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Effects of Flexible Seating in the Lower Elementary Classrooms

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Effects of Flexible Seating in the Lower Elementary Classrooms

A Quantitative Research Methods Proposal

Presented to the Graduate Faculty of Minnesota State University Moorhead

By

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Requirements for the Degree of
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ABSTRACT

This 2021 study focused on the effects of traditional and flexible seating had on student engagements and autonomy in second and third grade students. The focus was to see which type of seating most benefit student focus, attention, attitude, and morale. Students were observed in four increments per day for four weeks. The first two weeks focused on traditional seating and the second two weeks were focused on flexible seating. Students were also given a survey to present their preferences on both types of seating, traditional and flexible. The research took place in two North Dakota Elementary schools during independent literacy centers, also known as Daily 5. The data and results were as follows. There was not a significant difference between on and off task behaviors for the two seating options. Trends in data showed preference was a significant factor in student engagement. Giving students a choice proved to be beneficial to the learning outcomes.

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CHAPTER 1

INTRODUCTION

Introduction

Going as far back as the Industrial Revolution, where the traditional classroom model was created, our goals of education have drastically changed. There has been a shift from traditional seating of students sitting at desks in rows, to the 21st Century classroom model where students are able to have a choice in seating. The goal at that time was to prepare students to work in factories, which matched the classroom seating. Numerous schools have now adopted the flexible seating model such as wobbly chairs, standing tables, and yoga mats to engage and prepare all learners for our everchanging world.

Brief Literature Review

Research of the countless benefits of flexible seating has been ongoing. Due to Covid-19 and the strict social distancing protocols, teachers were forced to transition back to traditional seating and teaching styles. This ignited the interest in the correlation between on-task behavior, student autonomy and seating in the classroom. One of our immediate discoveries due to the new challenges we faced was student focus in the physical and virtual classroom. As thoughtful teachers, we began to question the need for flexible seating. We began to research seating options and the effects it could have on student engagement.

Teachers have a wide variety of learners in their classrooms. Each year, as a new group of students enters their classroom, educators are given the task to meet their individual needs. Seating is a vital part of the overall classroom environment. Seating that enables students to move, fidget, and burn off restless energy may help them perform better in school (Kennedy,

2017). Some students may be content to sit in a more “modern” seating, such as the standard desk and chair, however others may be more inclined to absorb the information by standing, or using seating that allows them to wobble, fidget or rock. Research has found that some students, especially those who have difficulty concentrating, perform better when they are on such seating, like a stability ball (Kennedy, 2017). It could not only enhance their overall engagement, but it can also improve posture and cut down on restless behavior.

The second topic that sparked the research interest was the student individual needs. Differentiation is a vital aspect of teaching. Students have different styles of learning and may benefit when they do not have to sit in the same configuration for long periods (Kennedy, 2013). Classroom furniture that can be moved and rearranged enables teachers to change their instructional style to better engage students (Kennedy 2013). Incorporating flexible seating could lead to better focus on studies and spark creativity.

Lastly, student autonomy and choice were important to our research study. We want students to be independent learners in the classroom environment. Wright (2018) stated:

Flexible seating gives students the option to control their physical environments in which they work best. In other words, with choices, students gain greater flexibility and control of their surroundings giving them the autonomy and comfort to stay engaged and focused. This leads to increased student engagement, which is linked to higher motivation and academic performance, as well as improved overall behavior.

When teachers offer students the option to choose where they will learn, it will make them feel empowered in their learning.

Statement of Problem

The West Fargo Public School District has been in support of flexible seating. Due to Covid-19, all teachers, while following CDC guidelines and district recommendations, were forced to reconstruct the layout of classroom. Educators had to revamp everything, most importantly, classroom seating. To begin the 2020 school year, The West Fargo Public School District implemented a hybrid model to protect the wellbeing of all students, staff, and families.

Observations were noted after reverting to traditional ways of classroom seating and teaching styles. There was a significant lack of student engagement in the overall classroom environment. In the second and third grade classrooms, there was significant change in students' attentiveness, ability to recall simple directions, and had lack of retention of content, thus the basis of appeal for this research study.

Purpose of Study

The purpose of this study was to find out the affects that traditional vs. flexible seating have on student on-task behavior, as well as their perceptions of learning. The researchers of this study were able to find out more information about students' individual learning styles on a larger scale. Students can find out more about their own learning styles and why a particular seating choice may enhance their overall learning experience. Lastly, flexible seating could increase student engagement and morale.

Research Question

To what extent does traditional seating vs. flexible seating affect student on-task behavior and student perceptions of autonomy and learning?

Definition of Variables

Variable A: Dependent variables include student on-task behaviors and student autonomy with independent learning.

Variable B: Independent variables include traditional seating, which would be a traditional desk and chair seating arrangement in rows, and flexible seating, which includes wobbly chairs, standing tables, core discs, etc.

Significance of the Study

This study was critical to the practitioner (teachers) and was also important for the participants (students). Educators directed instruction to provide opportunities to each individual learner. As educators, it is their job to make sure students have opportunities to be successful, not only by meeting their learning needs but also their learning environment. By providing power of will, students were active in their own learning process. It was the main goal of the researchers to empower the learners and set them up for success. If students were eager and excited to come to school, it would ultimately result in more success for their future. Not only did the researchers see success the classrooms, but they would see success in the communities and world.

Research Ethics

Permission and IRB Approval. 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 sought from the school district where the research project will take place (See Appendix G and H).

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 E and F) that the researchers 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 their 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 using 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. Surveys always have limitations and unknowns. The researchers believed that there were only a few threats to the survey data. One threat could potentially be 'instrument decay.' Any type of seating, traditional or flexible, could become damaged or unusable. Another factor would be the possibility of a student becoming injured due to not properly using the seating option. In a sense, the study was limited on time, as it was a short period of time for observation. The researchers were fortunate to have been able to analyze two groups of students, however it was a possible limitation as well. There could have been certain biases such as varying teacher opinions, teaching styles, and different participants for the study. Finally, due to COVID-19, the learning environment may change in range of in-person learning, hybrid, or even distance learning. This could affect the validity of observations and research results and findings.

Conclusion

The researchers believed that student choice in seating would have an overall positive impact on student engagement, retention of content, and enjoyment in student learning. Some students thrived with a desk and a chair; however, the majority of classes yearned for their option of seating that best suits them and their individual learning styles. While following the mandated health guidelines and restrictions this year, educators creatively worked hard to continue to have more flexible seating options in the classrooms.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The traditional classroom model of rows of desks and chairs was created in the 18th Century. Professions and educational goals have drastically changed since then. Teachers have been shifting from traditional seating to the 21st Century classroom model where students are able to have a choice in seating. The goal in the 18th and 19th Centuries was to prepare students to work in factories, which matched the classroom seating. Today, in the 21st Century, many schools have adopted the flexible seating model to engage and prepare all learners for their future endeavors, whatever they may be.

The West Fargo Public School District supported the implementation of flexible seating in the elementary classrooms. During Covid-19 pandemic, that began in 2019, all teachers, while following CDC guidelines and district recommendations, were forced to reconstruct the layout of classroom. Teachers had to revamp everything, most importantly classroom seating. To begin the 2020 school year, districts implemented a hybrid model to protect the wellbeing of all students, staff, and families. While conducting the research study, the district was in the process of bringing back all learners to full reentry by the end of November 2020. After reverting to more traditional ways of seating and teaching styles, teachers had noticed a significant lack of student engagement in the overall classroom environment. In the second and third grade classrooms, it was evident that there was a change in students' attentiveness, ability to recall simple directions, and students had a lack of retention of content, thus the basis of appeal to the research study.

