# The Effects of Book Choice in Small-Group Reading 

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The Effects of Book Choice in Small-Group Reading

# A Quantitative Research Methods Proposal <br> A Project Presented to <br> The Graduate Faculty of <br> Minnesota State University Moorhead 

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#### Abstract

This study investigated the effects choice has on student comprehension, motivation and overall satisfaction in a small-group setting within the reading classroom. The focus for this study was to determine if allowing students the opportunity to choose the book that is read in small-group is more beneficial than having the book chosen by the teacher. Data were collected through student comprehension scores, student surveys, and teacher observation sheets. Research took place within two $4^{\text {th }}$ grade classrooms in a small school in central Minnesota. The results of this study indicated that allowing choice has positive effects on student learning.


## DEDICATION

For Kendell,
Thank you for the encouragement, support, and for making sacrifices with me along the way to make this possible.

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## CHAPTER 1

## INTRODUCTION

## Introduction

Educators are moving through one of the most challenging years they have ever seen. Students and teachers have been forced to teach and learn in ways they have never done before. Though education is always changing, the goals generally stay the same. Educators want students to be successful. One of the challenges for many teachers through these changing modes of learning is keeping students motivated and excited to learn while still fostering student success, specifically in reading comprehension. Through conversations with teachers, it has been discovered that motivation seems to be at an all-time low. After having "school at home" for the last weeks of the 2019-2020 school year, many students are less motivated to complete rigorous work in the classroom. Of particular importance is maintaining students' motivation to read. As we know, reading is crucial to student learning and development. After being "locked-down" last spring and unable to visit school or local libraries to discover new and exciting books, students seem to have lost their momentum to engage in reading for enjoyment. Now, teachers are faced with the challenge of reigniting the flame for reading and helping students find what motivates them. Though there are many different avenues teachers could take to motivate students to read, the researcher chose to investigate how allowing students the opportunity to choose group book study material can affect students' motivation, overall satisfaction, and success.

## Brief Literature Review

The literature on the topic of choice shows that allowing students opportunities to make decisions in the classroom can have many positive effects such as increased comprehension scores, more consistent homework completion and increased time on task. There are many areas
within the school day where students can be given opportunities to make their own choices. Studies have investigated how giving student choices in things like homework, independent reading books, and other classroom materials can affect student performance outcomes and motivation.

Allowing students the opportunity to make choices can give them a sense of autonomy over their learning. According to the self-determination theory, having a sense of autonomy is important to the individual (Woolfolk, 2019). When teachers support this in their classrooms, by giving choices for example, it can lead to higher levels of engagement as well as increased learning and deeper understanding (Deci \& Ryan, 1996). When given the opportunity to choose which homework assignment to complete in a math classroom, students showed a greater level of motivation and performance (Patall et al., 2010). In another study, students were given both across-task and within-task choices and it was found that both types of choices resulted in more academic engaged time (Lane et al., 2015). Other similar studies have found that giving students various choices resulted in higher levels of achievement, engagement, and the use of more advanced literacy strategies (Johnson \& Blaire, 2003; McClung et al., 2019; Reynolds \& Symons, 2001).

After reviewing results of these previous studies, it is clear that choice can have positive impacts on student classroom experiences. Within small reading groups, the researcher wanted to see if allowing students, the ability to choose their group study books would have similar results. She expected students to show more excitement, motivation and understanding while reading the stories that they have chosen.

## Statement of the Problem

It can be very difficult for students to be successful when they do not find enjoyment or motivation for what they are doing. In the classroom, it is crucial for teachers to allow students opportunities to explore and discover their own interests to increase their intrinsic motivation. When students are engaged, they are more likely to learn and reach their goals. It is easy for teachers to act on the notion that they know what is best for students and continue to make most of the decisions in the classroom. However, if educators continue to limit students' autonomy, they will leave school unaware of their own interests, what motivates them and what it means to explore and discover. Giving students choices, especially in reading, can allow them to find their own level of understanding, identify their own interests, and motivate them to continue growing in life-long learning.

## Purpose of the Study

As an elementary teacher, I have never seen so many unmotivated students. Along with many challenges the Covid-19 pandemic has brought forth in education, is the issue of keeping students engaged and motivated. In my classroom I have noticed students become more and more disengaged from reading material provided by our reading programs or chosen by the teacher. It is my goal that students come excited and willing to learn into my classroom. I want learning to be fun, engaging, and motivational. There are many ways to improve the overall energy within a classroom. I allow my students to choose the books they read independently, and it is clear by observation that they enjoy this. However, in almost every other area throughout the reading block the texts, books and stories are chosen for them. They often seem uninterested in the texts during small groups where lots of practice and important instruction takes place. I
wanted to see if relinquishing some of the control and giving students choice over the stories in small groups could increase students' attention, motivation, and achievement.

During small group study students are typically given a leveled text provided by our reading series which expands on the concepts and skills we are learning during whole group instruction. The stories may be fiction or nonfiction, but do not allow much opportunity for students to feel a sense of autonomy in their learning within small group. In this study, two small groups could choose what book they studied, while two other groups were not given a choice. I hoped to discover that giving students choices of books to read would increase their interest in the story, motivate them to have deeper conversations, and ultimately improve their comprehension.

## Research Question(s)

1. How does book study choice impact comprehension during small group instruction with 4th grade reading students?
2. How does book study choice impact student motivation and participation during small group instruction with 4th grade reading students?
3. How does book study choice impact overall student satisfaction during small group instruction with 4th grade reading students?

Definition of Variables. The following are the variables of study:
Independent Variable A: The independent variable is the manipulation of book choice.

