they can overcome the challenges.

Purpose of the Study

Student motivation has a huge impact on the success of student learning in education. Since teachers in our district, including myself, have to teach to students at home, as well as in-person, I have been determined to find a teaching and learning model that can be beneficial for both environments of learning and keep students motivated to learn no matter what setting they are in. Focused on my group of fifth-grade students, I will implement the Flipped Classroom Model (FCM) into my classroom instruction. I will observe and collect data on how well the FCM affects my students' motivation at home, as well as in the classroom, given any subject area. I will collect information on any negative effects and determine how I can overcome the

challenges for my students. My focus is how I can make the FCM a positive success for delivery of instruction in any given subject and empower student motivation.

Research Question(s)

I utilized two research questions in my study and the two research questions were the following:

1. How does the Flipped Classroom Model (FCM) enhance student motivation at home, as well as in the classroom?
2. What obstacles can educators and students face pertaining towards motivation with the Flipped Classroom Model (FCM) and how can they overcome those challenges?

Definition of Variables. The following are the variables of the study.

Variable A: Student motivation (variable A) in the classroom and at home is my dependent variable. This is the dependent variable I observed and collected data on if it improved while teaching through the Flipped Classroom Model (FCM). Yilmaz (2017) defines student motivation as a notion which has an impact on the behavior of an individual and how far an individual's behavior will expand for full potential of determination (Yilmaz, 2017). "Motivation has a significant impact on learner attitudes and learning behaviors in educational environments" (Yilmaz, 2017, pp. 253). I assessed student motivation in my fifth-grade classroom by incorporating the FCM into each subject's instruction and used a student motivation questionnaire, student survey and individual interviews to obtain data on the dependent variable.

Variable B: The Flipped Classroom Model (variable B) is my independent variable. The Flipped Classroom Model (FCM) is defined as a model that allows learners to access schoolwork

outside of the classroom through the use of technology devices and materials. The purpose is to help students prepare for class before they attend by watching lesson videos on the upcoming focus. This allows for more class time to be used for hands-on activities, teacher-student interaction and interacting with peers (Karabatak & Polat, 2020**;** Winter, J. W., 2018)**.**

Significance of the Study

When observing and looking at how educators are adjusting their instruction to students during the current pandemic, student motivation can be greatly affected if instruction isn't engaging students. Students may not feel comfortable with learning through technology devices in the home setting. I focus on not just how to deliver instruction in a new model, but how to keep my students motivated to learn at their fullest potential throughout a learning strategy that involves technology, at home learning tasks, as well as in-person learning skills. This study is important to myself as an educator because I want to deliver the best instruction I can to my students no matter where they are learning at and strive to keep my students' motivation high with the enjoyment in learning through technology.

Research Ethics

Permission and IRB Approval. In order to conduct this study, I did seek MSUM's Institutional Review Board (IRB) approval to ensure the ethical conduct of research involving human subjects (Mills & Gay, 2019). Likewise, authorization to conduct this study was approved from the school district where the research project took place (See Appendix I and J).

Informed Consent. Protection of human subjects participating in research were assured. Participant minors were informed of the purpose of the study via the Method of Assent (See Appendix K) that the researcher has read to participants before the beginning of the study.

Participants are aware that this study is conducted as part of the researcher's Master Degree Program and that it will benefit of my teaching practice. Informed consent means that the parents of participants have been fully informed of the purpose and procedures of the study for which consent is sought and that parents understand and agree, in writing, to their child participating in the study (Rothstein & Johnson, 2014). Confidentiality is protected through the use of pseudonyms (e.g., Student 1) without the utilization of any identifying information. The choice to participate or withdraw at any time were outlined both, verbally and in writing.

Limitations. There was a potential limitation that could have affected the results in my study. The limitation was students not having access to a technology device at home. Some students may also not have internet access at home. To try and prevent these potential limitations, I asked permission from my building supervisor for students who may not have technology devices at home, use the one-to-one chrome books that students have the privilege of using in school. I accommodated for the students who did not have devices at home so they were able to receive the same amount of learning. Regarding internet use, our school did provide a hot spot for families to use so students are able to connect online at home.

CHAPTER 2

LITERATURE REVIEW

Introduction

Today, more than ever, technology-based learning has become more popular and changed the educational landscape. There is more one-to-one technology devices for students in schools, easier access to materials, and hybrid/distance learning in place due to the most recent pandemic. The main reason why I have chosen to conduct a study on the flipped classroom model and its effects on student motivation is due to the current pandemic. As a 5th grade teacher, I want to find the most effective teaching strategy for my students, especially when we are in a time of unknown for the days we will have in-person instruction, hybrid learning and/or distance learning. The focus of this literature review is to dig deeper and find how the Flipped Classroom Model (FCM) can help increase student motivation from different author's studies and perspectives within a variety of subject content areas. Keeping students motivated during different types of learning models and challenging times is critical for student success.

Body of the Review

Context. Staying motivated in the classroom and at home for my students can be challenging. Sometimes a lesson lecture can get to be too long in-person which can take away from hands-on skill learning through activities and resulting in homework assignments. Student motivation can be impacted at home through hybrid or distance learning due to a student's surrounding distractions. The Flipped Classroom Model (FCM) has caught my attention the more I have researched, therefore I have decided to conduct a study within my 5th grade classroom to determine if this teaching strategy can keep students motivated with more time in

the classroom for activities and less time at home completing homework assignments. The articles used in this research describe how the flipped classroom model effects student motivation in the classroom and at home for upper elementary and middle school students. The articles also provide information on how to help student motivation be successful through the Flipped Classroom Model.

Increase in Student Motivation Outside the Classroom.

Many may say that getting students to complete any type of schoolwork outside the classroom is going to be a challenge, but do we think about how we can actually improve the student motivation to complete schoolwork at home. Rewards and prizes are options to motivate students, but are they enough. For some students that may work, but not for every student. Maybe the way the material and content are being delivered to the students is not what they need, and they could need a more effective approach of learning. Student motivation is a notion which has an impact on the behavior of an individual and how far an individual's behavior will expand for full potential of determination (Yilmaz, 2017). "Motivation has a significant impact on learner attitudes and learning behaviors in educational environments" (Yilmaz, 2017, pp. 253). After researching through a variety of articles pertaining to student motivation and the flipped classroom, the first important factor that has an impact on student motivation within the flipped classroom model is e-learning readiness.

The flipped classroom allows learners to access schoolwork outside of the classroom through the use of technology devices and materials. The purpose is to help students prepare for class, prior to attending, by watching lesson videos on the upcoming focus. This allows class time to be used more for hands-on activities and learning while interacting with peers (Karabatak & Polat, 2020). The flipped classroom teaching model can help increase student motivation

within an individual's own learning. According to Karabatak & Polat (2020), the FCM increases student engagement and motivation, but stress and anxiety can play a role within this learning strategy if the students are not properly informed and trained within the use of the technology devices and programs that are being used during the FCM (Karabatak & Polat, 2020). According to Ramazan Yilmaz, his research states that students will show an increase or similar motivation and fulfilment through the FC model if they are familiar and comfortable with the use of technology. This needs to play an important factor for this learning model to be effective and successful (Yilmaz, 2017). This is e-learning readiness and students need to be prepared with e-learning readiness for the Flipped Classroom Model (FCM) to be successful.

Studies that have been conducted on the Flipped Classroom Method (FCM) being effective and increasing student motivation, many articles state that if students are not e-learning ready, the FCM will not be successful for students. If students do not have e-learning readiness skills, they will not be motivated or successful to learn at home and complete the at-home tasks within this teaching model. This can be a challenge to the use of the Flipped Classroom Model. "According to Kaur and Abas (2004), e-learning readiness is the ability of individuals to utilize e-learning resources and multimedia technologies to improve the quality of learning," (Yilmaz, 2017, pp. 252). Motivation plays a big part in the success of the flipped classroom method if students do or do not have e-learning readiness. Yilmaz states the following statements in his study from another author: "For instance, Grabau (2015) states that learners need to have intrapersonal skills such as self-efficacy, self-regulation skills, good communication skills, time management skills, teamwork, and goal directed behaviors to some extent and FC courses' online requirements could be completed successfully" (Yilmaz, 2017, pp. 252). To expand on these skills needed for motivation within the FCM, computer self-efficacy, internet self-efficacy,

online communication efficacy and self-directed learning are also factors that have been found to play an important role in the process and success of students within the Flipped Classroom Model. These factors could affect student motivation at home and in the classroom while learning through the flipped classroom model (Yilmaz, 2017). These skills correlate with individual responsibility and allows students to learn at their own pace. The flipped classroom model can be beneficial for differentiation. If research has concluded that students need these skills, then educators need to provide the proper training for students to develop these skills before they implement the flipped classroom method within their classroom.

Joshua W. Winter (2018) conducted a research study with the use of the flipped classroom model within his 6th grade social studies class. He states in his study that any type of online learning have shown connection between performance and self-efficacy in students. Motivation and engagement within students had also shown an upsurge within technology-supported learning environments (Winter, 2018). Technology-supported learning environments provide proper technology devices and training/preparation that are needed for learning success. If students feel the importance of technology from their educators, student motivation will increase like Winter states it has within his own study. Winter (2018) also discusses how the flipped classroom method may not be successful for all students, especially students who may not have internet access at home or a device at home. Luckily, more schools are transitioning to one-to-one devices allowing students can take their devices home from school. If not, educators need to make the accommodations for these students to still access the learning materials and schoolwork that is needed to be done for success if they do not have a device at home.

