TEACHERS AND SEATING ARRANGEMENTS AND ASSIGNMENTS: A QUALITATIVE STUDY

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Mary P. Kinahan

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Abstract

Seating assignments and arrangements are utilized in every school classroom. This qualitative study explored the perceptions that teachers have on seating assignments and arrangements to gain a better understanding of how they make design considerations which impact their students. The questions that guide this study are: How do elementary teachers in Grades Two through Five describe their experiences with seating assignments and desk arrangements, and how do they make sense of these experiences as they relate to fostering the social, behavioral, and academic success of their students? The research was conducted by employing a qualitative approach. The researcher derived information from one-on-one interviews with five Lower School teachers at an independent school in Massachusetts. Bandura’s (1986) Triadic Reciprocal Model served as the theoretical framework. This model explained that behavior is a result of interactions among personal characteristics and environmental factors. Teachers reflected upon their personal experiences, their classroom environment, and student behavior. By considering these factors and their relationship with one another, teachers can make more informed decisions about classroom design and how they meet the social, emotional, and academic needs of students. The act of reflection was a positive experience for participants, but one that they rarely considered.

Keywords: qualitative, seating assignment, seating arrangement, social, behavioral, and academic implications of seating
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Table of Contents

Abstract..................................................................................................................2

Acknowledgements.................................................................................................3

Chapter One: Introduction .......................................................................................7
  Statement of Problem ...........................................................................................7
  Significance of Problem .......................................................................................9
  Positionality .........................................................................................................10
  Central Research Question ...............................................................................11
  Theoretical Framework .......................................................................................11
  Conclusion ...........................................................................................................17

Chapter Two: Literature Review .............................................................................18
  Social Implications ..............................................................................................18
  Behavioral Implications .....................................................................................21
  Academic Implications .......................................................................................24
  Conclusion ...........................................................................................................26

Chapter Three: Methodology ...............................................................................28
  Research Question .............................................................................................28
  Paradigm ............................................................................................................28
  Research Tradition ............................................................................................29
  Participants ........................................................................................................30
  Setting ................................................................................................................30
  Recruitment and Access .....................................................................................31
  Protection of Human Subjects ............................................................................31
| Obtaining Informed Consent                                      | 31 |
| IRB Approval                                                  | 32 |
| Data Collection                                               | 32 |
| Data Storage and Management                                   | 32 |
| Data Analysis                                                 | 33 |
| Trustworthiness                                               | 34 |
| Conclusion                                                    | 35 |

**Chapter Four: Research Findings and Analysis** .......................... 36

Participant Profiles .................................................................... 36

Emergent Themes ........................................................................... 40

  Theme 1: Understanding Students’ Needs and Planning .................. 40

  Theme 2: Variety of Classroom Goals ........................................ 49

  Theme 3: Utilization of Seating to Meet Individualized Student Goals ... 55

  Theme 4: How Manipulating the Physical Environment is Optimized ...... 63

Conclusion .................................................................................... 69

**Chapter Five: Discussion and Implications for Practice** .................. 72

Summary of Findings ....................................................................... 72

Findings in Relation to Theoretical Framework ............................... 76

Findings in Relation to Literature Review .......................................... 79

Limitations ..................................................................................... 82

Changes in Positionality ................................................................. 83

Implications for Practice and Research ........................................... 83

Conclusion ..................................................................................... 88
References ................................................................................................................91
Appendix A: Interview Protocol ........................................................................... 95
Appendix B: Informed Consent Form ..................................................................... 96
Appendix C: Recruitment Email ............................................................................ 99
Appendix D: IRB Action Form .............................................................................110
Appendix E: Site Permission Form ......................................................................111
Appendix F: Application for Approval for Use of Human Participation ............114
Chapter One: Introduction

Statement of the Problem

In elementary classrooms, students are assigned to seats that determine where they will sit for up to 35 hours per week. The physical environment is a factor that impacts student achievement (Fernandes, Huang, & Rinaldo, 2011). Manipulating seating is a consideration for teachers as they strive to meet the unique needs of students. However, little is known about the motivation and attention that teachers give to the needs of their students when determining seating arrangements and assignments. How mindful are teachers of the social, academic, and behavioral effects that seating arrangements have on students? What do they consider to be the implications of seating assignments? Are teachers’ educational philosophies driving their decisions regarding seating design and assignments? The purpose of this study was to explore the mindfulness of teachers as they design arrangements and assign seating in their classrooms in order to better understand how these decisions are made that impact a child’s social and academic experience.