One group in each of two 4th grade reading classrooms was given choice in what book to read in small group, and one group in each classroom was not given choice.

Dependent Variable B: The first dependent variable is student comprehension. Student comprehension was measured using the AR scores from the Renaissance Learning platform. An
example of this is shown in Appendix A. Scores were averaged by group and compared between those who were given choices versus those who were not given choice of books.

Dependent Variable C: The second dependent variable is student motivation and participation within the small group. This was measured using teacher observations recorded on the form presented in Appendix B. The average and range scores from the observation sheets were used to compare choice versus non-choice outcomes.

Dependent Variable D: The last dependent variable is student overall satisfaction within small group. Students completed the survey in Appendix C before and after the completion of the study. Again, average and range scores were used to compare choice versus non-choice outcomes from the satisfaction survey.

## Significance of the Study

Though past studies have investigated the effects of choice in homework, independent reading books, writing topics and more, there is little known about how giving students choice in a group book study setting can affect their achievement and motivation. This action research study is significant because it explores another avenue of choice that teachers could give students to promote autonomy in their learning. Because the researcher is always seeking new ways to keep students engaged and motivated, this study is also significant for her personally and for her students. The researcher believes that students need to be fully immersed in, engaged and excited about the content for them to successfully learn. Due to the observation that students have lost some excitement this year, this action research is especially important to reignite the flame for education within the researcher's classroom specifically.

## Research Ethics

Permission and IRB Approval. In order to conduct this study, the researcher will 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 will be seek from the school district where the research project will take place (See Appendix D and E).

Informed Consent. Protection of human subjects participating in research will be assured. Participant minors will be informed of the purpose of the study via the Method of Assent (See Appendix F) that the researcher will read to participants before the beginning of the study. Participants will be aware that this study is conducted as part of the researcher's master's degree Program and that it will benefit her 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 will be 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 will be outlined both, verbally and in writing.

Limitations. There are a few limitations to this study. First, the researcher did not have access to a large number of students teaching in a small district. This study was small-scale and only included 4 small groups of fourth grade students. Having a larger group of students could give more accurate results and represent a wider range of personalities, abilities, and interests when it comes to making and benefitting from choices. Secondly, student attendance could have been a potential limiting factor. If students within the small group were absent, this may have affected their comprehension AR test results at the end of the study and skew the conclusions
made about how choices affect student achievement. The absent student needed to catch up on readings that were missed during another part of the day. Assigning as homework may have hindered the results of motivation and satisfaction. Lastly, the school has a limited library book sets that can be used for groups. Though the students will only be presented with 3 options, the researcher was limited in the choices she could make in what 3 books to present to the small groups. With a larger selection, the researcher could potentially find books that better fit students' needs and interests.

## Conclusions

Teachers are always faced with the challenge of continuing to motivate and educate a changing population of students with diverse needs and backgrounds. This year has been possibly the most challenging yet. This study explores how allowing students to choose books to study in a group setting can affect their comprehension, motivation and overall satisfaction with small group reading lessons. The information gathered from the study will help the researcher to learn more about her students' educational preferences and determine whether it is worth it to give up teacher-control in exchange for student autonomy. The following chapter will further investigate recent literature that also discusses student choices within the classroom.

## CHAPTER 2

## LITERATURE REVIEW

## Introduction

Teachers are always trying to find ways to keep students interested and motivated in their learning. Unfortunately, some of the reading programs teachers are asked or required to teach are already very scripted with a narrow focus and do not allow much room for teacher or student choice in the instruction or learning tasks. These programs leave teachers wondering when they can incorporate books and stories chosen by students or if allowing choice is worth it at all. Research has also investigated how choice can affect student learning. Many studies have shown that there can be positive effects of allowing students opportunities to make their own academic choices. When teachers are willing to give up some of the control, the classroom can see many benefits. There are many opportunities to provide students with choice throughout a school day. The body of research on the topic of choice covers many areas where choice can be implemented in the classroom and overall shows that choice can improve many aspects of students' educational experiences.

## Body of the Review

Motivation and Choice. The ability to make choices fosters a sense of autonomy. In the classroom, when students are allowed to make choices, they may feel more in control of their learning. Research has shown that there are strong links between having a sense of autonomy and motivation. According to Patall, Cooper and Wynn (2010) a person may experience higher intrinsic motivation when they also have increased feelings of autonomy and feeling competent in their environment. They go on to say that "choice is a critical element in creating an autonomy supportive environment" (Patall et al., 2010, p. 913). Having a sense of autonomy is one of the
three main psychological needs within the self-determination theory. The self-determination theory states that everyone needs to feel competent, have a sense of autonomy, and to feel connected to other individuals to feel motivated (Woolfolk, 2019). Like adults, when students can make their own choices, it can increase their sense of autonomy. If teachers support autonomy in this way, it can lead to greater student interest and curiosity. A study by McClung et al. (2019) examined a correlation between students' perception of choice and their achievement on reading comprehension tests. After their study on literacy choice and student achievement McClung et al. (2019) stated, "Choice, therefore, is intrinsically motivating when the locus of causality - or sense of agency - resides within the student" (p. 148). A sense of agency is therefore important for students to feel they have control over their own lives and specifically their own learning.