In addition, homework is not always a task that students enjoy doing at home. Homework can affect student motivation for at home learning. The Flipped Classroom Model (FCM)

minimizes homework to roughly 10-20 minutes of preparation work for class the next day. That 10-20 minutes is a lesson video or informational video on the content that will be taught the next day in class. Abesyekera & Dawson (2015) state that the flipped classroom does require students to complete pre- and/or post-class activities to fully benefit from in-class work (Abeyskera & Dawson, 2015). The video can be from a resource online, or else the teacher's own video they created. "In some cases, a teacher assigns students a video that poses a mathematical problem or establishes a non-mathematical context motivating the work that will occur during the subsequent class period. We (educator researchers) call these *set-up/*motivation videos, and they occurred less frequently in our data than lecture videos" (Araujo, et. al., 2017, pp. 256). This is another type of video that enhances student motivation at home to help students be determined to come to class prepared the next day. Students watch the video for their homework task for the appropriate class and it helps them become prepared with the knowledge they need to know about the topic that will be worked on the next day in class. This way, class time can be used for active learning. According to Abeysekera & Dawson (2015), active learning is strongly supported in the educational world because it has shown to lead to improved learning (Abeysekera & Dawson, 2015).

Positive results from students' own words in an interview have shown success with having students view video lectures at home. Min-Kyung Lee conducted a study on the flipped classroom approach in his middle school class in South Korea. In quotations from a students' direct words in an interview on the flipped classroom, the student stated that when there is something he doesn't understand at home, he can replay the video to help him understand the classroom learning better. He also stated that when he is watching the lecture videos, it feels like his teacher is right there in front of him (Lee, 2018). Another student said, "Before, I struggled to

do my homework on my own, but now I can solve the problem by watching the video repeatedly. I can verify what I did not understand at home by asking the teacher or friends in the group activity" (Lee, 2018, p. 848).

Increase in Student Motivation Inside the Classroom.

In relation to student motivation outside the classroom, students still need to have e-learning readiness to be able to teach and learn within the flipped classroom model. The Flipped Classroom Model (FCM) can increase student motivation inside the classroom because it allows more time for activities, hands-on learning experiences and peer communication. "The flipped classroom provides the students with in-class support for completing work" (Schmidt & Ralph, 2016, p.1). In my opinion and with my own experience, students look forward to learning through activities, games, group work and teacher-student work time instead of sitting and listening to a lesson lecture for 20-30 minutes. For example, if I teach a math lesson for 30 minutes, I only then have 20 minutes left for my students to practice the math skill they have learned in class that day. Implementing the flipped classroom model into my classroom has allowed for my students to come to class prepared, do a 5-10 minute review, and then get into the activities to help the students practice the skills.

Schmidt and Ralph state in their article on the FCM that another author, Millard, found from his study that 80% of teachers reported that there was improvement on student engagement (Schmidt & Ralph, 2016). A few reasons these educators and authors are supporting that the flipped classroom works is because it allows classroom discussion, offers personalized guidance for students, build ups team-based skills and increases student engagement (Schmidt & Ralph, 2016). These are solid and valued reasons for the flipped classroom to be successful, especially the in-classroom side of it. Teachers and students all look forward to working with each other in

groups on activities, which helps build up the teamwork skills, communication and engagement of students.

The Flipped Classroom model is a model that allows a variety of activities to be conducted and implemented in the classroom. “The flipped classroom emphasizes the leverage of online self-regulated learning and physical classroom interaction by adopting various pedagogies, such as, inquiry-based learning, project-based learning, problem-based learning and learning by doing among collaborative team members” (Wei et. al., 2020, p. 1462). Other than projects and activities used to engage and motivate students during class time, teacher-student interaction has shown positive impacts on student learning through the flipped classroom approach. The authors stated that during the in-class learning, the teacher had more time to interact with students in small groups or individually to help guide students to a better understanding of the skill (Wei et. al., 2020). One student from their research study specified the following: “This approach benefits me a lot, specifically during the in-class learning, where the teacher used the questioning strategy and guided me to think deeply” (Wei et. al., 2020, p. 1476). Another student stated the following involving the teacher in the flipped classroom method: “When I study in a traditional classroom, I have to ask the teacher for help after class. However, the teacher usually does not have enough time to answer all our questions. In the flipped classroom, I have more time to discuss with the teacher in class” (Wei et. al., 2020, p. 1478). The statements from these students were positive impacts the flipped classroom has done for them inside the classroom. They have shown that the flipped classroom can give opportunity for a teacher to find time to answer student questions and for students to know that there will be a time for them to ask about any confusion. When students know they will receive this time, it will

motivate them to do their assignment at home by watching the video lessons so they come prepared and they will be able to practice the skill in the classroom with the teacher.

Obstacles and Overcoming Challenges

The Flipped Classroom Model involves technology use at home and in the classroom. These days, schools provide internet access in the classroom, as well as some type of device students can use in the classroom. Not all schools allow students to take home devices, but during the current pandemic we are in, schools are allowing devices to be taken home to use for learning. A challenge that may be faced during the FCM is a students' family may not have Internet access at home. A way to solve this obstacle could be for the school to provide a Hot Spot for the student. The use of a hot spot is a focus right now in our school district because of the pandemic causing students and educators to adjust to different learning models, including distance and hybrid-learning. Not all families have internet usage at home.

Another challenge that may be faced while striving for student motivation while using the Flipped Classroom Model could be that students aren't trained properly to use technology devices and online resources. To overcome this obstacle and to prevent facing this challenge, students need to be e-learning readiness. A technology expert can come in and teach/inform students how to use their device and online programs effectively. The educator who is running the class can also train his/her students repeatedly how to properly use the device, as well as how to access the online programs and sources students will need. If students have not received this training, then they could develop the feeling to "give up" and not remain motivated to learn. Yilmaz (2017) informs readers that student motivation will increase if students are properly trained and informed about technology devices and sources, which is called e-learning readiness.

If students don't have e-learning readiness, then they may not feel motivated to do school work if they don't know how to use the source that is used to teach and assess the content.

Theoretical Framework

The theory that is centered around and applied in the Flipped Classroom Model (FCM) is Bloom's Taxonomy. McDaniel (2020) informs readers that Bloom's taxonomy is a framework consisting of these six major categories: knowledge, comprehension, application, analysis, synthesis, and evaluation. These six categories are believed by Bloom and his contributors to help educators become knowledgeable of the different areas that should be applied within instruction for students to have full potential of learning success (McDaniel, 2020).

In relation to the Flipped Classroom Model, knowledge occurs at all components of the FCM. As students are learning a skill or about a topic at home and in the classroom, their background knowledge, prior knowledge and what they have currently learned is being applied to all assessments and activities. Subcategories under the category of knowledge are remembering and understand (McDaniel, 2020). This occurs during the at-home tasks that are part of the FCM such as watching the lesson videos that teach the students the skill prior to attending class. Remembering is applied when students are using their background knowledge, as well as putting together what they've learned, inside the classroom with activities. Apply and analyze are the next subcategories that pertain to the FCM (McDaniel, 2020). Students apply what they have learned from the educational videos during activities and assessments that taken place during the classroom time. The last subcategories that apply to the FCM are evaluate and create (McDaniel, 2020). The educator and students work together in the classroom through discussion, group work, projects, and hands-on activities. The educator evaluates student comprehension and understanding during this time.

Conclusions

From these research findings, I have concluded that for my students, or any students, to become successful during the flipped classroom strategy, students need to be trained how to successfully use technology and develop the important skills for communication and self-directed learning. I also have come to conclusion that students need to have e-learning readiness for the FCM to be successful inside the classroom as well. It all starts with students being able to have confidence in operation the technology at home to complete the video lessons. Then, students will be able to come to class prepared with any questions they have, spend time on hands-on learning activities, peer communication and teacher-student interaction.

CHAPTER 3

METHODOLOGY

Introduction

My study will focus on the impact the Flipped Classroom Model (FCM) has on student motivation at home and in the classroom, given each subject content area I teach in my self-contained classroom. The subjects I teach my students are the following: Science, Social Studies, Mathematics and Reading/Language Arts. I will conduct this study with my own fifth-grade class of 21 students. I chose to focus on the impact the FCM has on student motivation because of the current pandemic we are in, which has affected teachers and students to teach and learn through different learning models. To keep my students motivated as they learn at home and in school through distance and hybrid-learning during this pandemic, I will implement the Flipped Classroom Model (FCM) into my classroom instruction. I am determined to keep my students engaged and enhance their motivation towards learning no matter what type of setting they are learning in. The FCM will allow students and I more time in person for activities, peer communication and teacher-student interaction. Students will be prepared in advance coming to class each day by watching an instructional video on the concept and skill prior to the next day of class. This adjustment to the delivery of instruction and hands-on work activities can increase student motivation. The preparation aspect of the FCM will help my students stay motivated at home by watching the instructional videos and potentially do a pre-assessment because they understand that this allows for more time in class to work with peers and complete engaging hands-on activities.

As I completed the literature review on the effects the Flipped Classroom Model has on student motivation, I saw that qualitative interviews were mostly conducted. This has caused me to feel that I should use quantitative surveys to better understand the qualitative results that have already been reported. With the young group of students within the study, I feel as if surveys were the best way to gather feedback, as well as the interviews that are conducted. A student motivation questionnaire, one-on-one interviews with students, a study survey and then observations collected by me, as the educator, will be incorporated into the study to give clear understanding if the FCM was a positive effect on student motivation.