There has been ongoing research of the countless benefits of flexible seating, including overall student attentiveness, power of student choice, and autonomy regarding independent work. The transition back to traditional seating and teaching styles, due to the pandemic, ignited interest in the correlation between on-task behavior and seating in the classroom.

Body of the Review

Context. This literature review will explain the benefit of movement-based interventions in the classroom, resistance to traditional seating implementation, and finally the power of choice and autonomy in a student's education. These main themes embodied our research study and added to our knowledge to accommodate a new generation of learners.

Traditional Vs. Flexible Seating

Traditional seating often consists of desks in rows facing the same way towards a white board or even a chalk board, which the researchers stated are obsolete in current times. Some students crave a structured classroom layout and their own space and materials, however traditional seating may reduce opportunities for learning experiences. For students who need interaction and options to move their bodies and find comfort, the traditional seating limits the opportunity. "It is evident that there are preferred seating positions which students perceive as offering positive learning impact (Park & Choi, 2014, p.758)." In this study, Park and Choi (2014) explained that it was clear an underlying restriction of traditional seating was that there were limited number available seats in the preferred seating zone. The preferred seating zone were the seats in the center of the front row.

Some studies suggest that sitting in a traditional seat for long periods of time (more than four hours a day) can adversely affect the spine. It weakens your back muscles and tightens

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others (Manahawkin Chiropractic Center, 2020). Traditional chairs hinder balance and do not allow for good balance and movement. The Manahawkin Chiropractic Center suggests sitting on a ball chair to force non-used muscles to in chair-sitting to work. Not only does flexible seating benefit student moral and attention, but it also benefits the overall health and wellbeing of students.

Although flexible seating may not be correct for every student, however the advantages of flexible seating seem to overshadow the disadvantages. One of the many benefits of flexible seating is increasing student engagement. Increased student engagement may be a result of physical movement. "There are also immediate benefits of Flexible Seating such as burning calories, reduce stress, improve posture, and can improve core strength (Smedley-Warren & Smedley-Warren Howdy, 2018)." Kennedy (2017) explains the value in creating learning spaces that are cohesive to modern learning strategies. The use of seating options to help students concentrate and focus on classroom activities is essential. "The students take more responsibility for their learning. They know what their bodies need to focus, and they make the choice of where and how to sit" (Evelsizer, 2017, p. 1). These ideas can greatly benefit student engagement and focus. Seating that enables students to move, fidget, and burn off restless energy may help them perform better in school (Kennedy, 2017). Some students may be content to sit in a more modern seating, such as the standard desk and chair, however others may be more inclined to absorb the information by standing, or using seating that allows them to wobble, fidget or rock.

A study in 2010 involved college classes that were taught by two different approaches; TILE (Transform, Interact, Learn, and Engage) vs. non-TILE classroom instruction and environment. Park and Choi (2014) explained the comparative research project that examined four TILE Courses and four non-TILE courses that had been taught by the same instructors. The

study discovered that the students in the four TILE classes achieved higher grades than students in the non-TILE classes. “Students in the TILE courses also displayed a more positive attitude toward learning and a higher level of engagement by the end of the course” (Park and Choi, 2014, p. 755). Those cases shared the common goal of creating and exploiting new classroom design to expand educational impact and providing an educational environment that inspired students’ active participation in the learning experience.

Modern curriculum and instruction should be more welcoming to all styles of learners and cater to each individual learning style. The 21st First Century skills are collaboration, communication, critical thinking, and creativity. “The great thing about flexible seating is that it allows all four these 21st century skills to develop in the classroom” (Smedley-Warren & Smedley-Warren Howdy, 2018). Research has found that some students, especially those who have difficulty concentrating, perform better when they are on such seating, like a stability ball (Kennedy, 2017). It could not only enhance their overall engagement, but it can also improve posture and cut down on restless behavior. Kennedy (2017) says that according to studies, prolonged sitting is harmful to one’s health. A standing desk can interrupt a student’s inactive day and may help them to be more engaged with their teachers and retain more information. There are more examples of flexible seating that Kennedy (2017) talks about, but all of them seem to have its own way of helping a particular student focus better.

As some students show they are more actively involved and attentive with traditional seating in the classroom, a lot of students can also show attentiveness and soak up knowledge with other types of seating. It is essential for educators to decipher what each individual student needs and what seating will accommodate their learning style. Educators have the responsibility

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to understand what students need to be successful. It may take more practice at the beginning of the year to learn new expectations. Educators have the responsibility to teach how to self-regulate. “The funny thing about self-regulation is that it gets better with practice and it doesn't get any better if you don't practice it” (Parnell, 2013). There are different ways to arrange and execute the plan, depending on teacher styles and what each individual student needs. Educators plan to teach students how to choose and understand the expectations, as well as how to problem solve if there are conflicts.

Seating options in the classroom and at home are extremely important when meeting students' needs to focus and retain information. In reference to the 'at home' learning environment, Vaglica (2020) talked about making sure the height of the students' seating is appropriate, encouraging good posture. Placing an inflatable disc on a student's chair can help him or her focus by creating that outlet for wiggling. Fidgets are a great option to have available as well. Fidgets are not meant to be negative; they can be a very positive thing for students who need movement to maintain focus (Vaglica, 2020). Communication and consistency between home and school must be imperative for student success, such as clear expectations and learning targets.

Kennedy (2013) focused on the need for careful consideration of furniture in the classrooms. The furniture creates a learning environment, so the way furniture is set up can greatly affect the nature of students' daily activities. Kennedy (2013) explains that a classroom is just an empty space until school planners decide what goes inside. The types of furniture chosen, determines whether a space becomes a place where teachers and students can do their jobs effectively. “Furniture, in the educational setting, needs to have a long life, enable users to carry

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out their tasks in comfort, and have the flexibility to adapt to the varying needs of its users” (Kennedy, 2013). Students have different styles of learning and may benefit when they don’t have to sit in the same configuration for long periods (Kennedy, 2013). Classroom furniture that can be moved and rearranged enables teachers to change their instructional style to better engage students (Kennedy 2013). Doing such things could lead to better focus on studies and spark creativity.

Winslow focused on the benefits of a particular group of teachers working together with parents, as well as companies, to provide flexible seating in the classroom. These teachers were passionate about flexible seating. They had students who once disliked a subject, but since they have found a way to focus, they are beginning to realize the subject wasn’t so bad. Winslow’s article (2017) included findings from a principal who implemented flexible seating at his school. He noticed a major, positive change in students’ attention, not only how long they can pay attention, but how well they focused. Students were given the opportunity to move throughout the school day. “You can't sit them still for a super long time and expect them to be on task the whole time” (Winslow, 2017). All students crave movement in their educational setting. "A lot of students have difficulty sitting still, but movement equals brain power, we use wiggle seats, wedges under chairs, therapy balls and Hokkie stools, which helps students work on their core and trunk muscles” (Evelsizer, 2017, p. 4). Evelizer (2017) also talked about how adults who sit for a very long time will get bored and crave the need to move. If adults are given more opportunities to move, then why not start with younger generations. Flexible seating gives learners the opportunity to move, which can in turn supply brain power.

Flexible seating lends itself especially well to group work, which is much more common in classrooms now than it was decades ago. “Our classroom environments should be conducive to open collaboration, communication, creativity and critical thinking. This simply cannot be done when kids are sitting in rows of desks all day” (Delzer, 2016). As students work in shared spaces, the teacher is free to create learning opportunities in all corners of the class, rather than just at the front (Winslow, 2017, p. 3). “Particularly at an elementary school, we always have kids who struggle with the sit-in-the-box or row kind of mentality,” Principal Heather Bojorquez said. “Sometimes, kids learn best sitting in a desk. Other kids learn best by standing or having the option to sit on the floor” (Winslow, 2017, p. 5). Giving students the option seems to really boost their learning.