When it comes to motivation specific to reading, studies have shown students are more motivated to read when they are able to choose their materials. Motivation is extremely important when it comes to reading. Motivation and reading enjoyment cannot be forced upon students. The more force and control there are around reading, the more students tend to pull away. It is extremely important for teachers to get students motivated to read so that the potential for a love of reading is not lost forever. In their article discussing the importance of students selecting their own literature, Johnson and Blaire (2003) agree that "children must not only have the competence to read, but also the motivation to read" (p. 182). They also state that, "In addition to fostering intrinsic motivation, allowing students to make choices gives them control" (Johnson \& Blaire, 2003, p.183). Increased control, therefore, tends to consistently lead to increased motivation.

Once students are motivated to read or complete tasks within the classroom, achievement can occur. Even as adults, we must be motivated toward a goal for the task to potentially help us grow and learn. According to Deci and Ryan (1996), "To be motivated means to behave with the intention of achieving some outcome." If we want students to be successful and learn, we must foster motivation in any way we can and one of those ways can be to allow them the ability to make choices within their learning environment. This study investigates whether choice, specifically within a small group book study, affects students' motivation toward reaching a goal of understanding and discussing the book together. As many teachers are, the researcher is always looking for more ways to get students excited and motivated to read books. Based on the research, students who are given book choice within small group study will be more motivated to complete reading tasks.

Interest and Engagement. Giving students choice allows them to act on their own interests. It is generally assumed that when someone finds a task interesting, they will naturally be more engaged in that task. Research also suggests that this is true. According to Deci and Ryan (1996), "Although intrinsic motivation promotes learning and adjustment, it does so only with respect to activities that children find interesting" (Section 5, para 1). Therefore, if students do not find something interesting, intrinsic motivation may not be a factor in improving their learning. In Johnson and Blaire's (2003) article they state that, "In order for students to engage with text, they must feel like they have control in selecting materials that are interesting to them" (p.184). It is possible that students will also be more successful in reading books that interest them not just because they may have been allowed to choose the book, but also because they have already developed schema on the topics, they find interesting. In a study by Reynolds and Symons (2001), students were required to search and find answers to questions in non-fiction
books. Students were either told which book to use, or they were able to choose their own books. They found that students who were able to choose books were more successful at finding answers to the questions. They contend that, "Prior knowledge and topic choice might contribute to children's choice of book, and these factors might account for improved performance" (Reynolds \& Symons, 2001, p.20). When students can choose what they read, they are more than likely choosing because it looks interesting or familiar to them and therefore could be more engaged and successful in their efforts when interest is on their side.

When teachers allow students to explore their interests, they are also communicating with students that they care about things the students enjoy. Students should believe that their teachers care more about allowing students to explore what interests them versus controlling every aspect of how they go about their lessons in the classroom. Having the connection with students about their interests can strengthen the rapport teachers have with their students. Genuine teacher-student relationships are essential in education and can overall have very positive effects on student achievement. According to Patall, Cooper and Wynn (2010), "When a student perceives that their teacher allows them to make choices, this may also increase the students' perceptions that the teacher is listening to them, taking their perspectives into consideration, and understanding or respecting them" (p.899). In Dickerson's (2015) article, he explains the positive effects his "Reading Zone" time had on students in his high school English class. Students were allowed time at the beginning of class to read a book of their choosing every day. They discussed these books, wrote about them, and observed the teacher read a book during this time, too. He found that this not only increased his students' engagement in reading, but it also decreased many behavioral and management issues he had in his classroom (Dickerson,
2015). It seems that, allowing students to find a book they were interested in not only stimulated their love for reading, but also strengthened the relationships he had with students in his class. A study by Lane et al. (2015) found that when two students previously identified as needing academic or behavioral supports were given opportunities to make choices about their instruction, it resulted in more time on task. The students were able to either choose the order in which they completed tasks, or the materials used to complete tasks, or were denied choice all together. Researchers in this study found that, "both types of choice resulted in increases in AET [academic engaged time] for both students" (Lane et al., 2015, p. 501). This study was important because it shows that teachers do not have to feel they are giving up complete control over their lessons and goals for students by giving them choices. There are many ways that teachers can provide students with choice. Of course, there are times when giving choices might not fit with particular standards or procedures, for example, when administering standardized tests. There may also be students who handle choice differently than others and too much choice can be overwhelming without a significant amount of guidance. However, teachers can be creative with choice, as this study showed. The two students in this study still completed the tasks that were otherwise required by their teacher. They were simply allowed to complete tasks in any order, or with different materials. There are still questions to be answered, such as are their certain areas of academics where choice is more beneficial and how much freedom should be given to students to cultivate achievement?

Choice and Achievement. Every teacher wants their students to be successful. Though there is a great deal of research on how choice can improve motivation and increase interest, ultimately can choice also foster achievement and success? Teachers can often feel restricted by curriculum and programs that promise student success. They are afraid to venture from the rigid
manuals for fear their students will not achieve district or state goals. Many in the profession may feel this way, at times. Thankfully, there are studies that show choice can be a tool to help students achieve goals and improve academic performance. Patall, Cooper and Wynn (2010) studied the effects of giving high school students choice in their math homework assignments. They found that when students were offered a choice in their homework assignment, they ultimately scored higher on assessments versus when they were told which assignment to complete. Like the studies examined previously, they also found that students reported more interest and motivation to complete their homework when they could choose between assignments (Patall et al., 2010).