Research Question(s)

In response to my literature review and my determination to find and implement a teaching strategy that will help my students' motivation and learning improve, I propose the following research questions: How does the Flipped Classroom Model (FCM) enhance student motivation at home, as well as in the classroom? What are obstacles that educators and students face with the Flipped Classroom Model (FCM) and how can they overcome those challenges?

Research Design

The approach I selected for this study is the Survey Research Design. Although, I do use a bit of the Action Research Design as well (Fraenkel et. al., 2015). I take a qualitative and a bit of a quantitative approach to the action research study by conducting a survey of a purposive sample of students at my school, which in this case, is my own students. The survey that was conducted consisted of the following forms: teacher observations, student questionnaires and teacher-student interviews. The qualitative part was the written observations, transcribed notes from the interviews, and the written comments by students to open ended

questions on the questionnaires. The quantitative part was the Likert scaled questions that I had the participants do as they rate their motivations (Fraenkel et. al., 2015). I focused on the effect the dependent variable (Flipped Classroom Model) had on the independent variable (student motivation) and if it helped increase student motivation while learning at home and in the classroom. This research design helped collect data and viewpoints of my students about the flipped classroom model, their attitude about the FCM and lastly, if it affected their own motivation in class and at home towards learning.

A survey is a document of questions that help collect feedback of participants of the study that is being conducted (Fraenkel et. al., 2015). A survey was used at the beginning of the study that asked questions about student motivation/attitude and if the student was interested in trying the flipped classroom model within our classroom instruction. The flipped classroom model was described to the students before answering the questions. An interview was directed with each student during the middle of the study to collect information on how each student enjoyed the flipped classroom model, as well as their attitude towards it and if they believed they were more motivated to learn at home and in the classroom. Lastly, a survey was given out at the end of the study to determine if the flipped classroom model showed positive impact on students' attitude and motivation towards learning.

As the educator who collected all the data from the surveys, questionnaire and interviews, this is where the Action Research Design came in. I used all the written notes and feedback to comprehend the effect the flipped classroom model had on my students' motivation in the classroom, and at home.

Setting

This study took place in a rural middle school. The school district has two elementary schools (PreK – 4th grade) and two elementary/middle schools (PreK – Grade 6), one middle school (Grades 5-8), and one high school (Grades 9-12). The school district is located in Minnesota and the population of the town is about 4,000 people. The community provides strong support for education and athletics.

The total amount of students in the school district is about 1,882 students. The amount of students within the middle school is 512 students. The study took place in my own fifth-grade classroom, located in the middle school. The middle school, in which the study was implemented, have the following percentages for student ethnicity: White (82%), Black or African American (2%), Hispanic or Latino (10%), American Indian or Alaska Native (0.4%) Asian (0.4%), Native Hawaiian or Other Pacific Islander (0.2%), Two or more races (5%). This school does have positive parental involvement with their child's education.

Participants

The total number of students who participated in this study was 21 students. There were 14 males and 7 females, ranging from 10-11 years old. The grade level of these students is fifth-grade and they are my students in my fifth-grade class for the school year of 2020-21. The ethnicity percentages with my classroom of 21 students are the following: White (87%), Hispanic/Latino (4%), Two or more races (9%).

Sampling. The study is comprised of 21 fifth-grade students who are currently in my fifth grade class of 2020-21. This is a convenience sample because the students who are participating in this study are my own students and this is most convenient for myself as the

researcher. I have decided to select my own fifth-grade students because I have not used the Flipped Classroom Model (FCM) in my classroom before and I want to gather information on if it is beneficial for student motivation, especially during the current pandemic we are in.

Instrumentation

An observation checklist was used to monitor each individual's motivation in class (Appendix A). Next, a student motivation questionnaire was handed out to the students to rate their current motivation prior to the Flipped Classroom Model (FCM) being accessed in the classroom and home setting (Appendix B). About half way through the study on student motivation, a teacher-student interview occurred with each participant (Appendix C). The interviews consisted of questions regarding the students' personal experience with the Flipped Classroom Model and how they felt about their motivation towards learning. The obstacles and challenges that were faced, according to student feedback within the interviews, were collected and recorded to help assess my second research question. A spread sheet was used to organize and record the student responses from the interviews, motivation questionnaire, observation checklist and the survey. The last instrumentation that was implemented at the end of this study was a student survey. The student survey consisted of questions and rating of student motivation within the FCM (Appendix D). Another spread sheet was created to collect the student survey responses.

Data Collection. In order to accurately access the student motivation while the Flipped Classroom Model (FCM) is implemented into the teaching and learning process, data was collected and organized from each instrumentation into a spread sheet. The first instrument that is used is an observational data collection spread sheet that was completed by the educator. Please see this spread sheet in Appendix E.

The data that was collected from the student motivation questionnaire was organized and documented in a spread sheet as well (Appendix F). Each question and how students rated their personal motivation is set up in this spread sheet. This helped me view the data collected from all 21 participants and see where they believed their motivation stands.

The data that was collected from the teacher-student interviews was accessed on the interview document and then organized in an interview spreadsheet (Appendix G). This helped me understand and oversee all student responses.

The last assessment was a student survey that rated their experience within the Flipped Classroom Model (FCM) and their motivation with the implementation of this model. The student survey data was organized on the student survey spread sheet (Appendix H).

Data Analysis. Means, medians and percentages were calculated using the responses and rating scores based off the student motivation questionnaire, interviews and student surveys. An excel spread sheet was used to keep track of the data from each of these assessments. Every score was used to compare each participant's personal motivation during the Flipped Classroom Model (FCM). By comparing each response and the data that was collected, I grasped a clear understanding of how the FCM affected student motivation in the classroom.

Procedures

This study took place over an eight week period within my own fifth-grade classroom. There were 21 participants, fifth-grade students, who were a part of this study. Prior to this study, students were taught through the traditional classroom model with some technology used. Students were first informed and trained how to use their devices and access the online sources that were used during the Flipped Classroom Model (FCM). Before I began implementing the

FCM into my classroom, I gave each student a motivation questionnaire for them to rate themselves on their personal motivation in school and at home. The next step in the procedure was to carry out instruction and assessments through the FCM in the classroom and at home for pre and post-assessments. Each of my lessons were taught through the Flipped Classroom Model striving to enhance student motivation.

During week four of the study, I met with each participant individually for an interview on how each student felt learning in the FCM is for them and how they felt about their motivation. The interviews were spaced out during that week of five school days. As I continued to teach with the FCM, I observed and collected data on how I see student motivation during the FCM. The last part of the procedure that occurred was the student survey at the end of the study. The student survey consisted of ratings and questions for the participants to answer on the FCM and their motivation.

Ethical Considerations

In this study, each of the participants were protected for their own confidential rights. A consent form was sent out for parents and participants to sign and agree on being a part of this study. Student names were labeled different; an example is “Student 1.” Keeping my students safe and receiving the best instruction was extremely important to me as an educator. I constantly checked in with each of the participants to ensure they felt confident about learning through the FCM and that they were receiving the best instruction. The possibility of harming students could have been potentially through using a device and internet access at home to complete the pre and post assessments needed for the FCM. This may not have been the most ideal situation for every student, but I did my best to make sure each student successfully learned and completed the FCM at home as well. Student motivation could be affected negatively if students were

struggling at home. To prevent this, I made sure each participant is properly informed and trained with the right knowledge to access online sources needed for the FCM instruction.

CHAPTER FOUR
DATA ANALYSIS AND INTERPRETATION

Description of Data

The purpose of my research was to determine if The Flipped Classroom Model enhances student motivation at home and in the classroom. The FCM is a teaching model that allows students to access school materials outside of the classroom using a technology device. Within this instructional model, I assigned students to complete short assignment tasks involving watching a video pertaining to the skill and/or topic that was taught the next day in class. The goal of the video was to help students come to class prepared with the appropriate knowledge. Then, the instruction time in class was student-centered and used for hands-on learning, one-on-one teacher to student interaction and peer communication. I wanted to conduct this study because I have observed some students in my classroom who lack motivation towards school, learning and homework. Not only have I seen the lack of motivation in the classroom, but I have seen it and have heard about it in the home setting as well. With the pandemic affecting school and learning, I decided to research The Flipped Classroom model and evaluate if it can positively enhance student motivation, no matter where they are learning.

The FCM research was conducted within my fifth-grade classroom of 21 participants. The FCM was implemented into my classroom instruction for 8 weeks. On the first day of the study, the participants took the Motivation Survey I created to collect data on how students believe what level their motivation is currently at towards school and learning, as well as if they'd be willing to try a different learning strategy, The Flipped Classroom Model. As the study was conducted, I completed the Observation Checklist on each individual students' motivation

and preparedness for school. After week four of the study, I completed one-on-one student to teacher interviews. I asked the participants questions pertaining to how they feel their motivation has been during the FCM, as well as how they feel about the FCM. At the end of the study, students completed a survey I created to gather student feedback on the Flipped Classroom Model, as well as their personal motivation through learning and if they feel it has increased.

The Flipped Classroom Model was conducted in each of the subject content areas: Science, Social Studies, Mathematics and Reading/Language Arts. Flipped Classroom assignments consisted of short lesson videos either made by myself or short lesson videos through online sources. Each of the video lessons that students were to watch for the next school day focused on what the students would learn the next day in class for each subject. Along with the short videos, I had students write three facts they learned or answer three questions pertaining to the content in the videos. This showed evidence of the students watching the lesson videos and if they would be prepared for the next day of class. Each new day of class, we would spend 5-10 minutes reviewing about the short video lessons. Then, we'd get into hands-on learning activities that pertain to the topic from the video lesson. These learning activities consisted of the following: stations, small group activities, game-like activities, projects and teacher-student interactive activities.