Simmons (2015) investigated whether specific classroom seating arrangement can contribute to students being on or off-task while completing independent work within the general education setting of an inclusive second grade class. This article appealed to us specifically, as we are second and third grade teacher wanting to answer this same question. The seating options were cluster seating, horseshoe seating, and row seating. The study involved how the students showed on-task behavior depending on how they were arranged, vs. traditional or flexible seating. The behaviors observed were inappropriate talking, students out of their seats without permission, students not following directions, and students not starting independent work promptly. Data were collected using three methods: observation/ anecdotal record, teacher behavior checklist, and a behavior tally sheet. It was determined that row seating had the fewest off-task behaviors for this second-grade class. It was also determined that inappropriate talking was the most frequent occurring off-task behavior and not following directions was the least off-task behavior observed (Simmons, 2015). For this classroom, row seating was determined to be

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the best classroom arrangement. This finding is contradictory to what we had hypothesized about flexible seating benefits in our own classrooms.

Due to the Covid-19 global pandemic, educators, parents, and students, experienced a new frontier of distance learning together. Through our personal experiences with virtual learning, communication, collaboration, and consistency, between home and school, has never been more important. Having a workspace that is conducive to learning, whether it be at home or in-school setting, is vital for student success.

Vaglica (2020) showed versatile in the sense that it can be used in the classroom or the home setting. Parents, in a way, have played the role as a co-teacher to their child since the pandemic began. During the complexities of the pandemic, it was made apparent how essential it was for teachers to assist student families in setting up their children to succeed at home. The article explained home environments, technology, and focusing on social emotional skills. While you do not need to devote a home office to remote learning, some sort of dedicated space within parental view helps foster the routine a real classroom provides (Vaglica, 2020). The space should also be mild with colors. The use of cubbies was suggested to keep the area very tidy and decorate with the students' own artwork.

The use of technology during distance learning brought about many complexities such as language barriers with some student families, knowledge of specific technologies (SeeSaw, Microsoft Teams), and availability of internet and lack of family involvement due to prior obligations such as work. Aside from all these complexities, it was discovered that technology could ultimately change the word of education for the better. Technology is very powerful when monitored appropriately in connecting students to their peers, such as when scheduling online

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playdates and/or virtual classroom meetings. A new school year may bring anxiety both parents and students. But the experts agree: Focus on making sure your children's social skills keep developing and worry less about the academics (Vaglica, 2020). The article also explained the importance of social emotional skills. "It can help ward off this sense of mourning brought on by not seeing classmates," said Dr. Felt (Vaglica, 2020).

Power of Choice and Student Autonomy

When students have a positive outlook on school, it most likely will lead them to success in future endeavors. Flexible Seating can give students options to control their own physical environment, which can lead to increased student engagement and motivation. "With choices, students gain greater flexibility and control of their surroundings giving them the autonomy and comfort to stay engaged and focused" (Wright, 2020, p. 2). (Winslow, 2017) stated:

Giving students the freedom to sit how they want to have made a big difference for more fidgety students and those with attention deficit disorders. Students who would normally lose focus fidgeting in a stiff desk can now wiggle on a wobbly stool, dangle their legs from an elevated chair or bounce on a ball, naturally working out their excess energy while staying focused on the work in front of them. (p. 4)

Teachers could create an environment where students are given a choice and have a voice to help foster student autonomy in their learning. Student choice in flexible seating may contribute to a students' ability to self-manage, self-monitor, and self-regulate, which could lead to positive student autonomy (Pfeiffer et al., 2008). Student autonomy, or independence, is a goal that we as educators have for our students. (Wright, 2018) stated:

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Flexible seating gives students the option to control their physical environments in which they work best. In other words, with choices, students gain greater flexibility and control of their surroundings giving them the autonomy and comfort to stay engaged and focused. This leads to increased student engagement which is linked to higher motivation and academic performance, as well as improved overall behavior. (p. 2)

When teachers offer students the option to choose where they will learn, it gives them the flexibility to make them feel empowered in their learning.

Research Question

Our research question is: To what extent does traditional seating vs. flexible seating affect students on task behavior and students' perceptions of autonomy and learning?

Conclusion

Overall, these articles helped us to understand the importance of flexible seating in regard to student focus and on-task behavior. Kennedy is a scholar that I will continue to follow and use his findings to further research flexible seating and how it truly benefits student retention of information and focus. In response to Covid-19, Vaglica helped give us more insight and perspective on parent-involvement during distance learning. She specifically noted the learning space at home. It is important for families to create a positive, flexible home learning environment.

We believe that student choice in seating can have an overall positive impact on student engagement, retention of content, and enjoyment in student learning. Some students really do

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thrive with a desk and a chair; however, the majority of our classes are yearning for their option of seating that best suits them and their individual learning styles. While following the mandated health guidelines and restrictions this year, we are creatively working hard to continue to have more flexible seating options in our classrooms.

CHAPTER 3

METHODS

Introduction

Previously in traditional classrooms, students sat at desks or tables, often assigned to them. They may have had limited opportunity to move around the classroom. With the flexible seating option, classrooms were arranged in a variety of ways. Students were given the choice. Flexible seating options included but were not limited to, low tables, couches, a cushion or rug on the floor, clipboards, tray tables, bean bag chairs, exercise balls, wheeled chairs, standing desks and more.

The benefits of traditional seating flexible seating lent itself especially well to group work, which was much more common in classrooms lately than it was decades ago. Teachers also benefited from the flexible seating arrangement. We had been shifting from traditional seating of students sitting at desks in rows, to the 21st Century classroom model where students are able to have a choice in seating. “Our classroom environments should be conducive to open collaboration, communication, creativity and critical thinking. This simply cannot be done when kids are sitting in rows of desks all day” (Delzer, 2016).

The purpose of this study was to find out the affects that traditional vs. flexible seating have on student on-task behavior, as well as their perceptions and learning. Educators found out more information about students’ individual learning styles on a larger scale. Students had more opportunity to find out more about their own learning styles and why a particular seating choice may enhance their overall learning experience. It increased student engagement and moral.

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Numerous schools had adopted the flexible seating model in order to engage and prepare all learners for our everchanging world.

Research Question

To what extent does traditional seating vs. flexible seating affect student on-task behavior and student perceptions of autonomy and learning?

Research Design

When pondering the research question, and after researching the possible designs, the decision was made that the Survey and Correlational Research Designs best fit this research study. The hope was to develop deeper understanding and knowledge of these designs and analysis of the results. For the survey design, two different surveys were used. The first one was entitled, Traditional Seating. This survey was conducted before the ‘traditional seating week.’ The second survey was entitled Flexible Seating. This survey was also conducted before the ‘flexible seating week.’

A longitudinal panel study survey (see Appendix A and B) was conducted in the classroom setting. This survey was administered to the same group of participants at different times. The traditional and flexible seating surveys were conducted before and after the traditional and flexible seating weeks. Trends were noted and analyzed over time.

The student seating surveys aligned with the research question because students were asked what their views, preferences, and attitudes towards their learning environment were. Flexible seating choice would lead to better student autonomy and student engagement. The

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ultimate goal was to become more thoughtful and purposeful teachers who give their students opportunities to discover how they learn best.

Setting

The setting of this study took place in two different schools within the West Fargo Public School District in urban settings of Fargo and West Fargo, ND. Each school had between 400-500 students in its population at the time of this study. Osgood Elementary School, which is a Title I school, had 30% of its student population receiving free or reduced lunch. Legacy Elementary School had 10% of its students receiving free or reduced lunch. During the 2019-2020 school year, the West Fargo School District had a total of 10,950 students within 20 schools. The population included 84% Caucasian, 6% African American, 4% Asian, and 3% Hispanic. The district had 896 English Language Learners (EL students) which was 12% of the district's population at that time. 1,476 students were on individualized education plans (I.E.P's) which was 7.4% of the school district.