Classroom seating design has implications for student learning. The University of Salford, along with architects at Nightingale Associates, conducted a yearlong study to determine if classroom design affects student learning (Barrett & Zhang, 2013). Data was collected from 34 classrooms in seven primary schools with a variety of learning environments and age groups. The researchers surveyed students about age, gender, and academic performance. They evaluated the classroom environment by measuring factors such as noise level and classroom design. In addition, the researchers measured student performance in reading, writing, and math. The physical factors were compared with student performance. The researchers found that the classroom design had a 25 percent impact, positive or negative, on a student’s academic progress.
within a school year (Barrett & Zhang, 2013). Overall, student performance was attributed to design and the environmental factors.

Studies showed that seating arrangements directly affect students behaviorally and academically (Wannarka & Ruhl, 2008; McCroskey & McVetta, 1978). Wannarka and Ruhl (2008) found that the physical arrangements of seats are a critical classroom consideration because they have the potential ability to prevent problem behaviors that interfere with student attention and diminish instructional time. In addition, they suggested that desk configurations altered the nature of student interaction. It is concluded that teachers should be able to eliminate disruptions and increase participation through the use of the appropriate arrangements.

While there are a number of ways to arrange a classroom, the three most commonly identified are straight-row, horseshoe, and modular (McCroskey & McVetta, 1978). The traditional straight-row arrangement has been predominant in most educational settings throughout American history. The straight-row design typically is made of rows of desks that face an area of focus in a classroom, such as a Smartboard or a teacher’s desk or podium. The horseshoe design is one where desks are arranged in a U or C shape with the horseshoe opening pointed at the front of the room. The modular design includes clusters or pods. Desks are arranged together in small groups. This design is frequently found in elementary classrooms, where student-student interaction is a priority for many activities and lessons.

Not only do teachers create a seating arrangement, they also determine where each child will sit within that design. This refers to a child’s seating assignment. The term seating assignment implies that a teacher has assigned a seat to an individual with the intention that they remain there for a designated period of time. In elementary schools, most teachers assign seats within their classroom.
According to Fernandes et al. (2011), it is important to examine the perception teachers have about classroom seating arrangements, classroom seating, and the academic and social development of students and their learning. Their article, *Does Where a Student Sits Really Matter?*, provided an in-depth look at the impact of seating locations on student motivation, student-student and student-teacher relationships, the nature of different tasks and activities performed, and classroom participation. Many of the studies that they examined found a strong relationship between classroom seating and student participation, learning, and academic performance. The findings also showed that student behavior then influenced the teachers’ perceptions of individual students. For example, the study showed that when students sit in the front of a room, students were more attentive and teachers perceived them to be better smarter.

A great deal of research has been done on classroom seating arrangements and assignments (Barrett & Zhang, 2013; Fernandes et al., 2011; Van den Berg & Cillessen, 2015; Wannarka & Ruhl, 2008). This research tends to ignore the impact of teachers’ considerations of their positionality and intentionality with regard to classroom seating. The purpose of this research was to gain a better understanding of the teacher’s experience, along with their intent when both arranging and assigning seats.

**Significance of the Problem**

The physical composition of the classroom space plays an integral role in creating the optimal educational experience for children (Fernandes et. al, 2011); one of the most salient components of this environment is the student seating arrangement. From the outset, teachers determine the initial design and implementation of classroom seating assignments and arrangements, and they regularly rearrange seating in response to observations (Van den Berg & Cillessen, 2015). Each and every one of these rearrangements is an important decision: teachers’ choices and actions regarding physical environment directly impact students’ school experiences.
in significant areas: academic achievement, behavior, interaction, and engagement (Van den Berg & Cillessen, 2015; Wannarka & Ruhl, 2008). Given these impactful circumstances, students deserve teachers who are informed about how to best meet the variety of individual academic, social, and behavioral needs through seating assignments and arrangements. Despite its significance, however, the degree to which teachers understand the impact of classroom design is unclear—especially with regard to seating arrangement.

**Positionality**

Briscoe (2005) stated, “dimensions of positionality include one’s demographic positioning within society, one’s ideological positioning, and how one discursively positions the other and oneself” (pp. 31-32). In order to uncover any potential bias, I had to face my own understandings and ideological positioning while examining my relationship with the phenomena of classroom seating and arrangements.