RESULTS

Data Set One

Prior to the research study on if the Flipped Classroom Model enhances student motivation in school and at home, students took the Motivation Questionnaire. A sample of the Motivation Questionnaire can be found in Appendix B. The Motivation Questionnaire focused

on questions regarding each individual's personal motivation towards school and learning in the classroom, as well as outside the classroom. The questionnaire also has questions based on the Flipped Classroom Model and if students would be willing to try a different learning model. Table 1 below shows student responses to the questions from the Motivation Questionnaire.

Table 1

Student Motivation Questionnaire Responses

Student #	Question #1	Question #2	Question #3	Question #4	Question #5	Question #6	Question #7	Question #8	Question #9	Question #10
1	Sometimes	learn new skills	It doesn't matter	don't like homew	Yes	Yes	Teacher in perso	Video lessons	Yes	No Comment
2	all the time	more motivated	It doesn't matter	doesn't bother m	Yes	No	Teacher in perso	Video Lessons	Yes	No Comment
3	all the time	learn new skills	different way	at school	Yes	Yes	Video Lessons	Video lessons	Yes	"I'm really excited to try a new way of learning."
4	Sometimes	learn new skills	It doesn't matter	at school	Yes	Yes	Teacher in perso	Assignments	Yes	No Comment
5	all the time	learn new skills	different way	don't like homew	Yes	Yes	Video Lessons	Video Lessons	Yes	No Comment
6	Sometimes	learn new skills	It doesn't matter	doesn't bother m	Yes	Yes	Teacher in perso	Video lessons	Yes	"I'd like to interact more."
7	Sometimes	learn new skills	different way	at school	Yes	Yes	Video Lessons	Video Lessons	Yes	No Comment
8	Sometimes	learn new skills	It doesn't matter	at school	Yes	Yes	Video Lessons	Assignments	Yes	No Comment
9	all the time	learn new skills	It doesn't matter	at school	Yes	Yes	Teacher in perso	Assignments	Yes	No Comment
10	Sometimes	learn new skills	It doesn't matter	doesn't bother m	No	Yes	Teacher in Persc	Assignments	Yes	No Comment
11	Sometimes	learn new skills	It doesn't matter	Don't like homew	Yes	Yes	Teacher in perso	Video Lessons	Yes	No Comment
12	Sometimes	more motivated	It doesn't matter	Don't like homew	Yes	Yes	Teacher in perso	Video Lessons	Yes	No Comment
13	Sometimes	more motivated	It doesn't matter	It doesn't bother	Yes	Yes	Video Lessons	Video Lessons	Yes	No Comment
14	Sometimes	learn new skills	It doesn't matter	at school	Yes	Yes	Teacher in perso	Assignments	Yes	"I'm excited to try this method."
15	Sometimes	learn new skills	It doesn't matter	doesn't bother m	Yes	Yes	Video Lessons	Video Lessons	Yes	No Comment
16	all the time	learn new skills	It doesn't matter	at school	Yes	Yes	Video Lessons	Video Lessons	Yes	No Comment
17	Sometimes	learn new skills	different way	at school	Yes	Yes	Video Lessons	Assignments	Yes	No Comment
18	Sometimes	more motivated	It doesn't matter	at school	Yes	Yes	Teacher in perso	Assignments	Yes	No Comment
19	Sometimes	learn new skills	It doesn't matter	Don't like homew	Yes	Yes	Teacher in perso	Video Lessons	Yes	No Comment
20	Sometimes	learn new skills	It doesn't matter	doesn't bother m	Yes	Yes	Teacher in perso	Assignments	Yes	No Comment
21	Sometimes	learn new skills	It doesn't matter	doesn't bother m	Yes	Yes	Video Lessons	Video Lessons	Yes	No Comment

Response Percentages

Question 1 – *How would you rate your overall motivation towards school?*

I feel motivated all the time: 5/21 = 24%

I feel motivated sometimes: 16/21 = 76%

I never feel motivated: 0/21 = 0%

Question 2 - *Do you think you are motivated to learn new skills or not as motivated as you wish you'd be?*

I feel I am motivated to learn new skills: 17/21 = 81%

I feel like I should be more motivated: 4/21 = 19%

Question 3 – *How do you feel about learning new skills in the traditional classroom setting?*

I don't like it: 0/21 = 0%

It doesn't matter to me: 17/21 = 81%

I'd rather learn a different way: 4/21 = 19%

Question 4 - *How do you feel about having homework at home due to not being able to complete everything during class?*

I don't like having homework: 5/21 = 24%

It doesn't bother me: 7/21 = 33%

I'd rather get my work done at school: 9/21 = 43%

Question 5 - *Would you be willing to try a different way of learning that would relieve you of homework at home?*

Yes: 20/21 = 95%

No: 1/21 = 5%

Question 6 - *Would you prefer to use class time for more interactive activities to practice new skills you are learning?*

Yes: 20/21 = 95%

No: 1/21 = 5%

Question 7 - *Would you prefer to learn about skills through video lessons created by the teacher or from the teacher in person?*

Video Lessons: 9/21 = 43%

Teacher in Person: 12/21 = 57%

Question 8 - *Would you rather have 5-10 minute video lessons for homework or assignments including worksheets or online assessments?*

Video Lessons: 12/21 = 57%

Assignments (worksheets and online assessments): 9/21 = 43%

Question 9 - *Would you be willing to try the flipped classroom method for a new way to learn?*

Yes: 21/21 = 100%

No: 0/21 = 0%

Question 10 - *Any comments or suggestions to the teacher you may have about trying the flipped classroom method in class?*

Student Comments:

- "I'm really excited about trying a new way of learning."
- "I'd like to interact more."
- "I'm excited to try this method."

The student responses were what I expected because this age group is usually up for trying new things. For motivation, I expected that students think they are somewhat motivated towards school, but could definitely be more motivated. What surprised me was the responses on Questions 7 and 8. About half the students prefer having me teach in person and about half the

students would like to learn from video lessons. I suspected more students would prefer video lessons due to the amount of technology is used in everyday life, as well as in the classroom. For Question 8, I thought even more students would prefer video lessons as homework rather than worksheet assignments. I feel as if this depends on what type of learners are in the classroom and how they learn best. This assessment was a great way to collect information on how the students rate their own personal motivation towards school. After each question was described to the students, the 5th graders were able to complete this questionnaire.

Data Set Two

The second set of data collected was observations made by me during this action research study. I observed student motivation and attitude during the time the Flipped Classroom Model was implemented into my classroom. Specific areas that were observed of the students was the following: student preparation for class, focus in class, work ethic, participation, knowledge of what is being learned and practiced in class, collaboration and attitude. The Teacher Observation Checklist can be found in Appendix A.

Table 2

Teacher Observation Results

	Observation 1	Observation 2	Observation 3	Observation 4	Observation 5	Observation 6	Observation 7	Observation 8	Observation 9	Observation 10	Observation 11	Observation 12	Observation 13
Student 1	4	4	4	4	1	1	2	4	2	4	4	5	1
Student 2	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 3	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 4	4	4	3	3	5	2	2	4	3	5	4	4	3
Student 5	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 6	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 7	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 8	4	4	4	5	4	1	1	4	1	5	4	5	1
Student 9	3	3	4	3	4	3	2	3	5	4	4	3	2
Student 10	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 11	3	4	4	3	2	3	1	4	3	4	3	4	3
Student 12	3	3	4	4	3	3	1	4	3	3	4	4	1
Student 13	5	4	5	5	1	1	1	5	2	5	5	5	1
Student 14	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 15	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 16	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 17	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 18	5	4	5	5	1	1	1	5	1	5	5	5	2
Student 19	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 20	5	5	5	5	1	1	1	5	1	5	5	5	1
Student 21	4	4	3	4	2	3	1	4	2	5	4	4	1
Total:	1s: 0	1s: 0	1s: 0	1s: 0	1s: 15	1s: 16	1s: 18	1s: 0	1s: 14	1s: 0	1s: 0	1s: 0	1s: 17
	2s: 0	2s: 0	2s: 0	2s: 0	2s: 2	2s: 1	2s: 3	2s: 0	2s: 3	2s: 0	2s: 0	2s: 0	2s: 2
	3s: 3	3s: 2	3s: 2	3s: 3	3s: 1	3s: 4	3s: 0	3s: 1	3s: 3	3s: 1	3s: 1	3s: 1	3s: 2
	4s: 4	4s: 7	4s: 5	4s: 3	4s: 2	4s: 0	4s: 0	4s: 6	4s: 0	4s: 3	4s: 6	4s: 4	4s: 0
	5s: 14	5s: 12	5s: 14	5s: 15	5s: 1	5s: 0	5s: 0	5s: 14	5s: 1	5s: 17	5s: 14	5s: 16	5s: 0

Observation Results in Percentages

Observation 1 – *Comes prepared with prior knowledge to class.*

3 (Only Sometimes): 14%

4 (Sometimes Always): 19%

5 (Always): 67%

Observation 2 – *Pays attention and is focused in class.*

3 (Only Sometimes): 10%

4 (Sometimes Always): 33%

5 (Always): 57%

Observation 3 - *Attempts to do his/her work thoroughly, rather than just doing it to get by.*