McClung et al. (2019), also examined how choice affects academic performance. They used data from fourth grade students to see if allowing students choice correlated to higher literacy achievement. They believed that when people are able to select what they read, it "facilitates intrinsic motivation to read, and thereby comprehension, because students are empowered to find texts that match their experiences, interests and preferences" (McClung et al., 2019, p.147). They also discussed an interesting concept of "perceived choice" and how it affects student success. They found that when students believed they were given choices, they achieved higher reading scores than students who felt they did not have choice. Their study concluded that, "when students believe that they have frequent opportunities to choose their own texts at school, they tend to perform better on reading assessments" (McClung et al., 2019, p.164). Similarly, in Reynolds and Symons' (2001) study, they found that students displayed more advanced reading strategies to answer the questions that correlated with their non-fiction books when they had been given the choice in what they read. Finally, Johnson and Blaire (2003) agree that "respecting students' literature choices" will increase their success in reading.

## Theoretical Framework

This action research was guided by the self-determination theory. The self-determination theory explains that individuals need to feel autonomous, connected with others, and be competent within their own environments (Deci \& Ryan, 1996; Woolfolk, 2019). Allowing students choice in their literature not only supports their autonomy, but also allows them to be guided by curiosity and interest. When a student is interested in something, it is likely that they already have some background knowledge on the topic. Letting this curiosity guide their choices, students feel more competent in their tasks. The feeling of connectedness was a result of the group discussions within the book study as students explored together the book that they chose to read. The researcher hoped that by taking this self-determination theory approach, student engagement, achievement and overall satisfaction within small group study will improve. Patall, Cooper and Wynn (2010) found a strong correlation between the self-determination theory and the findings of their study:

Overall and in line with self-determination theory, results suggested that providing students with choices among homework tasks effectively enhanced motivational performance outcomes and that choice is an important component to creating a classroom environment supportive of autonomy and intrinsic motivation. (p. 910)

When keeping the self-determination theory in mind while teaching, teachers should see students that are more engaged with a deeper understanding of topics, as well as feeling more adjusted and connected within the classroom (Deci and Ryan, 1996).

## Research Question(s)

After reviewing the literature, the researcher wanted to know more about specific outcomes that result from allowing students to choose their group book-study texts.

1. How does book study choice impact comprehension during small group instruction with 4th grade reading students?
2. How does book study choice impact student motivation and participation during small group instruction with 4th grade reading students?
3. How does book study choice impact overall student satisfaction during small group instruction with 4th grade reading students?

## Conclusions

A large body of research confirms that allowing students choice can have positive effects on student motivation, engagement, and achievement within the classroom. Though each study or article used choice in different ways, the results suggested that choice can be a powerful tool for teachers. This study examines specifically how choice can affect student comprehension, motivation, engagement, and their overall satisfaction with reading lessons when given the opportunity to choose their group's book. The next chapter will discuss the specific methods and processes that were used within this action research on providing text choice to students.

## CHAPTER 3

## METHODS

## Introduction

This study investigated the effects of allowing students choice during reading class. The researcher worked in a small group setting where students were either given a choice of which book to study, or not given a choice. While motivation for many students seems to be at an alltime low, teachers are desperate for ways to increase student motivation and engagement in daily lessons. The purpose of this study was to explore a way to motivate students while also encouraging deeper comprehension and overall satisfaction with a small group lesson. Four total student groups were involved in this study; two groups were given choice in their book and two were not. This study was quantitative in nature and followed a quasi-experimental design. After review of the literature, the researcher sought a deeper understanding of whether similar results would be found in a younger population, specifically fourth graders. Previous studies have analyzed both quantitative and qualitative data, however most data were collected from older students. Because today's schools put a high priority on quantitative data, the researcher sought to have this kind of data to show whether choice had positive or negative effects on student learning. The quantitative results of this quasi-experimental study could open ideas for elementary teachers to incorporate even more choice within their classrooms and to encourage more student autonomy.

## Research Question(s)

1. How does book study choice impact comprehension during small group instruction with 4th grade reading students?
2. How does book study choice impact student motivation and participation during small group instruction with 4th grade reading students?
3. How does book study choice impact overall student satisfaction during small group instruction with 4th grade reading students?

## Research Design

The research design that best fit this study is a quasi-experimental design. The study was quasi-experimental in nature because one group received a choice in which book to study (experimental group) and one group (comparison group) did not receive a choice in which book to study (Fraenkel et al., 2019). According to Fraenkel, Wallen, and Hyun (2019), the quasiexperimental design works when groups of students have already been formed, and true randomization cannot occur. Randomization would have been difficult with this population as there were some students distance learning and other students who received reading instruction from outside the classroom. Because the researcher already had small groups that met 3-4 days per week to read and discuss books together, the quasi-experimental design fit best in this scenario. The researcher compared results of groups that did not receive a choice in a book for study, versus groups that received a choice.

## Setting

This study was performed in a K-12 school in rural, west-central Minnesota. The population of the town where the school is located is 477 people. The town and surrounding area are known for vast fields and small forests. There are many corn and bean crop farms, as well as other larger commercial farms and even a few factories in surrounding small towns that create many jobs for families in the area. The school district includes many surrounding communities which contribute to a total K-12 enrollment of nearly 500 students. Over $90 \%$ of the students are
white, with only $7 \%$ of the student population being comprised of minorities. Approximately $58 \%$ of students in the district receive Free and Reduced Priced Lunch. Students with Individualized Education Plans (IEPs) make up about 16\% of the population at this school. Local students and families enjoy many outdoor activities such as hunting, fishing, camping, horseback riding, and four-wheeling. It may also be worth noting that many students in this district come from separated and blended families.