I share many of the same characteristics as the participants. I am a female, a classroom teacher, and mother of two children. As a teacher at the same independent school, I understand the participants’ roles as faculty members, which helped to encourage open dialogue. In addition, I serve as the Lower School Humanities Chairperson. In this close-knit school community that demands excellence, I am among highly dedicated colleagues who are committed to supporting student growth.

Growing up, I devoted much of my time to children. At an early age, I became the neighborhood babysitter and I worked as a camp counselor in the summer. While working with children, I was interested in both their social and cognitive development. I remained interested in the development of children throughout my life. At the university, I dual-majored in elementary education and psychology. For some time, I struggled in the decision to become a classroom
teacher or a school psychologist. While I decided upon being a classroom teacher, my interest in the social, emotional, and cognitive aspect of students remained.

Seating arrangements exist in every classroom. They have academic, social, and emotional implications that concern me as an educator and someone who is invested in the psychology of children. Considering my interest in children at a young age and my educational background, which included a heavy course load in both education and psychology, the experience of assigning and arranging seats became a personal one that required attention.

In order to avoid potential bias and preconceptions, I needed to consider my own viewpoints about classroom arrangements and students and my relationship with participants to accurately interpret interviews. Creswell (2013) recommends that, as a researcher, I needed to determine how and in what way my “personal understandings are introduced into the study” (p. 83). Throughout the study, I kept a journal of my thoughts and experiences so that I could reference the data in my reflections. Although the shared experiences created a connection with the participants that supported a successful interview, I had to separate my own feelings to ensure that the focus remained on allowing participants to tell their stories and understanding their viewpoints.

Central Research Question

What are the experiences of elementary teachers in Grades Two through Five in making seat assignments and seating arrangements and how do these teachers make sense of these experiences as they relate to fostering social, behavioral, and academic success of their students?

Theoretical Framework

The purpose of the study is to provide insight into teachers’ experiences and philosophy when making seating arrangements and assignments. Social Cognitive Theory (1986), specifically Bandura’s Triadic Reciprocal Causation Model, shaped the study by focusing on the
interactions of three elements: behavior, personal factors, and environmental influences. Studies regarding classroom design have only focused on the relationship between the environment and the behavior of students. The inclusion of cognition within the framework allowed for a deeper understanding of the relationship among the factors that engage with one another in the classroom. Social Cognitive Theory was used both to elicit teacher perceptions regarding seating assignments and arrangements and to understand the important role that teachers decisions have on the environment and the students.

**Social Cognitive Theory**

Maintaining its roots in social psychology, Social Cognitive Theory studied the individual within a social or cultural context and focused on how people understand the information they receive from others and produce themselves (Sternberg, 1995). Previous to Bandura’s Social Cognitive Theory (1989), behavioral theories emphasized the role that environment plays on human functioning (Pajares, 2004). The focus was on conditioning, with a belief that learning occurs primarily by interacting with the environment. If an action had a positive result it would likely be repeated. If an action prompted a negative result, it would likely be avoided. Bandura added to this idea by emphasizing that one’s thoughts are essential in grasping knowledge and controlling behavior. He shared that “what people think, believe, and feel affects how they behave” (Bandura, 1986, p. 25). Development was no longer the sole result of consequences, but also an outcome of ones’ understanding of an event.

Another important element of Social Cognitive Theory was the influence that people and the environment have on one another. Bandura’s (1989) perspective connected cognition and one’s personal behavior with the actions of others. Bandura recognized both the social aspects and the cognitive development of human thought, motivation, and action (Pajares, 2004). People learn by observing others within their environment. They internalize the actions of others and the
impact that decisions have on the world around them. Pajares (2004) explained that people are neither solely driven by inner forces nor shaped by their environment (Bandura, 1986). Human action is not only the product of the self and the environment, but rather it is the “dynamic interplay of personal, behavioral, and environmental influences” (Pajares, 2004, p. 340).

Based on the notion that human behavior is part of an active relationship with personal and environmental influences, it emphasized an ongoing relationship between its three components: personal characteristics, behavior, and the environment. The Triadic Reciprocal Causation Model, also known as reciprocal determinism (Bandura, 1986), explained how all three systems interact with one another. When one changes, it influences the others. Understanding that human behavior is a product of interacting factors enhanced our understanding of the experiences of teachers with classroom seating assignments and arrangements.

**Triadic Reciprocal Causation Model**

The Triadic Reciprocal Causation Model is the central concept of Social Cognitive Theory. Bandura (1986) explained that learning results from continuous interactions among the three factors. Thus, behavior is controlled by the individual through thought processes and by the environment. Actions have repercussions and behavior interacts with the environment and personal characteristics.