3 (Only Sometimes): 9%

4 (Sometimes Always): 24%

5 (Always): 67%

Observation 4 – *Participates actively in discussions.*

3 (Only Sometimes): 14%

4 (Sometimes Always): 14%

5 (Always): 72%

Observation 5 - *Needs to be reminded of what was taught and learned on the video prior to class.*

1 (Never): 72%

2 (A Little): 9%

3 (Only Sometimes): 5%

4 (Sometimes Always): 9%

5 (Always): 5%

Observation 6 - *Doesn't seem to know what is going on during activity/assessment time in class.*

1 (Never): 76%

2 (A Little): 5%

3 (Only Sometimes): 19%

Observation 7 – *Is withdrawn; uncommunicative.*

1 (Never): 86%

2 (A Little): 14%

Observation 8 - *Approaches tasks and activities with sincere effort.*

3 (Only Sometimes): 5%

4 (Sometimes Always): 28%

5 (Always): 67%

Observation 9 - *Doesn't take independent initiative; must receive help to get started on a task and to keep going on the work.*

1 (Never): 67%

2 (A Little): 14%

3 (Only Sometimes): 14%

5 (Always): 5%

Observation 10 – *Ask questions to get more information.*

3 (Only Sometimes): 5%

4 (Sometimes Always): 14%

5 (Always): 81%

Observation 11 – *Tries to finish an activity even if it's challenging.*

3 (Only Sometimes): 5%

4 (Sometimes Always): 28%

5 (Always): 67%

Observation 12 - *Raises hand to answer questions or volunteer to add more information.*

3 (Only Sometimes): 5%

4 (Sometimes Always): 19%

5 (Always): 76%

Observation 13 - *Gets discouraged and "gives up" with frustration if encountered an obstacle.*

1 (Never): 80%

2 (A Little): 10%

3 (Only Sometimes): 10%

The results from observing the 21 students in my class during the Flipped Classroom Model were what I expected. Most of the students came prepared to class had the prior knowledge needed, accepted challenges, worked hard through the FCM, and asked questions when needed, collaborated well and participated in class. There were a few students I knew who would struggle with some of these categories due to learning disabilities and/or students who struggled with motivation in the first place. A thought I did gather during the FCM research study on student motivation is if the FCM would benefit this age group better if it was just focused on a specific subject. What triggered this thought was that maybe some students weren't coming prepared like they should because they were expected to prepare themselves with short video lessons/assessments for each subject. I observed some students feeling overwhelmed and making comments on how they had a lot to do for school the next day. With this age level, I would consider next time just focusing on one or two subject areas to implement the FCM.

Data Set Three

The third set of data that was collected was student feedback during the Student-Teacher FCM Interviews. The interview questions can be found in Appendix C. These interviews were conducted one-on-one with each participant in a separate area away from other participants. The interview questions consisted of questions pertaining to each student's thought on the Flipped Classroom Model, their opinion on how they feel about the FCM, motivation at home and in school, preparation for class and participation in class, as well as any additional comments students had relating to the FCM.

Table 3

Student-Teacher FCM Interview Responses

	Student 1	Student 2	Student 3	Student 4
Q.1 – How are you feeling about the FCM?	"I like it because I get to learn the day before and know what we will be doing in class the next day."	"I like it. I think it is easier for me."	"It is ok and not my favorite. I feel it is more to do at home."	"I like the video lessons, but would rather have the teacher teach the lesson in person."
Q.2 – Are there parts of the FCM that you like? Is there any you don't like?	"I like the Flipped Classroom in math because of the math videos and short questions we do. There is nothing I don't like."	"Video lessons and knowing what we will be learning prior to the next school day."	"I like the different activities and we don't have to go through 30 minute lecture lessons in class."	"I like watching the videos because they helped me."
Q.3 – Do you feel you enjoy learning more with the FCM?	"I am in between because I like both when the teacher teaches in person and through video lessons."	"Yes, a lot more."	"No."	"No."
Q.4 – Do you feel motivated to do your work at home?	"Yes, because then I know we will be doing fun learning activities in class the next day."	"Yes, I feel more motivated."	"Yes."	"Yes."
Q.5 – Do you feel less stressed with school work at home?	"I feel less stressed."	"Yes."	"No."	"Yes."
Q.6 – Do you feel prepared when you come to class on what you're learning that day?	"Yes."	"Yes."	"Not really. I feel I understand it more when the teacher explains it in person."	"Yes."

Q.7 Do you feel motivated to participate in activities in class?	"Yes."	"Yes."	"Yes."	"Yes."
Q.8 On a scale of 1-5, how do you rate your motivation in school now, compared to before the FCM?	"4. I was at a 2 before."	"4."	"5."	"4."
Q.9 – On a scale of 1-5, how do you rate your motivation at home now, compared to before the FCM?	"4"	"3."	"4."	"3."
Q.10 – Are there any challenges you feel you face during the FCM?	"No."	"No."	"Yes, sometimes I don't have a lot of time at home."	"No."
Q.11 – Is there anything you would like to be different with the FCM to help you be even more motivated?	"No."	"I don't think so."	"Nothing really."	"No."

	Student 5	Student 6	Student 7	Student 8
Q.1 – How are you feeling about the FCM?	"I like it because it gives more time being spent with other students in class."	"I liked it."	"I don't really like it."	"I kind of like it."
Q.2 – Are there parts of the FCM that you like? Is there any you don't like?	"Sometimes I don't like it because I feel overwhelmed."	"I kind of don't like the math videos, but I like the science videos more."	"I don't really like watching videos."	"I like the videos for homework better than paper homework. I don't like going home to watch videos."
Q.3 – Do you feel you enjoy learning more with the FCM?	"Yes."	"Yes."	"I enjoy more learning with the teacher teaching in person."	"No."
Q.4 – Do you feel motivated to do your work at home?	"Yes."	"Sometimes."	"Yes."	"No."
Q.5 – Do you feel less stressed with school work at home?	"No, because I'd rather have worksheets for assignments."	"Yes."	"Yes."	"Yes."
Q.6 – Do you feel prepared when you come to class on what you're learning that day?	"Yes."	"Yes."	"Yes."	"Yes."
Q.7 Do you feel motivated to participate in activities in class?	"Yes."	"Yes."	"Yes."	"Yes."
Q.8 On a scale of 1-5, how do you rate your motivation in school now, compared to before the FCM?	"4, but before it was a 3."	"5."	"3."	"4."

Q.9 – On a scale of 1-5, how do you rate your motivation at home now, compared to before the FCM?	"5."	"3."	"3."	"3."
Q.10 – Are there any challenges you feel you face during the FCM?	"No."	"Not really."	"No."	"Certain math topics are hard over video lessons."
Q.11 – Is there anything you would like to be different with the FCM to help you be even more motivated?	"No."	"No."	"No."	"No."

	Student 9	Student 10	Student 11	Student 12
Q.1 – How are you feeling about the FCM?	"Good. It gives me more knowledge before class."	"I like it a lot."	"Good. I like it."	"It's ok."
Q.2 – Are there parts of the FCM that you like? Is there any you don't like?	"I like that we can do fun activities in groups."	"I like that it gives us another option of learning and video lessons for homework."	"I like the activities in class the next day. There isn't anything I don't like."	"I like the video lessons."
Q.3 – Do you feel you enjoy learning more with the FCM?	"Yes. A lot more."	"Not as much as you teaching in front of us."	"Yes."	"Yes."
Q.4 – Do you feel motivated to do your work at home?	"Yes."	"Yes."	"Yes."	"Yes."
Q.5 – Do you feel less stressed with school work at home?	"Yes."	"I don't get stressed."	"Yes."	"Yes."
Q.6 – Do you feel prepared when you come to class on what you're learning that day?	"Yes."	"Yes."	"Yes."	"Yes."
Q.7 Do you feel motivated to participate in activities in class?	"Yes."	"Yes."	"Yes."	"Yes."
Q.8 On a scale of 1-5, how do you rate your motivation in school now, compared to before the FCM?	"5."	"4."	"5."	"4."
Q.9 – On a scale of 1-5, how do you rate your motivation at home now,	"3."	"3."	"4."	"5."

compared to before the FCM?				
Q.10 – Are there any challenges you feel you face during the FCM?	"No."	"No."	"No."	"No."
Q.11 – Is there anything you would like to be different with the FCM to help you be even more motivated?	"More group work with my classmates."	"No."	"No."	"No."

	Student 13	Student 14	Student 15	Student 16
Q.1 – How are you feeling about the FCM?	"I like it because I get to do work at home that is less than I normally have to do."	"It's ok. I don't like watching the videos."	"I like it."	"I think I do better with the Flipped Classroom."
Q.2 – Are there parts of the FCM that you like? Is there any you don't like?	"I like that there is less work at home and more time at home for other things."	"I like that we have more time in class for fun activities."	"I like how we could do the lessons prior to the next day of class and use class time for fun activities. I don't like having to write down things about the videos."	"I like watching the videos and already knowing what we will do the next day. I also like spending class time on activities.
Q.3 – Do you feel you enjoy learning more with the FCM?	"Yes, videos provide information to help me get ahead."	"Yes."	"Yes."	"Yes."
Q.4 – Do you feel motivated to do your work at home?	"Yes."	"Yes."	"Yes."	"Yes."
Q.5 – Do you feel less stressed with school work at home?	"I don't notice an effect on my stress."	"Yes."	"Yes."	"Yes."
Q.6 – Do you feel prepared when you come to class on what you're learning that day?	"Sometimes. I am always curious to know what we will be learning next."	"Yes."	"Yes."	"Yes."
Q.7 Do you feel motivated to participate in activities in class?	"Yes."	"Yes."	"Yes."	"Yes."
Q.8 On a scale of 1-5, how do you rate your motivation in school now,	"5."	"4."	"3."	"4."

compared to before the FCM?				
Q.9 – On a scale of 1-5, how do you rate your motivation at home now, compared to before the FCM?	"5."	"5."	"3."	"5."
Q.10 – Are there any challenges you feel you face during the FCM?	"No."	"No."	"Homework was sometimes a challenge to get done."	"Yes, some videos I had to watch over a couple times, but it helped me review things I missed and understand things better."
Q.11 – Is there anything you would like to be different with the FCM to help you be even more motivated?	"Even more fun activities."	"Not really."	"Try more activities that are game-like."	"No."