## Participants

The population of students for this study was 32 total fourth graders. Of these fourth graders, only 28 of them are in-person learners. The in-person learners are comprised of 45\% female students and $55 \%$ male students. The students are divided into two classrooms with different teachers. The researcher teaches reading to both classes. The two classes receive equal reading time, 90 minutes each day. Three students with IEPs attend a different reading class within the building. Four gifted students receive accelerated small group instruction with an additional teacher, other than the researcher in this study. During the small group study portion of the reading block, this leaves eight students in Class A and twelve students in Class B. These students are split into reading groups of 3-5 students per group in each classroom. Groups may change slightly throughout the year, but generally remain similar. During the study, reading skill level was dispersed evenly among the groups.

Sampling. The sample for this study will be purposive, because the researcher will be using her own students in each class. In purposive sampling, researchers use personal judgement to choose a sample that best represents the population (Fraenkel et al., 2019, p.100). In this study, the researcher chose a sample that best represented the class and also eliminated potential interruptions during the research. Each class will have 2 participating small groups. One group in
each class will receive choice in their study book, the other will not. The researcher decided to eliminate the lowest achieving small group in each class from the sample, so interventions could continue, as necessary. This may have affected results of this study, preventing the data from truly representing all students. Though this is true, the researcher's decision not to use that group of students was appropriate, allowing for group meetings to happen consistently without having to adjust for interventions. In Class B the two middle groups will participate. In Class A the remaining two groups (after eliminating the lowest) will participate. All the participants in these groups are performing at an average reading level for $4^{\text {th }}$ grade, reading at least 115 words per minute per their Fastbridge screening and progress monitoring scores. Fastbridge is an online database that is used by schools to track student progress in reading and math (Illuminate Education, Inc., 2020).

## Instrumentation

Three different instruments were used to collect data for each of the research questions. First, to measure student comprehension, the researcher used Accelerated Reader (AR) tests within the Renaissance Learning system. The AR tests within Renaissance Learning are used to measure students' understanding of books they read on their own that teachers may not always know enough about to assess comprehension themselves (Renaissance Learning, Inc., 2020). These tests are comprised of 10 multiple choice questions specific to leveled chapter books within the system. Data were recorded and compared within Table 1 (Appendix A) where differences can be seen from choice groups versus non-choice groups. To measure student participation and motivation, the researcher developed a Teacher Observation Survey (Appendix B). Questions were formulated by thinking of participation in 4 ways: being prepared for class, volunteering to read, volunteering to participate in verbal discussion, and being willing to write
responses in notebooks. The final question is an overall observation of the interest level of students. The researcher completed this survey during or immediately following each group meeting, to be sure the answers were reliable and based off current information. Finally, the researcher measured student interest by creating a Student Interest Survey (Appendix C). The first question indicates which study group students belong to, while the rest ask about general enjoyment of the book, small group reading time, and whether students think the book and small group are beneficial to their reading success. Students filled out the survey during the first group meeting at the beginning of the study, as well as the last group meeting at the end of the study. The survey took no more than five minutes for students to complete.

Data Collection. All data were collected during the small group setting. Comprehension AR tests were taken on student chrome books at the small group table. The tests were completed during students' small group time, at the conclusion of the book. Groups finished books on different days due to varying lengths of text. The researcher completed the observation survey during each small group meeting throughout the duration of the study. Each survey sheet was labeled by class, group, and date. Finally, the student satisfaction surveys were taken at the beginning and end of the study and were read aloud to students.

Data Analysis. After initial collection, data averages were taken for comparison. Calculated means were used as averages for this data analysis. Comprehension test scores were averaged within each group, and combined averages were taken among like groups (similar groups in Class A and B) to compare results of experimental (choice) groups versus comparison (nonchoice) groups. Teacher observation sheets were tallied and totaled for each week, and for the length of the study. These totals represented the percentage of students within the group that met the question criteria. Averages were taken for each category, then combined with like groups
from each class. Final averages were compared between experimental and comparison groups.
Lastly, student surveys were tallied similarly to the teacher observation surveys. After averages were collected for each category and like group scores were combined, the comparison between experimental and comparison groups were made.

When interpreting the data after analysis, the researcher looked specifically at trends that arose within comprehension test averages in separate classes as well as in comparison groups. Similarities within classes versus within test groups indicate other influencing factors like time of day or location of the class. However, similarities within experimental and comparison groups indicate that the results were influenced by the presence of or lack of book choice. Similar trends were analyzed for student surveys and teacher observation sheets.

Research Question(s) and System Alignment. The table below (i.e., Table 3.1.) provides a description of the alignment between the study Research Question(s) and the methods used in this study to ensure that all variables of study have been accounted for adequately.

Table 3.1
Research Question(s) Alignment

| Research Question | Variables | Design | Instrument | Validity \& Reliability | Technique (e.g., interview) | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| How does book study choice impact comprehensio n during small group instruction with $4^{\text {th }}$ grade reading students? | DV: Book comprehensio n <br> IV: The ability to choose books for small group study | Quasiexperimental design. <br> The study will compare performance, participation and satisfaction outcomes of students who are given a choice in | AR book comprehensio n tests from Renaissance Learning, Inc. (Appendix A) | Group activities and the amount of responding and writing will stay the same between the groups. Baseline satisfaction scores will be used at the beginning of the study to | Renaissance <br> Learning AR comprehensio n tests (Multiple choice) <br> Teacher observation survey (daily per group) <br> Student satisfaction | Fourth graders <br> Two classes <br> Two groups her class of $3-$ 4 students each <br> Total: 14 participants |


| Research <br> Question | Variables | Design | Instrument |  <br> Reliability | Technique <br> (e.g., <br> interview) |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Procedures

To begin the study, all participants were first given the Student Survey during a small group meeting, using paper and pencil. The researcher read aloud the questions to be sure students understood all the words and were able to choose responses that best fit their opinions. After the survey was completed, three books were presented to the experimental groups, while the comparison groups were informed which books they would be reading for their book study.