A person's behavior helps to shape one’s environment, as well as himself or herself as a person (Bandura, 1986). Likewise, a person's environment may be determined by personal characteristics, such as beliefs and ideas about the world around him or her. The influence of person, environment, and behavior depends on which factor is strongest at a particular moment (Bandura, 1986). Figure 1, which appears below, is an illustration of the Triadic Reciprocal
Causation Model. The subsequent paragraphs further describe the factors and the interactions between them in greater detail.

Figure 1

*Triadic Reciprocal Causation Model*

Teachers make decisions every day that influence the students in their classroom. Independent of teachers’ intentions in making these decisions, the outcomes thereof ultimately depend upon the interaction of the three subthemes of the Triadic Reciprocal Causation Model pictured above: behavior, personal characteristics, and environment. The following paragraphs describe the Triadic Reciprocal Causation Model and its three subthemes in greater detail.

**Personal Characteristics.** Personal characteristics refer to internal features such as cognition, motives, and personality, as well as physical traits such as age, size, race, and sex (Bandura, 1986). Bandura (1986) explains that all of these qualities evoke reactions from one’s environment, which may then cause changes in human behavior. Social reactions to internal and external characteristics affect a person’s self-belief or self-efficacy and can influence how he or she behaves and how the environment reacts to his or her behavior (Bandura, 1986). According to Bandura (1986), a person’s expectations and beliefs are developed and changed by social influences (Bandura, 1986).
Social influences trigger emotional reactions through modeling and persuasion (Bandura, 1986). When people observe the consequences of someone else’s modeled behavior, they interpret the event. Later they will recall the occurrence to guide personal decisions. Therefore learning is directly correlated to one’s observations. Depending on personal characteristics, people will have various reactions to others and their environment. A shy individual will interpret a situation differently than an aggressive or outspoken child.

**Environment.** The environment is comprised mainly of the physical and social aspects within a setting, such as arrangements and the positioning of the teacher and students within the classroom. The Triadic Reciprocal Causation Model describes three types of environmental structures: the imposed environment, selected environment, and constructed environment. Each environment is determined based on the level of personal agency that one has within his or her surroundings. The imposed environment refers to the physical and social environment that is forced upon a person whether he or she prefers it or not. A person only has control over how he or she reacts to this structure. For a child, this may refer to the school setting; a place selected by their parents and one that he or she must attend. For a teacher, it may refer to the aspects of the environment that they cannot control, such as the number of students or the size of the classroom. The selected environment involves the part of the setting that a person experiences. Both students and teachers choose whom to talk to and activities to engage in while at school. Finally, the constructed environment is one where the participant thoughtfully makes decisions that directly impact the activities within the overall setting (Bussey & Bandura, 1999). Students may construct their environment when the teacher allows them to do so. For example, if they permit the students to select their own seats. Teachers have the most control of the environment. They construct their environment by determining the activities and the design of the classroom.
Internal personal characteristics, such as cognition and motives, and behavior will react depending on which type of environment surrounds the individual (Bandura, 1999).

**Behavior.** Behavior refers to action or skill. It may include the creation of one’s immediate environment and personal characteristics, such as expectations, beliefs, self-perceptions, goals, and intentions, all of which give shape and direction to behavior. Through the use of the Triadic Reciprocal Model, Bandura (1986) describes the regulation of human behavior and explains that it is learned through patterns, such as self-observation, reflection, and self-evaluation. Decision-making and action are a result of ones’ understanding of behaviors.

Just as the environment alters the other two factors of the model, aspects of the environment itself are changed when activated by behavior. This suggests that people are both products and producers of their environment (Bandura, 1986). For example, in the classroom, a teacher may alter the design of a lesson based on the appropriate or inappropriate behavior of the students. If students appear withdrawn or uninterested in an activity, the teacher may change her tone of voice or introduce new material to gain the attention of the students. Environmental influences determine developing behaviors. By introducing new material or presenting old information in a more exciting format, the students may appear more engaged and interested in the lesson. Both the behavior of students and the environment set up by the teacher influence one another.

Personal characteristics, such as one’s mental and emotional factors, affect how one behaves (Bandura, 1986). Conversely, effects of one’s actions determine reactions. The Reciprocal Causation Model demonstrates the complex interaction and causation that occurs between the factors that influence behavior. By understanding how one’s own cognitive processes affect learning (personal characteristic), one can make change in behavior to overcome ineffective learning strategies (behavior pattern), and explanations and various skills may be
explained and modeled by others (social environment). The personal characteristics influence a behavior pattern, which alters the social environment.