	Student 17	Student 18	Student 19	Student 20
Q.1 – How are you feeling about the FCM?	"I feel in the middle about the Flipped Classroom."	"It is ok."	"I like it, but sometimes I'm overwhelmed. Homework time was shorter, but there are more video lessons to watch because this is in each subject."	"I enjoy the Flipped Classroom."
Q.2 – Are there parts of the FCM that you like? Is there any you don't like?	"I don't really like any of the worksheets for homework, but the videos that go along with the worksheets help me."	"I like how it doesn't take a lot of my time for homework. I don't like how it feels like extra work."	"I like that we have a chance to get work done at the end of the school day in study hall."	"I like that the video lessons are short and help me know what we are going to work on the next day."
Q.3 – Do you feel you enjoy learning more with the FCM?	"Not really."	"Yes, it was fun!"	"No."	"Yes."
Q.4 – Do you feel motivated to do your work at home?	"No."	"Not really."	"No."	"Yes."
Q.5 – Do you feel less stressed with school work at home?	"School work is always stressful at home for me because I like to use my time at home for other things."	"Yes. It is easier."	"No."	"Yes."

Q.6 – Do you feel prepared when you come to class on what you're learning that day?	"Yes."	"Yes."	"Yes."	"Yes."
Q.7 Do you feel motivated to participate in activities in class?	"Yes."	"Yes."	"Yes."	"Yes."
Q.8 On a scale of 1-5, how do you rate your motivation in school now, compared to before the FCM?	"4."	"5."	"3."	"4."
Q.9 – On a scale of 1-5, how do you rate your motivation at home now, compared to before the FCM?	"3."	"5."	"3."	"4."
Q.10 – Are there any challenges you feel you face during the FCM?	"Getting work done at home with the time I have."	"No."	"Finding time at home to watch the video lessons."	"No."
Q.11 – Is there anything you would like to be different with the FCM to help you be even more motivated?	"No."	"More team collaboration and even more activities in class."	"Less video lessons or maybe just do the Flipped Classroom in Math class."	"Maybe doing the Flipped Classroom in just one class."

	Student 21
Q.1 – How are you feeling about the FCM?	"I like it."
Q.2 – Are there parts of the FCM that you like? Is there any you don't like?	"I like how short the video lessons are. I also like how we use class time for activities or working in groups."
Q.3 – Do you feel you enjoy learning more with the FCM?	"Yes."
Q.4 – Do you feel motivated to do your work at home?	"Sometimes."
Q.5 – Do you feel less stressed with school work at home?	"Yes."

Q.6 – Do you feel prepared when you come to class on what you're learning that day?	"Yes."
Q.7 Do you feel motivated to participate in activities in class?	"Yes."
Q.8 On a scale of 1-5, how do you rate your motivation in school now, compared to before the FCM?	"4."
Q.9 – On a scale of 1-5, how do you rate your motivation at home now, compared to before the FCM?	"3."
Q.10 – Are there any challenges you feel you face during the FCM?	"No."
Q.11 – Is there anything you would like to be different with the FCM to help you be even more motivated?	"No."

During the student interviews and as I gathered their responses, I have declared that there was a lot of similar feedback on the Flipped Classroom Model and student motivation. The similar feedback consisted of students either not liking learning in the FCM or feeling like their motivation wasn't effected, as well as students enjoying learning in the FCM and recognizing how their motivation towards school has increased. What I gathered from student feedback is that students feel at this age level the Flipped Classroom Model was a little overwhelming as it was implemented into each subject. This could be a factor affecting student motivation during the FCM. Quite a few students informed me that they think it would be a good idea to use the Flipped Classroom Model in just one or two subjects, such as math and science. Another piece of

feedback from the interviews that interested me was the ratings of student motivation in the classroom during the FCM, as well as home during the FCM. A handful of participants stated they felt as if their motivation didn't change at home because watching video lessons to prepare for the next day of class was still homework and they don't enjoy homework. However, a lot of participants stated that their motivation in the classroom has increased because they know that if they watch the video lessons, class time is used for activities and collaborating with their peers. The student interviews helped me brainstorm new ideas of how to use the FCM in my classroom if I plan to continue teaching in this model.

Data Set Four

The fourth set of data that was collected based on the participants' feedback on the Flipped Classroom Model and their motivation towards school and at home was the Student Survey. The Student Survey can be found in Appendix D. The survey consists of statements that the participants selected if they strongly disagree, disagree, neither disagree or agree, agree and strongly agree with. The survey provides me with information regarding the outcome of the implementation of the Flipped Classroom Model as well as feedback on student motivation.

Table 4

Student Survey Results

	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.7	Q.8	Q.9	Q.10	Q.11	Q.12	Q.13	Q.14	Q.15	Q.16
Student 1	D	A	D	SA	A	N	N	SA	A	D	A	SD	N	SA	D	D
Student 2	N	A	D	SA	SA	A	SD	SA	SA	A	N	A	N	SA	A	D
Student 3	D	D	A	A	SA	D	N	D	SA	D	SA	D	D	A	N	A
Student 4	N	A	D	D	A	N	D	A	N	A	SA	A	D	A	A	D
Student 5	A	N	N	A	SA	A	N	A	A	N	N	A	D	SA	A	A
Student 6	D	N	N	A	A	D	N	A	A	SD	SA	D	A	A	D	SA
Student 7	D	SD	SA	A	SA	SD	N	SD	D	D	A	D	N	N	SD	SA
Student 8	SD	N	N	D	A	D	N	D	D	SD	SA	D	D	N	SD	SA
Student 9	N	SA	SD	N	SA	SA	SD	SA	SA	SA	N	SA	SA	SA	SA	N
Student 10	N	A	D	A	SA	N	D	A	A	SA	N	A	A	A	SA	SD
Student 11	SA	N	N	A	SA	SA	SD	SA	SA	SA	SD	SA	A	SA	A	D
Student 12	A	N	N	A	A	SA	SD	A	A	SA	N	A	N	A	A	SD
Student 13	N	N	N	N	SA	N	N	A	SA	A	D	N	SA	SD	D	D
Student 14	D	D	A	D	SA	D	D	A	SD	A	D	N	D	D	A	A
Student 15	N	D	A	SD	SA	N	A	A	N	N	N	D	D	N	D	N
Student 16	A	A	SD	SA	SA	SA	SD	SA	A	SA	D	SA	A	SA	SA	SD
Student 17	D	SD	SA	D	A	D	SA	N	D	D	SA	D	SD	N	D	SA
Student 18	SA	A	D	A	SA	SA	SD	A	A	N	N	SA	A	A	N	D
Student 19	N	SD	SA	A	SA	SD	A	SD	D	SD	A	SD	A	N	SD	SA
Student 20	A	A	D	SA	SA	N	A	SA	A	N	N	A	N	A	A	N
Student 21	A	N	N	SA	A	A	D	N	SA	N	A	N	SA	SA	N	N
Total:	SD: 1 = 5%	SD: 3 = 14%	SD: 2 = 10%	SD: 1 = 5%	SD: 0 = 0%	SD: 2 = 10%	SD: 6 = 29%	SD: 2 = 10%	SD: 1 = 5%	SD: 3 = 14%	SD: 1 = 5%	SD: 2 = 10%	1 = 5%	SD: 1 = 5%	SD: 3 = 14%	SD: 3 = 14%
	D: 6 = 29%	D: 3 = 14%	D: 6 = 29%	D: 4 = 19%	D: 0 = 0%	D: 5 = 24%	D: 4 = 19%	D: 2 = 10%	D: 4 = 19%	D: 4 = 19%	D: 3 = 14%	D: 6 = 29%	D: 6 = 29%	D: 1 = 5%	D: 5 = 24%	D: 6 = 29%
	N: 7 = 33%	N: 7 = 33%	N: 7 = 33%	N: 2 = 10%	N: 0 = 0%	N: 6 = 29%	N: 7 = 33%	N: 2 = 10%	N: 2 = 10%	N: 5 = 24%	N: 8 = 38%	N: 3 = 14%	N: 5 = 24%	N: 5 = 24%	N: 3 = 14%	N: 4 = 19%
	A: 5 = 24%	A: 7 = 33%	A: 3 = 14%	A: 9 = 43%	A: 7 = 33%	A: 3 = 14%	A: 3 = 14%	A: 9 = 43%	A: 8 = 38%	A: 4 = 19%	A: 4 = 19%	A: 6 = 29%	A: 6 = 29%	A: 7 = 33%	A: 7 = 33%	A: 3 = 14%
	SA: 2 = 10%	SA: 1 = 5%	SA: 2 = 10%	SA: 5 = 24%	SA: 14 = 67%	SA: 5 = 24%	SA: 1 = 5%	SA: 6 =29%	SA: 6 = 29%	5 = 24%	SA: 5 = 24%	SA: 4 = 19%	SA: 3 = 14%	SA: 7 = 33%	SA: 3 = 14%	SA: 5 = 24%

After reviewing the Student Survey results, I concluded that the participants' responses were similar to their responses during the interviews. There were similar amount of students who agreed and disagreed on if the FCM is engaging. One result that didn't surprise me was 14/21 of the participants liked that the FCM gave them the opportunity to collaborate with their peers in class. About half the participants agreed that they felt more motivated learning through the FCM and about the rest of the half of students did not feel more motivated as they learned through the FCM. After receiving verbal feedback after the survey, majority of the students felt as if they'd like to do the FCM again, but only if it was implemented into one or two subjects. At the 5th grade level, the participants stated it was overwhelming to have the FCM in all subjects: math, reading, science and social studies. I do agree with the participants on this suggestion.