The experimental groups made their choice by rating the books 1-3 individually. Points were tallied for each book and the book with the highest overall ranking was chosen as the group's study book. This was completed in one small-group sitting. The comparison groups were not directly informed that the other group would be receiving a choice. All groups started their books on the same day but each group ended their books on a different day, with the last group finishing at the conclusion of a 4 week period. Each week, every group met with the teacher for 20 minutes Monday through Thursday. Each day, the researcher completed the Teacher Observation Survey for every group.

Throughout the study, all groups followed the same approximate routine: $10-15$ minutes of reading and 5-10 minutes of discussion and skill work during each group meeting. Each week, all groups moved through the same set of skills and learning tasks, regardless of their book. Once their book was completed, each group took their paper and pencil Student Survey again, after having it read to them, and satisfaction comparisons could be made from the beginning to end of the study. Students also took their Renaissance Learning AR tests, 10 multiple choice comprehension questions on their book.

## Ethical Considerations

The researcher took necessary measures to ensure the wellbeing of the participants during this study. First, informed consent was required for participation; all subjects' parents gave consent for their participation prior to the study. The researcher also made sure not to use any identifiable information when it came to the teacher observation survey, the student survey and the AR test scores. Scores are held within the Renaissance Learning system online for teacher use, but no information was recorded that would identify students in conjunction with this study.

Lastly, students were informed that they would not have to participate in the data collection aspect of the study if they chose.

## Conclusions

This chapter provided detail of how the study was conducted. It explained who was involved in the study, how data were collected and the procedures for the study's implementation. Examples of instruments used are provided within the Appendix. The chapter also includes the ethical considerations for the study. The following chapter will explain results of the study and provide a comprehensive analysis of the data.

## CHAPTER 4

## RESULTS/FINDINGS

The purpose of this study was to determine if giving students choice in their small-group reading book would improve comprehension, motivation and overall satisfaction with smallgroup reading time. There was a total of 18 students who participated in this study, from two separate fourth grade classrooms. The students were split into two different groups per classroom: a group that were given no choice in the book they would study and a group that was able to vote and choose between three books. To measure comprehension, the Renaissance AR system was used, which asked each student 10 multiple choice questions about the book at the conclusion of the study. To measure motivation, the researcher completed a short questionnaire during each meeting with all four study groups. To measure overall satisfaction, students were given a survey at the beginning and end of the study to determine if there was any change in their perspective of the time spent in small-groups during reading.

## Description of Data

The data from like-groups between the two classes were combined and compared against the data of the opposite groups. Because not all groups finished their books at the same time, some groups had more teacher-completed questionnaires than others. It was for this reason that mean calculations were used for averages to ensure that the most accurate representation of that group was compared.

## Results

Research Question 1: How does book study choice impact comprehension during small group instruction with 4th grade reading students? Table 4.1, below, compares mean comprehension scores among choice groups and non-choice groups. Scores were taken from

Renaissance AR comprehension tests worth ten points: 10 multiple choice questions on the group's study book. Each student took their test individually, but questions were the same for all students within the group. Both groups from Class A, choice and non-choice, had 4 students.

Both groups from Class B, choice and non-choice, had 5 students.
Table 4.1

Average Student Comprehension Scores

| Group | Average Score per Group <br> (10 possible) | Combined Like-Group Averages |
| :--- | :---: | :---: |
| Class A - Choice Group | 8.75 |  |
| Class B - Choice Group | 7.2 | 7.98 |
| Class A - Non-Choice Group | 10 | 9.6 |
| Class B - Non-Choice Group | 9.2 |  |

*Note. There was a total of 9 choice group participants, as well as a total of 9 non-choice group participants.

These data show that groups who did not get to choose their book for book study performed better on their comprehension test than groups who chose their book. Though providing book choice was expected to have a higher comprehension result, there are some factors that may have contributed to this unexpected outcome. First, students who chose their book gravitated towards slightly longer, more challenging stories. In each class, students were presented with three books at similar reading levels. However, it was impossible to ensure the books provided exactly the same level of challenge at exactly the same length of pages. Three books were presented to the choice-group, and from the leftover two books, the teacher chose a book for the non-choice group. Second, because every group read a different book with a
different number of pages and answered a different set of questions in their comprehension test it is difficult to compare test results side by side. It is also worth noting that the difference between an average combined score of 7.98 (choice groups) and 9.6 (non-choice groups) is not necessarily statistically significant. Outside the study, when the Renaissance AR scores are recorded for grades and classroom use, the teacher is typically satisfied with a score above 8 when considering if a student's comprehension of a book was satisfactory. Looking through this lens, there was not a large difference between choice group and non-choice group comprehension data. Though the results tell us that choice may not matter in terms of increasing student comprehension significantly, it has been realized that this is a difficult set of data to compare given the differences in books for each group.

Finally, it is important to understand that the AR tests ask surface level comprehension questions. The tests include 10 multiple choice questions that do not require much deeper level thinking skills. There is much more depth to the overall understanding of the book than what these AR tests reflect. Though the scores are helpful in giving us a quantitative measurement of comprehension, they do not provide a full picture of a student's understanding of a book.

Research Question 2: How does book study choice impact student motivation and participation during small group instruction with 4th grade reading students? Table 4.2, below, shows results from the teacher observation survey that was completed by the researcher after each group meeting. Because groups had a varying number of participants and on some occasions, students were absent, the "number of students" as referred to in each question was translated into a percentage of student participants for recording purposes.