Fargo, ND is the largest city in North Dakota with over 124,000 people. It is home of the NDSU powerhouse football team. The historic downtown is full of unique lodging and eating establishments. It is also home to many colleges and tech schools. With its northern location, Fargo is also known for harsh winters and cool temperatures throughout most of the year. Fargo and the surrounding communities are known for their fertile grounds and agriculture, harvesting corn, wheat, beans, and sugar beets as some of the top crops.

Participants

For the academic school year of 2020-2021, our population was comprised of 19 second and 22 third grade students in the West Fargo Public School District. The ages range from seven and nine years of age. In the second-grade classroom, there were 11 boys and 9 girls participating in the study. In the third-grade classroom, there were 3 boys and 9 girls who participated.

The participants in this study were two diverse groups of learners. In the second-grade classroom, there were 18 Caucasian students and one Indian American. In the third-grade classroom, there were 14 Caucasian students, seven African American students, and one Asian student. Additionally, in the third-grade classroom, there were two special education students and one English Language Learner.

Sampling. The sample of this study was 19 second grade students and 22 third grade students in the 2020-2021 academic school year. All students were given the equal opportunity to participate in this study. The results of this study helped guide our instruction and better understand our learners and what type of seating motivated them to succeed academically.

Instrumentation

The instruments used to collect data was an on and off-task tally chart as well as the student perception surveys, which are included in Appendix A. We conducted a longitudinal survey, more specially a panel study in the classroom setting. The survey was administered to the

same group of participants at different times. The traditional and flexible seating surveys were conducted before the traditional and flexible seating weeks.

Data Collection. First, all students completed the student perception survey before week one (traditional seating) and again before week two (flexible seating). This brought us insight and information regarding their attitude towards flexible and traditional seating. During week one, on-task vs. off-task behaviors were tallied during four different intervals in independent daily 5 rotations in the span of four days. Due to the COVID-19 pandemic, our district operated in the hybrid-model of instruction.

Data Analysis. For data analysis purposes, we used the quantitative approach. We recorded the results of the pre and post student perception surveys in a bar graph. This ultimately led us to a clear result when analyzing the highlighted differences among positive, neutral, and negative “smiley” responses. We recorded the on and off-task tally data into an Excel spreadsheet which calculated percentages. We noticed trends in flexible vs. traditional seating and the correlation between on and off-task behavior.

One of the most intriguing aspects of this study was the comparisons, differences, and trends between 2 different grade levels. This led to other questions such as the effects of seating due to age and maturity. One goal of the study was to learn more about the power of choice and the effects it has on student autonomy and on-task behaviors. Another goal was to provide more opportunities of choice throughout our students’ day, not just in seating choices. Ultimately students should acquire a positive outlook on learning and gain autonomy in the classroom. Flexible seating was an important factor in reaching those goals.

Research Question and System Alignment. Table 3.1 below provides a description of the alignment between the study Research Question and the methods used in this study to ensure that all variables of the study have been accounted for adequately.

Table 3.1

Research Question Alignment

1 Research Paradigm	2 Research Design	3 Research Question	4 Variables	5 Instrument(s)	6 Source(s) and expected Sample Size	7 Data Analysis
Quantitative	Correlational Research (On and Off-Task Tally Chart) Survey Research (Perception Survey)	To what extent does traditional seating vs flexible seating affect students' on-task behavior?	IV: Traditional vs. Flexible Seating DV: On-Task Behavior DV: Student Autonomy	IV: Student Perception Survey (Positive, Neutral and Negative Smiley Faces) Tradition Seating (Desk and Chair) Flexible Seating (Wobbly Chair, Standing Table, Stools, Core Disks, etc.) DV: On and Off-Task Behavior Tally Chart	Second grade participants and third grade participants Sample Size Second Grade: 19 Third Grade: 23	We will conduct the perception survey before week 1 and again after week 2. After the second week, we will calculate traditional vs. flexible seating data and enter it into an excel sheet.
		To what extent does traditional seating vs. flexible seating affect students' perceptions of autonomy and learning?				

Procedures

The action research study took place during the literacy center time (Daily 5). Due to scheduling, these rotations were different in second and third grade. With the student perception survey data in mind, week one began with traditional seating. Prior to week two, students took the second perception survey. Four times a day each week, tallying took place to record on and

Effects of Flexible Seating

off-task behavior in 15-minute durations. When observing independent student work time, specific student on-task behaviors were observed, such as: eyes on their work, writing utensils on their paper, voices off, and quality work completion. Significant occurrences were noted, positive or negative, that could alter the research findings. For example, if a student had a behavior issue or a fire drill occurs. These examples could happen at any time and could alter the results.

Ethical Considerations

The participants or students were a vulnerable population since they were young children. However, their level of risk was extremely minimal with this research study. Parents or students had the opportunity to opt out at any time during the duration of the study.

There were minimal threats in the survey data. One threat could have potentially been ‘instrument decay’. Any type of seating, traditional or flexible, could become damaged or unusable. The second factor was the possibility of a student becoming injured due to not properly using the seating option. In a sense, there was a limit on time and sample size. This was a short period of time for observation. A benefit of this study was analyzing two groups of students. Finally, due to COVID-19, the learning environment may have changed. For example, instruction could fluctuate among these instructional methods: in-person learning, hybrid, or even distance learning. This would affect the validity of observations and research results and findings.

Overall, most young students want to please their teacher. Some anxious students may become uncomfortable or experience anxiety in the duration of the study. They are empathetic

toward their teacher. Students understand that this is an important aspect of their teacher's continuing education and may feel pressured to perform well for their teacher. The researchers tried their best to relieve this possible anxiety from their learners and reassured the students to do their best.

Conclusion

Student choice in seating can have an overall positive impact on student engagement, retention of content, and enjoyment in student learning. In this chapter, survey and data collection was discussed. The best research design was carefully considered. On-task behaviors were named specifically. The 2020 school year was unique and different in education due to COVID-19. The research study was conducted with guidelines and restrictions in mind.

CHAPTER 4

RESULTS

Data Collection

The results of this study show the effects of traditional vs. flexible seating in the lower elementary grades. One of the biggest hurdles of educators was student engagement and focus. The purpose of this study is to see whether student engagement correlates with types of seating and student choice in the matter.

Data were collected in a quantitative form. These data were made and collected by both educators. Participants were second and third grade elementary students. Tally charts, shown in Appendix I, were used to record students' on/off task behaviors. Google Forms were used to survey students' perceptions regarding traditional and flexible seating. It is important to note that the data reflected students in a socially distanced classroom environment with both traditional and flexible seating practices.

Through data analysis, we were able to find patterns and trends within each type of seating experience. We verified and evaluated our data through the quantitative approach. According to "Quantitative research methods are concerned with collecting and analyzing data that is structured and can be represented numerically" (Goertzen, 2021). Data collected with the student perception survey were analyzed and pie charts were used to show students' seating preferences. This showed number of students on and off-task behavior during independent center time and was represented in a chart.

Results

Figure 4.1 shows on and off-task data during independent stations in the 2nd grade classroom. It is apparent that students were mostly on task, but a little more attentive in flexible seating week 1. Data was very consistent for week 1 and week 2. This correlates with student perception surveys. Overall, most 2nd grade students enjoy flexible seating, which correlates with their on-task behaviors.