**Application of the Theory**

The Triadic Reciprocal Causation Model was utilized in this study as a lens for both the structure of the interviews and the coding and analysis of the data. This provided a clear and coherent understanding of the participants and their relationship with the phenomena of classroom seating arrangements and assignments. Personal characteristics focus on the experiences, personalities, and motives of teachers. Behavioral patterns included self-observation and self-evaluation of the teacher, and their perceptions of the behavior patterns of their students. Lastly, environment includes the overall classroom atmosphere, both physical and social. It is within the environment that seating arrangements and assignments take place and behavior is modeled for both teachers and students. The Triadic Reciprocal Causation Model was utilized to interpret meaning of teacher decisions and consider their beliefs in how classroom seating influences student behavior.

**Conclusion**

Bandura’s Social Cognitive Theory (1986) and the Triadic Reciprocal Causation Model (1989) provided the lens to understand the decisions that teachers make in the classroom regarding seating arrangements and assignments. This study adds to the existing literature on classroom seating arrangements by including the perspective of teachers in the decision-making process. While most literature focuses on the relationship between seating and students, this study helps to understand how teachers’ personal characteristics, behavior, and the classroom environment are intertwined.
Chapter Two: Literature Review

A variety of research has been written about the impact that seating assignments and arrangements have on students in the classroom. Within the literature, three strands emerge that will help to form a better understanding of the phenomena: social implications, behavioral implications, and academic implications. Gaps in the literature are considered and identified.

Social Implications

Being socially connected is an important aspect of student success at school. Research on social behavior at school focuses on relationships with peers and teachers, conversational activity, and feelings about one’s self and others, and how these affect academic success. These behaviors influence the overall learning environment in both positive and negative ways. For example, emotionally well-adjusted children have a greater likelihood of early school success. Peer relationships enhance children’s emotional intelligence, which is associated with overall academic achievement (Mayer & Salovey, 1997). Interactions with peers provide students with the opportunity to communicate, share academic ideas, model strategies, and develop standards of behavior. When individuals enjoy mutual friendships, students tend to be more socially and academically engaged (Wentzel, Battle, Russell, & Looney, 2010). Social competence in children is a predictor of their academic performance.

Educators play a significant role in the social behavior of students through the organization and arrangement in the classroom (Hughes, 2012). By manipulating arrangements, teachers can influence a variety of social behavior, such as asking questions and interacting with peers. With a belief that seating arrangements have the potential to prevent problem behaviors in the classroom, Wannarka and Ruhl (2008) analyzed eight peer-reviewed, empirical studies to determine which arrangements facilitate positive behavior and academic outcomes for students. For a classroom that valued discussion and collaboration between peers, they found that
communication increased when students sat in a semi-circular arrangement. With this arrangement, teachers were able to present more active and collaborative lessons. When interactive behavior, such as brainstorming or questioning is desired, close proximity to peers and teachers facilitated communication. More social interaction was possible with a greater number of students than in a rows and columns design. Enhanced discussion increased the ability for learning opportunities and greater peer interaction, supporting relationships between both peers and teachers (Fernandes et al., 2011). Some teachers considered talking to peers as an off-task behavior. In this case, rows and columns would be the superior because students were less likely to talk one another in this arrangement. While the results of the analysis demonstrated how seating arrangements influence student behavior, it did not mention the teachers’ understanding on methods of organizing the classroom. The results of the study indicated that teachers should let the task dictate the seating arrangements (Wannarka & Ruhl, 2008).

Marx, Fuhrer, and Hartig (1999) examined the relationship between classroom seating arrangements and children’s question-asking. Children were assigned to sit in both a semi-circle and row and column seating arrangement for two weeks each. Their verbal reactions were recorded over the four-week period. The investigation shows that children asked more questions in a semi-circular arrangement than in rows and columns. Face to face contact encourages greater peer and teacher interaction.

While seating arrangements have social implications, so do seating assignments, or a student’s specific location within the classroom. The same study found that assigned seat locations are related to question-asking behavior. Students that sat in the central area of the room asked more questions than those in the outer areas (Marx et al., 1999). The seating changed the classroom interaction, question-asking behaviors, and overall communication within the learning
environment. This data suggests methods to promote discussion in the classroom if a teacher believes that it supports his/her educational goals.