CHAPTER FIVE

ACTION PLAN AND PLAN FOR SHARING

From these research findings, I have concluded that for my students, or any students, to become successful during the flipped classroom strategy, students need to be trained how to successfully use technology and develop the important skills for communication and self-directed learning. I believe that if my students are confident in their use of technology, motivation will increase to complete the at home tasks that are part of the flipped classroom curriculum and come prepared to class the next day with the knowledge that is needed and expected. I also have come to conclusion that students need to have e-learning readiness for the FCM to be successful inside the classroom as well. It all starts with students being able to have confidence in operation the technology at home to complete the video lessons. Then, students will be able to come to class prepared with any questions they have, spend time on hands-on learning activities, peer communication and teacher-student interaction. An obstacle that students and teachers may face is the lack of technology access such as in devices and Internet at home. Schools can help overcome these challenges by providing technology devices for students to use at home as well as hot spots for families to have access to internet. This will allow for at home learning to be successful.

From this study, the participants acquired e-learning readiness and were prepared and trained to learn through the Flipped Classroom Model. The assessments that were implemented into this study include the motivation questionnaire, student interviews, teacher observations and a survey. The assessments gave me a clear understanding of the effect the Flipped Classroom Model had on student motivation at the middle school level. I also collected data on what the participants thought of the Flipped Classroom Model. The feedback from the students was very

helpful as I plan to teach through the Flipped Classroom Model again someday. The participants stated that they think they would like the FCM more and would be even more motivated if it was just implemented into one or two subjects, not all subjects. My students did enjoy the FCM the most in the math and science classes. I plan to continue teaching through the Flipped Classroom Model because it allowed for more class time for hands-on activities, group work, and one-on-one work time spent with students and engaging learning activities. The students also stated they this was the biggest reason they enjoyed learning through the FCM. They were motivated to watch the video lessons because it helped them know what they would be learning in class the next day, as well as allow for more activities in class. When I continue teaching in the Flipped Classroom Model, I plan to only incorporate this learning model into my math class to start. I feel like the FCM was really successful for preparing students on a math concept and skill to allow for more time to spend on that skill in class.

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Appendix A

Teacher Observation Checklist

Student: _____ Date: _____

Observation Focus	Never (1)	(2)	Sometimes (3)	(4)	Always (5)
O.1 Comes prepared with prior knowledge to class					
O.2 Pays attention and is focused in class					
O.3 Attempts to do his/her work thoroughly, rather than just doing it to get by.					
O.4 Participates actively in discussions					
O.5 Needs to be reminded of what was taught and learned on the video prior to class					
O.6 Doesn't seem to know what is going on during activity/assessment time in class					
O.7 Is withdrawn; uncommunicative					
O.8 Approaches tasks and activities with sincere effort					
O.9 Doesn't take independent initiative; must receive help to get started on a task					

and to keep going on the work.					
O.10 Asks questions to get more information					
O.11 Tries to finish an activity even if it's challenging					
O.12 Raises hand to answer questions or volunteer to add more information					
O.13 Gets discouraged and "gives up" with frustration if encountered an obstacle					

Appendix B

Motivation Questionnaire

1. How would you rate your overall motivation towards school?

   I feel motivated all the time. I feel motivated sometimes. I never feel motivated.

2. Do you think you are motivated to learn new skills or not as motivated as you wish you'd be?

   I feel I am motivated to learn new skills. I feel like I should be more motivated.

3. How do you feel about learning new skills in the traditional classroom setting?

   I don't like it. It doesn't matter to me. I'd rather learn a different way.

4. How do you feel about having homework at home due to not being able to complete everything during class?

I don't like having homework. It doesn't bother me. I'd rather get my work done at school.

5. Would you be willing to try a different way of learning that would relieve you of homework at home?

   Yes No

6. Would you prefer to use class time for more interactive activities to practice new skills you are learning?

   Yes No

7. Would you prefer to learn about skills through video lessons created by the teacher or from the teacher in person?

   Video lessons Teacher in person

8. Would you rather have 5-10 minute video lessons for homework or assignments including worksheets or online assessments?

   Video lessons Assignments (worksheets and online assessments)

9. Would you be willing to try the flipped classroom method for a new way to learn?

Yes No

10. Any comments or suggestions to the teacher you may have about trying the flipped classroom method in class (*flipped classroom would be watching 5-10 minute video lessons prior to the next day of each subject's class. You would then receive more time in class to interact with your classmates and teacher through activities and practice):

_____

_____

_____

Appendix C

Student-Teacher FCM Interviews

Student: _____ Date: _____

1. How are you feeling about the Flipped Classroom Model?
2. Are there parts of the FCM that you like? Is there anything you don't like about the FCM?
3. Do you feel you enjoy learning more with the FCM?
4. Do you feel motivated to do your work at home?
5. Do you feel less stress with school work at home?
6. Do you feel prepared when you come to class on what you're learning that day?
7. Do you feel motivated to participate in activities in class?
8. On a scale of 1-5, how do you rate your motivation in school now, compared to before the FCM?
9. On a scale of 1-5, how do you rate your motivation at home now, compared to before the FCM?
10. Are there any challenges you feel you face during the FCM?
11. Is there anything you would like to be different with the FCM to help you be even more motivated?

Appendix D

Flipped Classroom Survey

Student: _____ Date: _____

1. The flipped classroom is more engaging than the traditional classroom.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

2. I would recommend learning through the flipped classroom to a friend.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

3. I would NOT recommend learning through the flipped classroom to a friend.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

4. The flipped classroom gives me a greater chance to communicate with my classmates.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

5. I regularly watch the video assignment.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

6. I am more motivated to learn in the flipped classroom.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

7. The flipped classroom has not helped me improve my learning skills.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

8. I am motivated to watch the videos at home because I know we will do more activities in the classroom.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

9. I like the flipped classroom method because it allows me to work with my classmates and learn from one another in the classroom.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

10. I like watching the learning videos.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

11. I would rather watch my teacher teach a lesson than watch a lesson video.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

12. I feel as if the flipped classroom has helped me enjoy learning more.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

13. I am spending less time working on homework at home.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

14. The flipped classroom gives me more time to do activities in the classroom.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

15. The flipped classroom has helped me enjoy school and want to learn more.

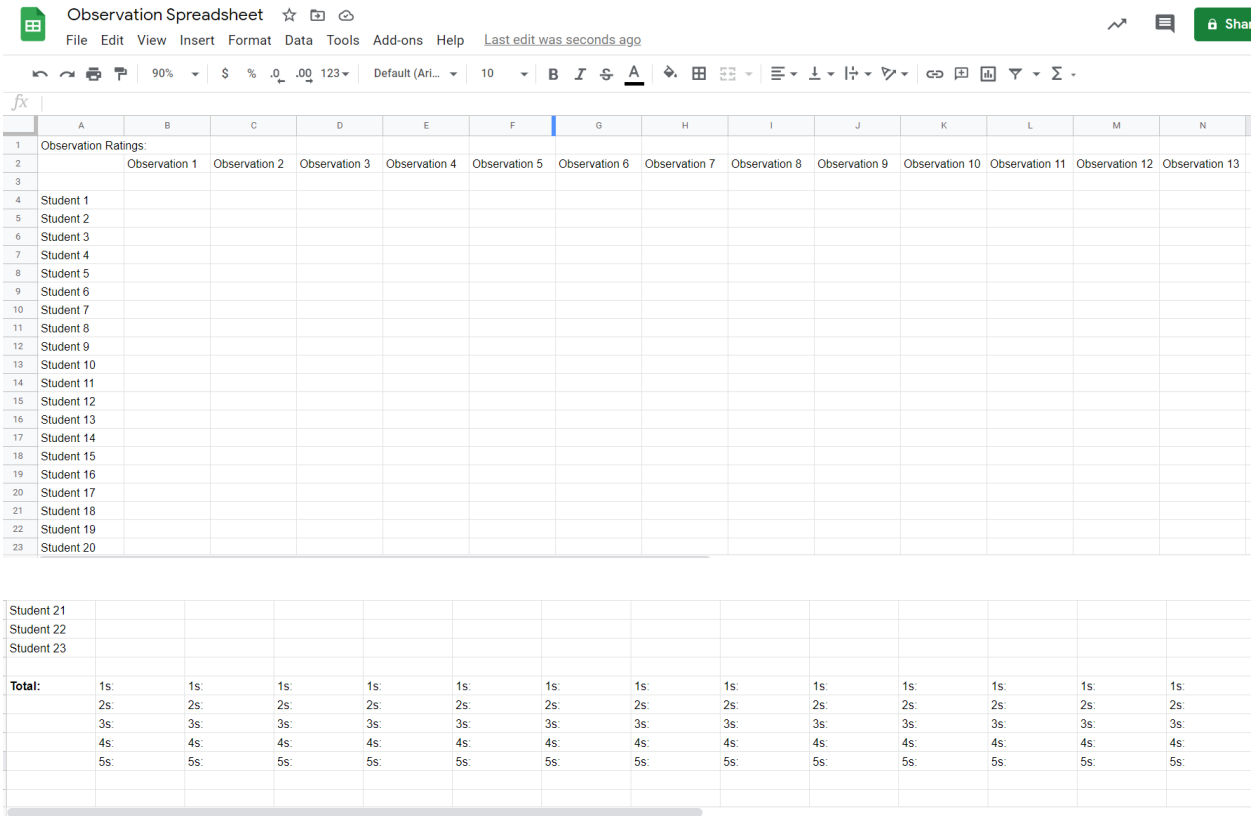
Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