Figure 4.1

On and Off-Task Tallied Behaviors for Traditional and Flexible Seating in 2nd Grade

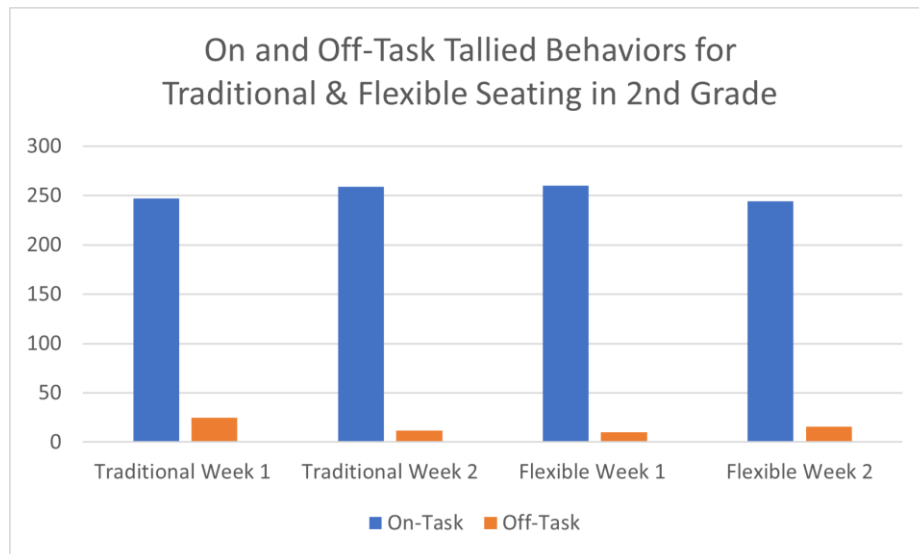


Figure 4.2 shows on and off-task data during independent stations in the 3rd grade classroom. The most evident trend is that 3rd graders had less off-task behaviors during the flexible seating weeks.

Figure 4.2

On and Off-Task Tallied Behaviors for Traditional and Flexible Seating in 3rd Grade

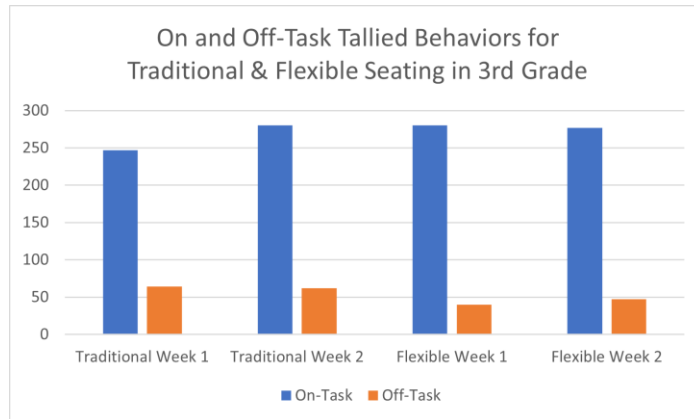


Figure 4.3 shows on and off-task data during independent stations in the 2nd and 3rd grade classrooms combined. When analyzing this bar graph, we were surprised that week 2 of both traditional and flexible seating had higher on-task behavior. Our assumption is that it takes some getting used to when changing the classroom environment with seating.

Figure 4.3

On and Off-Task Tallied Behaviors for Traditional and Flexible Seating in 2nd and 3rd Grade

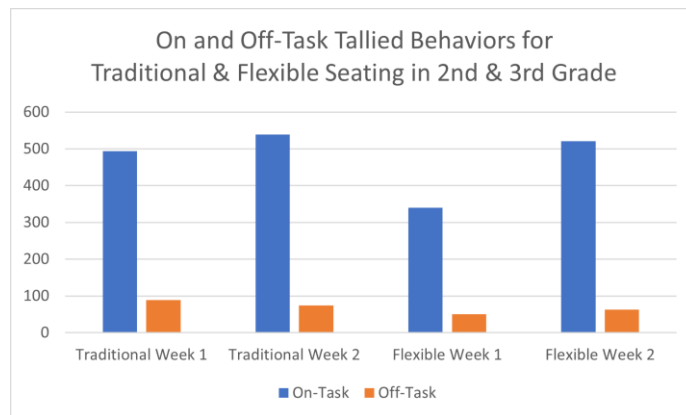


Figure 4.4 provides a data analysis of student perception of traditional seating in the 2nd grade classroom. It is important to note that T means ‘Traditional’ and the numbers are the numbered statements in the survey. Refer to Appendix A for the survey statements. According to T9 in the graph, it is apparent that most students enjoy having a seating choice. The results of T5 and T6 were significant as it shows students are less comfortable in the classroom environment while sitting in traditional seating.

Figure 4.4

Student Perception Survey Traditional Seating Results 2nd Grade Classroom

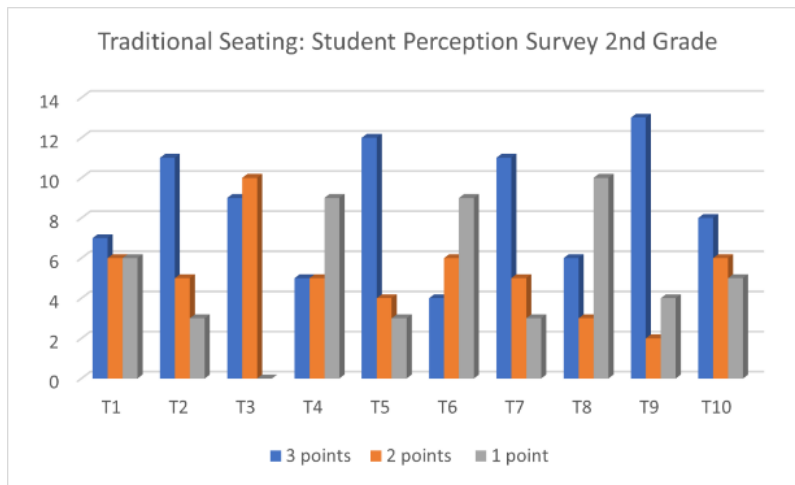


Figure 4.5 provides a data analysis of student perception of traditional seating in the 3rd grade classroom. When looking at the data, T3, T5, and T7 all relate to body control and focus. Most students feel that they are more comfortable and more focused in traditional seating.

Figure 4.5

Student Perception Survey Traditional Seating Results 3rd Grade Classroom

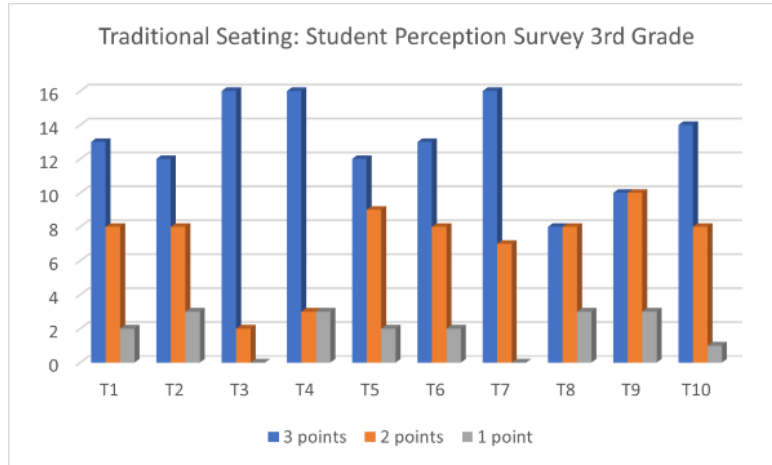
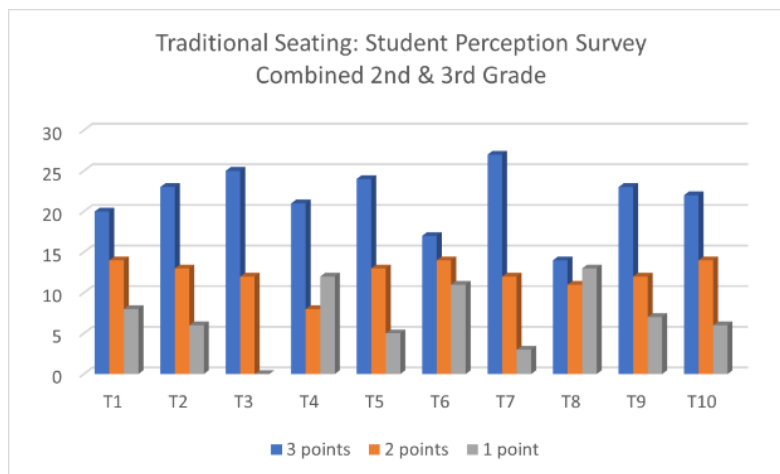


Figure 4.6 provides a data analysis of student perception of traditional seating in the 2nd and 3rd grade classrooms combined. In regard to T8, results show that students had no definite preference when the teacher chooses their seating.