## Table 4.2

Teacher Observed Motivation and Participation

| Questions | Non-Choice <br> Groups | Choice Groups |
| :--- | :---: | :---: |
| If any outside work or reading was <br> assigned, how many students completed <br> the assignment? | $100 \%$ | $100 \%$ |
| How many students volunteered to read <br> aloud during group time? | $78.5 \%$ | $86.3 \%$ |
| When prompted by the teacher, how <br> many students participated in answering <br> questions about the story during group <br> time? | $94.8 \%$ | $96 \%$ |
| When prompted by the teacher, how <br> many students were willing to write <br> responses to the teacher's questions <br> about the story or complete work during <br> group time? | $98.5 \%$ | $100 \%$ |
| During group time, how many students <br> seemed to be interested and engaged in <br> the book discussion overall? | $94.5 \%$ | $99 \%$ |

The results of the teacher observation survey showed that groups who were given a choice in their book showed the same or slightly higher motivation and participation on average. Because the researcher had worked with these students before and understood their typical learning habits, some more qualitative observations were used in combination with data from Table 4.2 to interpret the result. Within choice groups, it was observed that even students who were typically considered to be less-motivated showed increased engagement and willingness to participate after they had been given a choice in their study book. Therefore, the researcher concluded that allowing choice does have a positive impact on student motivation and
participation, despite the minimal differences in percentage shown in Table 4.2. Given these results and previous literature review, it can be assumed that being part of the decision-making process was the cause of the higher levels of motivation and participation among choice-groups.

## Research Question 3: How does book study choice impact overall student

satisfaction during small group instruction with 4th grade reading students? Table 4.3,
below, shows average student answers for each survey question and whether there was a difference seen after the research period, especially among choice groups. Students answered with a score of 1-4 for all questions (see Appendix C), therefore average scores also could not exceed 4.

Table 4.3

Student Satisfaction Survey Results

| Question | Choice Groups |  |  | Non-Choice Groups |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before | After | Change | Before | After | Change |
| 1. On a scale of 1-4 (1 meaning very little and 4 meaning very much) how much do you enjoy reading? | 3.44 | 3.89 | +0.45 | 3.0 | 3.22 | $+0.22$ |
| 2. On a scale of 1-4 (1 meaning very little and 4 meaning very much) how much do you enjoy small group reading time? | 3.22 | 3.44 | +0.22 | 3.0 | 2.89 | -0.11 |
| 3. On a scale of 1-4 (1 meaning very little and 4 meaning very much) how much do you like the books and stories we read during small group reading time? | 2.89 | 3.67 | +0.78 | 2.71 | 3.16 | $+0.45$ |
| 4. On a scale of 1-4 (1 meaning very little and 4 meaning very much) how much do you think | 2.89 | 3.22 | +0.33 | 2.85 | 3.0 | +0.15 |


| Question | Choice Groups | Non-Choice Groups |
| :--- | :---: | :---: |
| small group helps you become a <br> better reader? |  |  |
| Total change in satisfaction: | 1.78 | 0.71 |

It can be observed in the table that groups who were given a choice in their book were generally more satisfied with small group instruction overall. The survey results showed a higher increase in all question categories from beginning to end of the research period within choicegroups versus non-choice groups.

## Conclusions

Overall, allowing students a choice in what they read had a positive impact. Though comprehensions scores seemed slightly lower or unaffected, the satisfaction, motivation and participation of students increased when they were given the opportunity to choose what was read within their small group study. Through the teacher observation survey and the student satisfaction survey, it was found that students show more involvement and excitement within choice-groups during small group reading time versus non-choice groups.

## CHAPTER 5

## IMPLICATIONS FOR PRACTICE

## Action Plan

After reviewing the results, choice does have an effect on student motivation, engagement, and satisfaction. Though the results indicated there was not a positive effect on student comprehension, it can be assumed that the more a student feels engaged and motivated to learn, the more likely they will be to improve their skills and increase learning and comprehension eventually. The researcher found that the groups who were able to choose their small group study book seemed to have a more positive attitude daily. Though it was not part of the study, the researcher also observed less behavioral issues and had to redirect students less often.

Moving forward, the researcher plans to continue finding places in her classroom to implement choice for students. She will continue allowing students to make choices within small groups to further engage students and maintain a positive learning environment where students feel empowered and excited to read and learn.

## Plan for Sharing

Student choice is something teachers can easily implement into their classroom to motivate students and allow them to feel responsible for their learning. Teachers in all different types of classrooms, in all subject areas and all ages can add more opportunities for student choice. This can benefit an entire school by reducing the amount of behavior issues and resulting in more academic engagement. The researcher plans to share the success of this action research with fellow teachers while collaborating during professional learning communities.

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## Appendix A

Renaissance Learning, Inc. provides specific comprehension quizzes for individual chapter books. The tests consist of 10 multiple choice questions. Students are shown their score at the end. Students' scores are also available to view from the teacher's account and provide a record of all tests a student has completed.