Research that explores the social implications of seating arrangements is not limited to the classroom. Michelini, Passalacqua, and Cusimano (1976) shared similar findings in their study that examined men and women seated outside on a college campus. The researchers predicted that certain seating positions would either increase or decrease the likelihood of participation in a discussion. While studying groups of three, they found that the central person was the most dominant participator in the discussion (Michelini et al., 1976). Much like a theatre, he or she was in a position to be viewed by the audience, thus giving the person the ability to control the conversation most effectively. It appears that by taking this person out of the central location, he or she would have less of an ability to control the discussion. If a teacher is interested in increasing a child’s level of participation, assigning a seat in the center of the room might support his or her objectives.

In addition to supporting levels of participation, seating assignments help to build friendships between students. Van den Berg and Cillessen (2015) showed that by manipulating the distance between students, either by spreading students apart or putting them closer together, relationships could be strengthened or diminished. The study examined the impact that the physical distance between classmates had on the popularity of students. Data was compared from 14 fifth and sixth grade classrooms from 11 elementary schools. The researchers controlled the seating assignments and measured the distance between peers throughout the year. Peer affiliations were assessed with peer nominations and likeability ratings before and after the manipulation of distance. Pairs of students who did not like each other were identified in all classrooms. In the experimental classrooms, the distance between students who did not care for one another was decreased. Van den Berg and Cillessen (2015) found that over time these
students perceived one another as well-liked and popular. They also found that students seated along the perimeter of the room were considered less popular among peers. Proximity played an important role for how classmates perceived one another.

Van den Berg and Cillessen (2015) suggested that the classroom seating assignment could be used as a tool to improve preference and liking among peers. This could potentially reduce peer-reported problem behaviors in the classroom. Van den Berg and Cillessen (2015) pointed out that popular students often dominate the classroom. Therefore, by increasing the distance among liked students, a teacher can minimize aggressive, unwanted behavior (Van den Berg and Cillessen, 2015). On the other hand, by minimizing the distance between children who perceive each other negatively, the likeability ratings increased over time (Van den Berg and Cillessen, 2015). This would help to foster friendships among students. Results imply that seating assignments, like seating arrangements, impact peer relationships and student behavior. Teachers can control the way that students perceive one another through seating assignments.

All of these studies demonstrate that specific assignments have clear social implications within a given arrangement. In a classroom, a teacher has the ability to change the social structure of the class and the relationships between peers by the decisions made when assigning seats. This highlights the role that seating arrangements and assignments play in the social development of students.

**Behavioral Implications**

Teachers have varying expectations of classroom behavior. Some may prefer a quiet classroom where students raise their hand to participate; others might encourage students to call out responses, allowing for a more active type of learning environment. Wannarka and Ruhl’s (2008) synthesis of eight studies sought to identify the most ideal arrangement that facilitated positive behavior. Their review investigates common seating designs and social behavior. It is
concluded that the most appropriate on-task behavior such as hand-raising and writing, are displayed while students were sitting in rows. This was especially true for disruptive students because the distance between seats lessens distraction among peers. Talking to peers and being out of seat without permission are labeled as negative, off-task behaviors (Wannarka and Ruhl, 2008). The implication is that students behave more suitably when they sit individually as opposed to in groups. Similarly, Fernandes et al. (2011) examined the research on seating arrangements and found that using rows and columns allowed teachers to closely monitor students and increase on-task behavior and attention. Their study suggested that if a teacher seeks an individualistic approach, a traditional straight-row design would be the most fitting choice to elicit “positive” behavior (Fernandes et al., 2011). According to these studies, a rows and column design leads to more appropriate behavior in the classroom. It is unknown if all teachers would agree that that the behaviors described are actually “appropriate” or inappropriate. Knowing each teacher’s educational goals is necessary in order to make this determination.

Rosenthal, Lambert, and Black (1985) conducted a study based on a constructivist notion that active participation is necessary to support developmental learning. On-task and off-task behaviors were compared in three arrangements: rows, clusters, and circular designs. On-task behavior included hand raising, discussion comments, and questioning. Off-task behavior included disruptive conduct and disassociation with the activity. Desk arrangements significantly affected pupil behavior. For example, they found that a circular arrangement led to the greatest number of on-task behavior and responses. This design facilitated interaction and focused behavior of students. Conversely, students seated in rows exhibited more withdrawal and off-task behavior (Rosenthal et al., 1985). If a teacher sought an on-task, actively engaged group of students, then a circular design would best meet their needs. For teachers that supported a
constructivist approach, this design would be considered a viable way to meet their educational goals.