Figure 4.6

Student Perception Survey Traditional Question Results 2nd and 3rd Grade Classrooms



Effects of Flexible Seating

Figure 4.7 provides a data analysis of student perception of flexible seating in the 2nd grade classroom. Data showed that majority of 2nd graders prefer flexible seating and feel as though they have control over their bodies. Data represented on F8 showed that students would rather not have the teacher pick their spot for them.

Figure 4.7

Student Perception Survey Flexible Question Results 2nd Grade Classroom

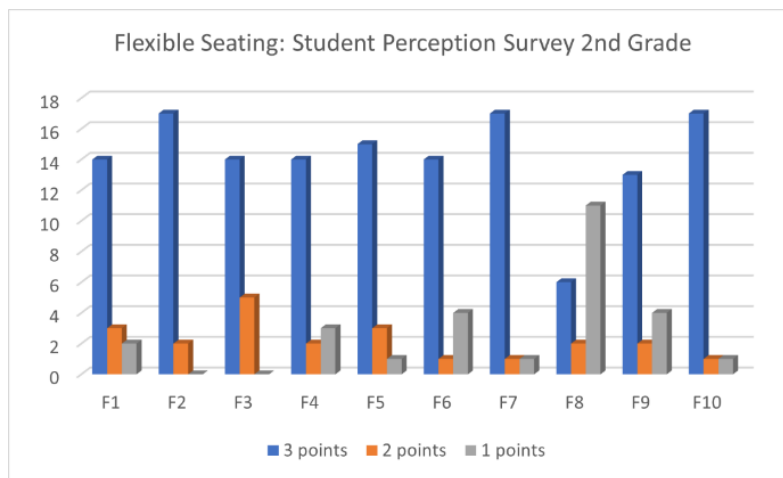


Figure 4.8 provides a data analysis of student perception of flexible seating in the 3rd grade classroom. 3rd grade students like flexible seating but seem to be aware of the fact that they may not be as attentive and in control of their bodies.

Figure 4.8

Student Perception Survey Flexible Question Results 3rd Grade Classroom

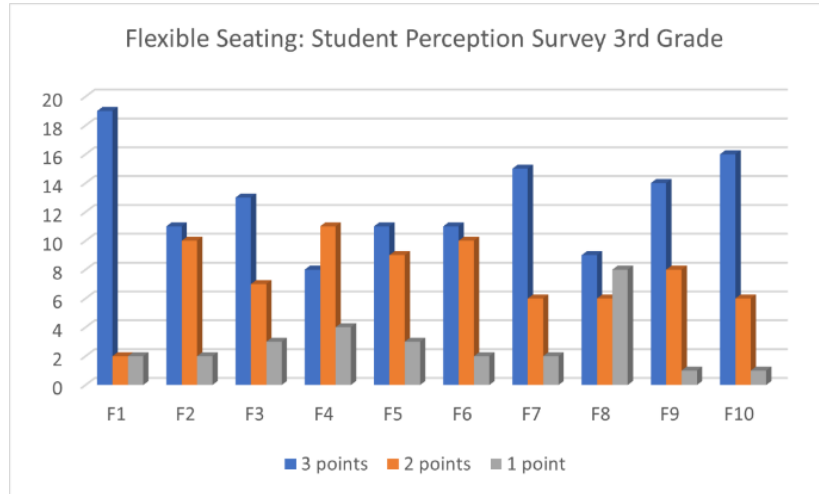
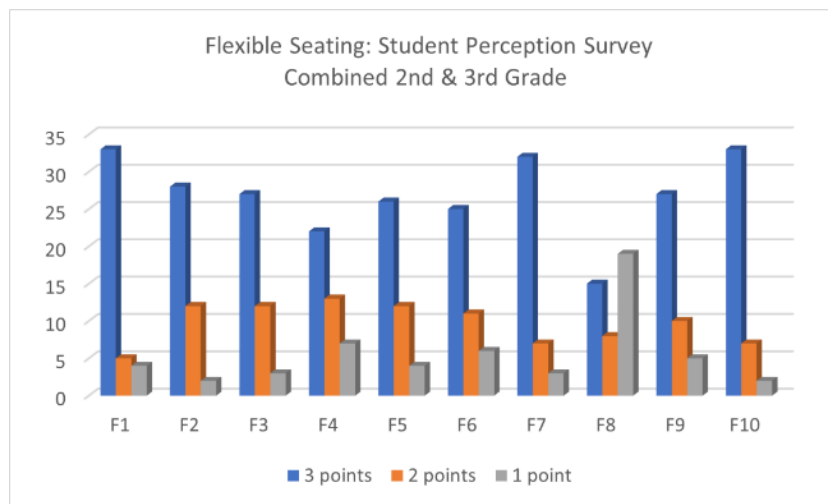


Figure 4.9 provides a data analysis of student perception of flexible seating in the 2nd and 3rd grade classrooms combined. Overall, the majority of students have a positive perception of flexible seating and having a choice in their seating.

Figure 4.9

Student Perception Survey Flexible Question Results 2nd and 3rd Grade Classrooms



Data Analysis

The data from this quantitative study were carefully analyzed. Figures 4.1, 4.2, and 4.3 showed the results of on and off-task tallied behaviors that were recorded by the educators during the traditional and flexible seating weeks. This was over a course of four weeks, two traditional seating weeks, and two flexible seating weeks. After recording, each educator entered the data into an excel spreadsheet, creating the bar graphs to show trends related to on and off-task behaviors. The data show that in the 2nd grade classroom, there was slightly more off-task behaviors in the traditional seating weeks. In the 3rd grade classroom, the data also showed there was slightly more off-task behavior in the traditional seating weeks. It was evident that no matter which seating option, traditional or flexible, the majority of students were on-task during their independent work time. Appendix I shows the teacher tallies for on and off-task behaviors. Some notes are listed on the sides, for example, students absent or special events such as extra recess time.

Figures 4.4, 4.5, and 4.6 showed traditional seating perception survey data results in 2nd and 3rd grade. All the figures clearly showed that majority of students were happy with traditional seating, but even more so in the 3rd grade classroom. It should be noted that all of the specific student perception survey statements are listed in Appendixes A and B.

Figure 4.7, 4.8, and 4.9 showed flexible perception survey data results in 2nd and 3rd grade. The data undoubtedly showed that majority of students were happy with flexible seating, even more so than traditional seating. Second grade showed higher interest in flexible seating compared to 3rd grade.

Conclusions

In the time of which the data were collected, there was a great deal of uncertainty in education due to COVID-19. As educators, we were faced with the challenge of safely socially distancing our students in the classroom environment. We knew that we were intrigued by flexible seating and how it affects student focus in a positive way. The results showed less off-task behaviors in the flexible seating weeks in both 2nd and 3rd grade classrooms. Extensive research on flexible seating and the results of our research study, favored our hypothesis that students would be overall more focused and have a higher rate of student autonomy in flexible seating.