An example of a student's quiz report as shown on the teacher page is shown here:

| Date | Activity Information |  |  |  |  | Questions |  |  | Points |  | DifficultyLeveland |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Num | Lang | Title | FNF | Read Indep? | Correct | Possible | \% Corect | Achieved | Possible |  |
| 09/29/20 | 141838 | EN | Who Was Rosa Parks? | NF | Yes | 9 | 10 | 90\% | 0.9 | 1 | 4.8 |
| 09/24/20 | 163167 | EN | What Was the First Thanksgiving? | NF | Yes | 10 | 10 | 100\% | 1 | 1 | 5.0 |
| 09/22/20 | 175887 | EN | What Was D-Day? | NF | Yes | 9 | 10 | 90\% | 0.9 | 1 | 5.8 |
| 09/22/20 | 27747 | EN | Riding Freedom | F | No | 7 | 10 | 70\% | 2.1 | 3 | 4.5 |
| Summary | Quizzes: |  | 4 taken, 4 passed |  | Totals: | 35 | 40 | 87\% | 4.9 | 6 | 5.0 |

A table to organize AR quiz data specifically for the purpose of this study is shown below:

## Table 1:

## Student AR Scores With and Without Book Choice

|  | Teacher-choice AR Score | Student-choice AR Score |
| :--- | :--- | :--- |
| Class A, Triangle Group |  |  |
| Student 1 |  |  |
| Student 2 |  |  |
| Student 3 |  |  |
| Student 4 |  |  |
| Class A, Square Group |  |  |
| Student 1 |  |  |
| Student 2 |  |  |
| Student 3 |  |  |
| Student 4 |  |  |
| Class B, Triangle Group |  |  |
| Student 1 |  |  |
| Student 2 |  |  |
| Student 3 |  |  |
| Student 4 |  |  |
| Class B, Square Group |  |  |
| Student 1 |  |  |
| Student 2 |  |  |
| Student 3 |  |  |
| Student 4 |  |  |
|  |  |  |

## Appendix B

## Teacher Observation Survey

Date: $\qquad$ Class: $\qquad$ Group: $\qquad$

If any outside work or reading was assigned, how many students (out of 4) completed the assignment?
1
2
3
4

How many students (out of 4) volunteered to read aloud during group time?

## 1

2
3
4

When prompted by the teacher, how many students (out of 4) participated in answering questions verbally about the story during group time?

1
2
3
4

When prompted by the teacher, how many students (out of 3 or 4) were willing to write responses to the teacher's questions about the story or complete work during group time?
1
2
3
4

During group time, how many students (out of 3 or 4) seemed to be interested and engaged in the book discussion overall?

3
4

## Appendix C

Student Interest Survey

Please answer the following questions as honestly as you can.

What reading group are you in? Circle 1.


On a scale of 1-4 (1 meaning very little and 4 meaning very much) how much do you enjoy reading?
1
2
3
4

On a scale of 1-4 (1 meaning very little and 4 meaning very much) how much do you enjoy small group reading time?

1
2
3
4

On a scale of 1-4 (1 meaning very little and 4 meaning very much) how much do you like the books and stories we read during small group reading time?

1
2
3
4

On a scale of 1-4 (1 meaning very little and 4 meaning very much) how much do you think small group reading time helps you to become a better reader?

1
2
3
4

## Appendix D

IRB Approval

## Institutional Review Board

| DATE: | February 8, 2021 |
| :--- | :--- |
| TO: | Ximena Suarez-Sousa, Principal Investigator <br> Jessica Proell, Co-Investigator |
| FROM: | Lisa Karch, Chair <br> Minnesota State University Moorhead IRB |
| ACTION: | [1709828-1] The Effects of Book Choice in Small-Group Reading <br> PROJECT TITLE: <br> SUBMISSION TYPE: <br> DECISION DATE: |

Thank you for submitting 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 E

School Building Authorization


www.isd786.org | Phone: 218-924-2500 | Fax: 218-924-3252
Eric Koep, Superintendent | Darren Glynn, Principal | Dave Mills, Dean of Students / Activities Director | Lynn Lindquist, Business Manager

## December 23, 2020

To Whom It May Concern:

This letter is to grant Jessica Proell permission to conduct an action research project study at Bertha-Hewitt Elementary school during the 2021 school year. I understand that this study poses no risk to those involved or to the Bertha-Hewitt District. I also understand that all information will be kept confidential and will only be used for the purpose of this study.


Principal, Bertha-Hewitt

## Appendix F

## Informed Consent

January 20, 2021

Consent Form: Participation in Research
Title: The Effects of Choice in Small-Group Reading

Dear Parent or Guardian,

Currently, I am working toward my Masters’ degree at Minnesota State University Moorhead. To complete this degree, I must conduct a classroom study. Student participation in this study is completely voluntary; deciding not to participate will have zero negative consequences. It does not pose any known risk to your child and would be part of our everyday reading lessons even if I were not obtaining my degree.

The study is meant to examine how giving students' choice in what they read affects their engagement and learning. Students will be given a pre-study survey as well as a post-study survey to determine if choice affects their attitudes toward reading. Student AR book test scores will also be used to determine if there is an academic affect in giving students choice. The findings from this study will help improve small group reading instruction. The study will not only benefit current 4th grade students, but future students in my class.

The study will be performed within the regular education classroom for approximately 20 minutes per day, during students' typical small group time. All information that I gather will remain confidential and no names will be used when reporting my findings. There will be no identifying information linking your student to the study.

By signing this form, you are confirming that you have read and understand the information above and that you are giving permission for your student to participate in this study. Please contact me if you have any questions or concerns or wish to stop participation at any time without consequence.

You may also direct questions to the following Minnesota State University faculty members:

Lisa Karch, Ph. D.<br>Chair of MSUM Institutional Review Board<br>218.477.2699<br>lisa.karch@mnstate.edu

Ximena Suarez-Sousa, Ph.D.
Principal Investigator
218.477.2007
suarez@mnstate.edu

Participant Name, Signature
$\qquad$

Investigator signature $\qquad$
date $\qquad$
date $\qquad$

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