16. I personally do not like the flipped classroom method.

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree

Appendix E

Observation Data Spreadsheet



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Observation Ratings:													
2		Observation 1	Observation 2	Observation 3	Observation 4	Observation 5	Observation 6	Observation 7	Observation 8	Observation 9	Observation 10	Observation 11	Observation 12	Observation 13
3														
4	Student 1													
5	Student 2													
6	Student 3													
7	Student 4													
8	Student 5													
9	Student 6													
10	Student 7													
11	Student 8													
12	Student 9													
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15	Student 12													
16	Student 13													
17	Student 14													
18	Student 15													
19	Student 16													
20	Student 17													
21	Student 18													
22	Student 19													
23	Student 20													

Student 21														
Student 22														
Student 23														
Total:	1s:	1s:	1s:	1s:	1s:	1s:	1s:	1s:	1s:	1s:	1s:	1s:	1s:	1s:
	2s:	2s:	2s:	2s:	2s:	2s:	2s:	2s:	2s:	2s:	2s:	2s:	2s:	2s:
	3s:	3s:	3s:	3s:	3s:	3s:	3s:	3s:	3s:	3s:	3s:	3s:	3s:	3s:
	4s:	4s:	4s:	4s:	4s:	4s:	4s:	4s:	4s:	4s:	4s:	4s:	4s:	4s:
	5s:	5s:	5s:	5s:	5s:	5s:	5s:	5s:	5s:	5s:	5s:	5s:	5s:	5s:

Appendix F

Motivation Questionnaire Data Spreadsheet

	A	B	C	D	E	F	G	H	I	J	K	L
1	Motivation Questionnaire Responses											
2		MQ. 1	MQ.2	MQ.3	MQ.4	MQ.5	MQ.6	MQ.7	MQ.8	MQ.9	MQ.10	MQ.11
3	Student 1											
4	Student 2											
5	Student 3											
6	Student 4											
7	Student 5											
8	Student 6											
9	Student 7											
10	Student 8											
11	Student 9											
12	Student 10											
13	Student 11											
14	Student 12											
15	Student 13											
16	Student 14											
17	Student 15											
18	Student 16											
19	Student 17											
20	Student 18											
21	Student 19											
22	Student 20											
23	Student 21											
24	Student 22											
25	Student 23											
26												

Appendix G

Interview Responses Data Table

	Student	Student	Student	Student
Q.1 – How are you feeling about the FCM?				
Q.2 – Are there parts of the FCM that you like? Is there any you don't like?				
Q.3 – Do you feel you enjoy learning more with the FCM?				
Q.4 – Do you feel motivated to do your work at home?				
Q.5 – Do you feel less stressed with school work at home?				
Q.6 – Do you feel prepared when you come to class on what you're learning that day?				
Q.7 Do you feel motivated to participate in activities in class?				
Q.8 On a scale of 1-5, how do you rate your motivation in school now, compared to before the FCM?				
Q.9 – On a scale of 1-5, how do you rate your motivation at home now, compared to before the FCM?				
Q.10 – Are there any challenges you feel you face during the FCM?				
Q.11 – Is there anything you would like to be different with the FCM to help you be even more motivated?				

Appendix H

Student Survey Data Spreadsheet

1	Student Survey Data													
2		Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.7	Q.8	Q.9	Q.10	Q.11	Q.12	Q.13	Q.14
3															
4	Student 1														
5	Student 2														
6	Student 3														
7	Student 4														
8	Student 5														
9	Student 6														
10	Student 7														
11	Student 8														
12	Student 9														
13	Student 10														
14	Student 11														
15	Student 12														
16	Student 13														
17	Student 14														
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19	Student 16														
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21	Student 18														
22	Student 19														
23	Student 20														

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Student 15														
Student 16														
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Student 18														
Student 19														
Student 20														
Student 21														
Student 22														
Student 23														
Total:	SD:	SD:	SD:	SD:	SD:	SD:	SD:	SD:	SD:	SD:	SD:	SD:	SD:	SD:
	D:	D:	D:	D:	D:	D:	D:	D:	D:	D:	D:	D:	D:	D:
	N:	N:	N:	N:	N:	N:	N:	N:	N:	N:	N:	N:	N:	N:
	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:	A:
	SA:	SA:	SA:	SA:	SA:	SA:	SA:	SA:	SA:	SA:	SA:	SA:	SA:	SA:

Appendix I

Prairie Wind Middle School
480 Coney Street West
Perham, Minnesota 56573
218.346.1700

www.perham.k12.mn.us

Scott Bjerke, Principal
James Mulcahy, Interventionist
Katie Grosz, Counselor
McKenna Meyer, Social Worker

January 25, 2021

To Whom It May Concern,

This letter is to grant Katarina Kuhlmann permission to conduct an action research study at Prairie Wind Middle School during the 2020-21 academic year. I understand that this study poses no risk to those persons involved or to the Perham-Dent School District. I also understand that all information received will be kept confidential and will only be used for purposes of this study.

Sincerely,

Scott Bjerke
Principal, Prairie Wind Middle School

Appendix J

Institutional Review Board

MINNESOTA STATE UNIVERSITY MOORHEAD

DATE: February 3, 2021

TO: Aaron Peterson, Principal Investigator
Katarina Kuhlmann, Co-Investigator

FROM: Lisa Karch, Chair
Minnesota State University Moorhead IRB

Lisa D. Karch

ACTION: **DETERMINATION OF EXEMPT STATUS**

PROJECT TITLE: [1711854-1] Flipped Classroom Effects on Upper Elementary and Middle School Student Motivation Inside and Outside the Classroom

SUBMISSION TYPE: New Project

DECISION DATE: January 28, 2021

Thank you for your submission of the requested modifications for this project. The Minnesota State University Moorhead IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations under 45 CFR 46.104.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact the Minnesota State University Moorhead IRB. Please include your project title and reference number in all correspondence with this committee.

This letter has been issued in accordance with all applicable regulations, and a copy is retained within Minnesota State University Moorhead's records.

Appendix K

February 11, 2021

480 Coney St. West

Perham, MN 56573

Dear Parent or Guardian,

I am in the process of completing my Master's Degree in Curriculum and Instruction through Minnesota State University Moorhead. I am writing and completing an action research project for one of my education classes. My action research study focuses on teaching instruction for each subject in a flipped classroom model. This model involves students preparing for the next day of what they are going to be learning in class. To do that, students will be assigned either short lesson videos or assignment tasks through google classroom to watch at home prior to the next day of school. The short lesson videos and tasks will be based on the specific skill and content they will be learning that next school day. The flipped classroom model allows for students to have more time in the classroom to work on activities, hands-on learning, and more practice time on the skill that is studied at that time. I wish to observe if student motivation towards school and learning in each subject area enhances through the flipped classroom model. Your child was selected because he/she is in my regular education classroom. If you decide to let your child participate, please understand that your child will be asked to complete the videos and activities that are given throughout the flipped classroom model, just like usual tasks.

Principal Scott Bjerke has given me permission to conduct this study and since this information is going to be used for my action research study through Minnesota State University Moorhead, I need to have parental consent to use this information in my final paper that is required to complete my Master's degree. Your child's name will remain confidential and anonymous within the study. By signing this letter of informed consent, you are giving me permission to use the information I collect from this study. Please also note that your child does not have to be a part of the data within the study. If this is the case, I do ask that they still do the activities and assignments just like in our normal classroom that they would be expected to do.

The participation of your child in this study is voluntary. It is up to you as their legal guardian/parent to decide whether or not to take part in this study. If you decide for your child to take part in this study, you are asked to sign this consent form. After you sign the consent form, you are still free to withdraw your child from the study at any time and without giving a reason. Withdrawing from the study will not affect the relationship your child has with me, as their teacher. If you withdraw your student from the study before data collection is completed, your child's data will be returned to you or destroyed. A new informed consent form will need to be completed and signed.

Please feel free to contact me if you have any questions. I can be reached at my school email address: kkuhlmann@perham.k12.mn.us. Any questions about your child's rights may be directed to Dr. Aaron Peterson, Professor of Leadership and Learning at Minnesota State University Moorhead by aaron.peterson@mnstate.edu. Any additional questions about your rights may also be directed to Lisa Karch, Ph. D., Chair of the MSUM Institutional Review Board, at 218-477-2699 or by lisa.karch@mnstate.edu. You will be given a copy of this form to keep. By signing this form, you have indicated that you have read the information stated above and give permission for your child to be a part of this study. I appreciate your consideration in letting your child be a part of helping me further my knowledge as an educator through my Master's program.

_____ _____

Signature of Parent/Guardian Date

_____ _____

Signature of Investigator Date