CHAPTER 5

IMPLICATIONS FOR PRACTICE

Action Plan

Before our research study was conducted, we had contemplated the effectiveness of tradition vs. flexible seating and how it affected students' on and off-task behaviors, as well as student autonomy. The abundance of research and literature reviews conducted has allowed us as educators and students as learners to develop a deeper understanding of flexible seating. This includes all students being able to pick a flexible seating option that coincides with their learning style. If students know the best way they can learn, then they can correlate and appropriately choose a good seating choice, making the connection between their learning style and the seating choice. This will help with their focus and understanding of content. For example, a student with high energy had more on-task behaviors sitting in a swivel chair. On the contrary, another student who likes her space and less contact with her peers, feels more comfortable and focused in a chair at a desk. As educators, we now know the benefits and advantages of flexible seating, which helps us to set up the ultimate learning environment for student success. We have also learned how important it is for educators to understand student opinions and feelings towards seating. It helps with the overall classroom environment to know they feel comfortable and safe.

Going forward, this will be a yearly routine at the beginning of the year, that may need some revamping and reteaching throughout the year. We plan to give a version of the student perception surveys to figure out how to best accommodate our students' learning styles, needs, and feelings. After giving seating options, we also plan to tally on and off-task behaviors to see how effective the seating is based on and off-task behaviors.

Effects of Flexible Seating

We have learned that we would make modifications to our research approach and data analysis. A few of the changes would include adding more notes to the on and off-task tally chart, using an online survey option rather than paper/pencil survey, and would gather the student perception information in the fall to start out the school year rather than the spring semester.

Adding more notes to the on and off-task tally chart would help us to pinpoint which students may need a different seating option. This tells us that something is impeding their learning, whether it is their seating choice or something else. We feel this would be a necessary modification because throughout our tallying, we noticed some students were specifically showing the off-task behaviors more frequently.

We found that the paper copies of the student-perception surveys were ineffective for the study. Earlier in our initial research plan, we stated that we would give the surveys in paper form. We soon realized that it was ineffective because it was time consuming to analyze the paper copies. We decided to use Google Forms because it was more effective, organized, and data analysis was much simpler. It was also fun for our students to participate in an online survey and added a technology piece to our study.

Lastly, we would give a student perception survey right away in the fall semester of the school year. These data would be important to analyze earlier than later, giving us more information on what students prefer and using that data to create the ultimate classroom learning environment. Then teachers can modify seating options throughout the school year based on on and off-task tallies during independent work time. It would also be beneficial to take it a step further and analyze which students are off-task frequently and why this may be occurring.

Plan for Sharing

Since we are both team leaders in our buildings, we plan to share our findings with our principal, leadership teams, and our grade level teams. We feel confident in sharing the benefits of flexible seating and also student perceptions of seating in the classroom environment. We will proudly share our surveys, tally charts, and results of our findings. We feel it is important for all students to have the opportunity to share their feelings towards seating and have opportunities to make decisions in their educational journeys.

We feel very proud of our research study and all the time and effort that went into these findings. It was amazing to see that the results actually supported our hypothesis. We feel that we have grown as educators and have become more thoughtful in planning for our overall classroom environment. Just like our students, educators are forever learners. We learned a lot through our research, through the process of conducting the research project, as well as analyzing the results.

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



















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Appendix A

Name: _____		
Date: _____		
1.	I like sitting in a chair at a desk.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
2.	Sitting in a desk with a black chair helps me learn.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
3.	I can control my body when I sit in a desk.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
4.	I feel more focused when I am sitting alone rather than with my peers.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
5.	I feel comfortable in my classroom when I sit in chair at my desk.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
6.	I like to sit in a chair at desk all day.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
7.	I am good at sitting in a chair at a desk all day.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
8.	I like when my teacher picks my desk spot.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
9.	I like when I can choose my chair and desk spot.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 
10.	A desk with a chair is a good spot for me.	<input type="radio"/>  <input type="radio"/>  <input type="radio"/> 

Appendix B

Name: _____		Flexible Seating			
Date: _____					
1.	I like sitting in different types of seating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
2.	Flexible seating helps me learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
3.	I can control my body when I sit in my flexible seating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4.	I feel more focused when I sit with peers rather than by myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
5.	I feel comfortable in the classroom when I sit in my flexible seating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
6.	I like to sit in my flexible seating all day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
7.	I am good at sitting in my preferred flexible seating all day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
8.	I like when my teachers picks my flexible seating for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
9.	I like when I can choose my own flexible seating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
10.	My flexible seating choice is a good spot for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Appendix C

Traditional Seating		
Day 1		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1		
2		
3		
4		
Traditional Seating		
Day 2		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1		
2		
3		
4		
Traditional Seating		
Day 3		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1		
2		
3		
4		
Traditional Seating		
Day 4		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1		
2		
3		
4		

Appendix D

Flexible Seating		
Day 1		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1		
2		
3		
4		
Flexible Seating		
Day 2		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1		
2		
3		
4		
Flexible Seating		
Day 3		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1		
2		
3		
4		
Flexible Seating		
Day 4		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1		
2		
3		
4		

Appendix E

November 11, 2020

5150 9th Street West
West Fargo, ND 58078

Dear Parent or Guardian, |

Your child has been invited to participate in a study. The purpose of the study is to see if flexible seating options will help students stay on task and improve independent stamina during stations.

Your child was selected because he/she is in my regular education classroom. If you decide to participate please understand that your child will be asked to do the following. These are typical classroom activities that involve no risk to your child.

1. Your child will be doing independent learning activities during Daily 5 stations. The activities will be our normal classroom activities.
2. Students will take a Seating Survey, circling a sad, straight, or smiley face to show their thoughts on seating.
3. I will tally students "on task" vs. "off task behavior" 4 times within an hour for 10 days to collect data.

I have gotten district approval and Mr. Marksusen's permission to conduct this study, but since this information is being used to help me complete my master's degree at Minnesota State University Moorhead, I need to have parental consent to use this information in my final paper that I am required to do as part of my degree. If I didn't need this information to complete my master's degree, I would be conducting this same type of research in my normal everyday lessons and I would not need signatures. If you sign this form, you are giving me consent to use the information that I gather. All information that is used will be confidential, no names will be used. Please also note, that your child can choose to not participate at any time without any consequences.

Please feel free to ask any questions you have regarding this study. You may contact me via email lindell@west-fargo.k12.nd.us. You can also contact my MSUM advisor, Michael Coquyt at michael.coquyt@mnstate.edu for further information.

You will be offered a copy of this form to keep. You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

Signature of Parent or Guardian

Date

Signature of Investigator

Date

Appendix F

November 11, 2020

5550 44th Ave S
Fargo, ND 58104

Dear Parent or Guardian,

Your child has been invited to participate in a study. The purpose of the study is to see if flexible seating options will help students stay on task and improve independent stamina during stations.

Your child was selected because he/she is in my regular education classroom. If you decide to participate please understand that your child will be asked to do the following. These are typical classroom activities that involve no risk to your child.

1. Your child will be doing independent learning activities during Daily 5 stations. The activities will be our normal classroom activities.
2. Students will take a Seating Survey, circling a sad, straight, or smiley face to show their thoughts on seating.
3. I will tally students "on task" vs. "off task behavior" 4 times within an hour for 10 days to collect data.

I have gotten district approval and Mrs. Toy's permission to conduct this study, but since this information is being used to help me complete my master's degree at Minnesota State University Moorhead, I need to have parental consent to use this information in my final paper that I am required to do as part of my degree. If I didn't need this information to complete my master's degree, I would be conducting this same type of research in my normal everyday lessons and I would not need signatures. If you sign this form, you are giving me consent to use the information that I gather. All information that is used will be confidential, no names will be used. Please also note, that your child can choose to not participate at any time without any consequences.