In addition to exploring on-task behavior and attention, Fernandes et al. (2011) examined the impact of seating locations on students’ motivation to learn and classroom contribution. They agreed with Rosenthal et al. (1985) that active engagement and participation positively affected student learning. With regards to classroom participation, their exploration of multiple studies showed that students that sat in the front of the room were more engaged and participated more readily than those that sat in the rear of the classroom.

In regards to seating assignments and location within the classroom, Pedersen (1994) examined seating and behavioral factors related specifically to personality. He found that the front of the room was a more ideal location for optimal learning. Students that sat in the front of the classroom showed greater self-control and acceptance of others. Furthermore, they shared a desire to impress and lead. Those that sat in the middle of the room demonstrated more adaptive social behaviors, such as flexibility and open-mindedness, than those in the front of the room. Personality traits were associated with seating selection in a classroom. Differences in personalities led to different decisions about where to sit. This reinforced the notion that personal characteristics influence action, as described in the Reciprocal Causation Model.

This study demonstrated how behavioral characteristics can change the dynamic of classroom relationships between peers and between students and the teacher (Pedersen, 1994). This information may help teachers to increase the types of behaviors that they are seeking in their classrooms. It can also help teachers to understand how the various personalities in the classroom influence and are influenced by the environment. A teacher’s design approach depends on the type of environment that he or she feels is the most suitable for learning. The
studies do not mention if teachers were aware of the behavioral implications of seating locations, or if they utilized this information to design their classrooms.

**Academic Implications**

Although associated with social and behavioral needs, academic needs are at the forefront of concern in a classroom. Research indicated that seating arrangements alter the classroom environment and individual’s experience in the classroom. Taylor and Vlastos (2009) explained that the physical environment and design of the classroom act as a “silent curriculum” (p. 25). It can support and improve student learning just like the explicit curriculum. For example, Fernandes et al. (2011) demonstrated that seating arrangements impact engagement, which supported a student’s overall educational experience. It is noted that while the physical arrangement ties into instructional strategies, the specific academic implications depended on the goals and objectives set forth by the teacher (Pace & Price, 2005).

Freire (2000), a prominent sociologist, theorized that dialogue and communication were necessary for student success. He shared his belief that individuals learn through active, collaborative tackling of problems. Cluster designs have been shown to increase communication between peers. A high achieving child in this type of classroom may be one that synthesizes information and collaborates with his or her peers to solve problems. Both cluster and circle designs promoted more active participation to support developmental learning. Rosenthal et al. (1985) conducted a study to determine the effect of desk arrangements. Individuals in six classrooms were observed while brainstorming ideas for writing assignments. In this study, cluster and circle arrangements produced a greater total of on-task oral responses compared with a row design. Desks in rows led to more withdrawal and off-task behavior and students were least likely to interact with the lesson material. The study also found that the low achieving boys were typically those engaged in off-task activities and low achieving girls demonstrated less
observable interactions (Rosenthal et al., 1985). This suggested that the highly engaged students were more likely to be higher academic achievers.

If a teacher believed that a quiet, focused environment would support their educational goals, they might use a rows and columns design (Wannarka & Ruhl, 2008). In this type of classroom, a high achieving student may be one that scores well on independent, written assignments. Another teacher might consider a high achieving student to be one who participates regularly in discussions. Different teachers may have different views on what defines academic achievement.

Where a student sits within the arrangement also has shown to have academic implications. Studies have shown that students sitting in the front of the class will outperform students seated in other areas of the room, regardless of a student's preference. Perkins and Wieman (2005) reported on their observations of a large introductory physics course in which students were randomly assigned to seats. They found that students that were seated in the back of the room were six times as likely to receive an F as those who were seated in the front of the room. The results occurred in spite of the teacher’s efforts to engage the students who were seated further away. The performance of students that sat in the back increased markedly when those students were brought to the front of the room. The closer students were to the front, the more likely they were to receive an A as a grade (Perkins & Wieman, 2005).

As noted in other studies, Breed, Christiansen, and Larson (1972) suggested that the reason for the success of students at the front of the classroom is because visual contact with the instructor increases attentiveness, which in turn makes for better grades and opportunity for academic success. This explained why students in the back of the room have a greater risk of disengagement. Vander Schee (2011) agreed that seat location matters when it comes to student performance and that those sitting near the front of the classroom have a better view, greater
interaction with the instructor, and exhibit less distracted behaviors. His study examined the seating choices and the academic performance of students at a private college. Students in the front row earned a significantly higher course grade than those seated in the back of the room. When surveyed, the students were unaware of the impact that seating had on academic performance and indicated that they did not believe that the teacher treated those in the front of the room differently than those in the back of the room (Vander Schee, 2011).