Please feel free to ask any questions you have regarding this study. You may contact me via email ivanveen@west-fargo.k12.nd.us. You can also contact my MSUM advisor, Belma Sadikovic at Belma.Sadikovic@mnstate.edu for further information.

You will be offered a copy of this form to keep. You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

Signature of Parent or Guardian

Jessica Van Veen

Signature of Investigator

Date

11/11/20

Date

Appendix G

RESEARCH STUDY REQUEST

I hereby request permission to conduct a research study in the West Fargo Public School District during the period from November to December.

TOPIC:

My research questions are:

- 1. To what extent does traditional seating vs. flexible seating affect students on task behavior?
- 2. To what extent does traditional seating vs. flexible seating affect students' perceptions of autonomy and learning?

I chose to focus on the seating in the classroom environment and how that can affect the students' ability to focus, as well as the impact on having a choice in flexible seating.

If this request is granted, I agree to abide by Administrative Policy 4800: refer to the Administrative policies in each building Administrator's office or in the Human Resources office.

Signature of Researcher: Lindsay Lindell

Institution of Higher Education: _____

Signature of Graduate Advisor: M. C. P.

Date: November 12, 2020

In addition to completing the Research Study Request Form, a copy of the following items are attached for review:

- 1. Abstract of the project
- 2. Questionnaire(s) to be used
- 3. Consent letter to be sent to parents

Endorsement: This request is approved disapproved

Approval for Action Research Administrator: G. Gustafson

Date: 11/16/20

A copy of the approval form must be presented to the school building principal before conducting any survey. The principal has the final approval to conduct a survey in a school building.

Effects of Flexible Seating

Please print your name and the mailing address where you want this form returned:

Name: Lindsey Lindell

Street Address: Legacy Elementary 5150 9th St. West

City, State, & Zip: West Fargo, ND 58078

Appendix H

RESEARCH STUDY REQUEST

I hereby request permission to conduct a research study in the West Fargo Public School District during the period from Nov. 2020 to Dec. 2020

TOPIC: Do flexible seating options help students stay on task and improve independent student stamina during center time?

If this request is granted, I agree to abide by Administrative Policy 4800: refer to the Administrative policies in each building Administrator's office or in the Human Resources office.

Signature of Researcher: Jessica Van Veen

Institution of Higher Education: Minnesota State University Moorhead

Signature of Graduate Advisor: [Signature] Dr. Belma Sadikovic

Date: 11/12/20

In addition to completing the Research Study Request Form, a copy of the following items are attached for review:

1. Abstract of the project
2. Questionnaire(s) to be used
3. Consent letter to be sent to parents

Endorsement: This request is approved disapproved

Approval for Action Research Administrator: [Signature]

Date: 11/18/20

A copy of the approval form must be presented to the school building principal before conducting any survey. The principal has the final approval to conduct a survey in a school building.

Please **print** your name and the mailing address where you want this form returned:

Name: Jessica Van Veen (Osgood Elementary School)

Street Address: 5500 44th Ave S

City, State, & Zip: Fargo, ND 58104

Appendix I

Traditional Seating		
Day 1 <i>3/1/21 Monday</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	17	2
2	15	0
3	14	1
4	15	4
Traditional Seating		
Day 2 <i>3/2/21 Tuesday</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	18	1
2	13	2
3	15	0
4	19	0
Traditional Seating		
Day 3 <i>3/3/21 Wednesday</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	17	2
2	14	1
3	15	0
4	16	3
Traditional Seating		
Day 4 <i>3/4/21 Thursday</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	17	2
2	13	2
3	14	1
4	15	4

17/19
15/15
14/15
15/19
18/19
13/15
15/15
19/19
17/19
14/15
15/15
16/19
17/19
13/15
14/15
15/19

Traditional Seating		
Day 1 <i>3/5</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	19	0
2	15	0
3	15	0
4	18	1
Traditional Seating		
Day 2 <i>3/9</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	17	2
2	13	2
3	15	0
4	19	0
Traditional Seating		
Day 3 <i>3/10</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	18	1
2	15	0
3	13	2
4	18	1
Traditional Seating		
Day 4 <i>3/11</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	17	2
2	15	0
3	15	0
4	17	2

19/19
15/15
15/15
18/19
17/19
13/15
15/15
19/19
18/19
15/15
13/15
18/19
17/19
15/15
15/15
17/19

Flexible Seating		
Day 1 <i>3/8/21 3/5</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	19	0
2	15	0
3	15	0
4	19	0
Flexible Seating		
Day 2 <i>3/16</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	19	0
2	15	0
3	14	1
4	18	1
Flexible Seating		
Day 3 <i>3/17</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	19	0
2	14	1
3	14	1
4	17	2
Flexible Seating		
Day 4 <i>3/18</i>		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	16	2
2	14	1
3	14	1
4	18	0

19/19
15/15
15/15
19/19
19/19
15/15
14/15
18/19
19/19
14/15
14/15
17/19
16/18
14/15
14/15
18/18

1 student absent

Flexible Seating <i>3/22/21</i>		
Day 1		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	17	1
2	15	0
3	15	0
4	15	3
Flexible Seating		
Day 2		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	18	1
2	15	0
3	14	1
4	18	1
Flexible Seating		
Day 3		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	18	1
2	15	0
3	14	1
4	17	2
Flexible Seating		
Day 4		
15-minute intervals	On-Task Behavior Tallies	Off-Task Behavior Tallies
1	16	3
2	15	0
3	15	0
4	17	2

1 student gone

17/18
15/15
15/15
15/18
18/19
18/19
15/15
14/15
18/19
18/19
15/15
14/15
17/19
16/19
15/15
15/15
17/19

Effects of Flexible Seating

Week 1 March 1-4

Traditional Seating			Total
Day 1			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	18	###	23
2	14	##	19
3	15		19
4	20		23
Traditional Seating			
Day 2			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	18		22
2	17		19
3	17		19
4	17	###	22
Traditional Seating			
Day 3 Wed no speech			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	18	###	Rece:
2	12	###	19
3	19		23
4	14	###	19
Traditional Seating			
Day 4			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	17	###	23
2	15		19
3	16		19
4	18	###	23

Notes:
one
absent

2*
absent

1 left
early

Week 2 March 8-11
gained 1 student

Traditional Seating			Total
Day 1			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	20		24
2	17		19
3	17		19
4	18	###	24
Traditional Seating			
Day 2			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	19		22
2	17		18
3	17		18
4	18		22
Traditional Seating			
Day 3 Wed - no speech			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	19	###	24
2	17		20
3	17	###	24
4	16	###	23
Traditional Seating			
Day 4			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	19	###	24
2	16		19
3	16		19
4	17	###	23

Week 1 March 22-25
lost 1 student

Flexible Seating			Total
Day 1			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	21		23
2	17		18
3	17		18
4	19		22
Flexible Seating			
Day 2			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	20		23
2	16		18
3	16		18
4	17	###	22
Flexible Seating			
Day 3			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	19		23
2	17		18
3	17		18
4	19		22
Flexible Seating			
Day 4			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	17	###	22
2	14		17
3	15		17
4	19		21

*
one
absent

2*
gone

*
2
gone

1 left
early

Week 2 March 29-April 1

Flexible Seating			Total
Day 1			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	20		23
2	17		19
3	18		19
4	18		22
Flexible Seating			
Day 2			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	18		21
2	18		19
3	18		19
4	18		20
Flexible Seating			
Day 3			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	16	###	21
2	17		19
3	16		19
4	15	###	20
Flexible Seating			
Day 4			
15-minute intervals	On-Task Behavior Tallys	Off-Task Behavior Tallys	
1	17	###	23
2	16		19
3	17		19
4	18		22