Since it is not possible for all students to sit in the front, it is necessary to explore other seating arrangements and the role of the teacher in respect to each of the designs. None of the studies attempted to understand why or how teachers assign seats. While Vander Schee (2011) explored the viewpoint of the students, it is unclear if teachers understood or believed that seating has academic implications for students and if they addressed these issues in their classroom.

**Conclusion**

Teachers have the ability to change the dynamics of the classroom and impact student behavior based on how they arrange and assign seats. Seating arrangements and assignments have clear implications on students’ behaviorally, socially, and academically. Therefore, seating location and assignments should be an important consideration for teachers. The numerous articles highlighted the many influences that seating assignments and arrangements have on students and the classroom. They presented the value of considering seating in relation to student learning and behavior. While there were many studies describing the clear implications that seating has in the classroom, there was limited research available that included the needs of the teachers for whom this information is most beneficial. Furthermore, teachers’ ideas regarding the seating phenomena were not addressed and were, therefore, unknown. The extent to which teachers use seating to reach social, behavioral, and academic objectives was unclear. Classroom
design recommendations cannot be made without understanding an educator’s desired outcome, educational philosophy, and personal experience.
Chapter Three: Methodology

A qualitative design was conducted which investigated the experiences of five elementary-school teachers with classroom seating arrangements and assignments. Data was collected throughout the interview process. The subsequent transcripts were then analyzed. The intent was to identify the themes that provide insights into teachers’ perceptions of classroom seating assignments and arrangements. Throughout the study, Social Cognitive Theory, specifically the Triadic Reciprocal Causation Model, served as the lens through which seating arrangements and assignments were understood. This chapter will discuss the research paradigm and tradition in greater detail, along with the selection of the participants, protection of subjects, data storage, management, and analysis.

Research Question

What are the experiences of elementary teachers in Grades Two through Five in making seat assignments and seating arrangements and how do these teachers make sense of these experiences as they relate to fostering social, behavioral, and academic success of their students?

Paradigm

A research paradigm is a set of assumptions that shape how one views reality. This study was conducted through the lens of constructivism/interpretivism, which focuses on understanding the lived experiences of the participants. The constructivist paradigm is an ideal, “traditional approach” used to plan qualitative research (Creswell, 2013, p. 61). Constructivists emphasize that individuals make meaning through social interactions and the environment (Ponterotto, 2005). The constructivist-interpretivist paradigm explains that reality and knowledge are developed in an individual’s mind. Constructivists seek to understand how people create their knowledge. One such constructivist, developmental psychologist, Jean Piaget (1952), believed that people produce knowledge and form meaning based upon their experiences. Therefore,
varied valid realities exist among different people (Ponterotto, 2005). Multiple meanings of a phenomena, such classroom seating arrangements, exist as well multiple interpretations of data. With this in mind, the constructivist-interpretivist researcher typically interviews “only a handful of clients for longer periods of time and when analyzing the transcript data will not seek other researcher consensus on identified themes” (Ponterotto, 2005, p. 130).

In research, constructivism is at the center of the interaction between the researcher and the participant. Deeper meaning is uncovered through the dialogue that occurs between them (Ponterotto, 2005). The constructivist position embraces a hermeneutical approach that believes that meaning is found through deep reflection (Ponterotto, 2005). With an emphasis on methods, interpretation, and context, hermeneutics describes the accounts and reflections of participants to “make sense of their experience” (Smith et al., 2009, p. 4). In this study, conclusions were developed based on the participants’ shared and subjective experiences allowing for deeper meaning to be attained. True to this school of thought, descriptions and interpretations were the key to understanding the participants’ life events. The perspectives and experiences of teachers were explored in order to gain an understanding, or make sense of, their use of classroom seating arrangements and assignments.

Research Tradition

The study was a qualitative approach aimed at better identifying how teachers made meaning of their experience with classroom seating. The constructivist-interpretivist paradigm provided “the primary foundation and anchor for qualitative research methods” (Ponterotto, 2005, p. 129). In qualitative research, data is collected in a natural setting, such as through interviews, and the participant’s voice is at core of the interpretation of the problem (Creswell, 2013). It is inductive in nature and is focused on individual meaning and the complexity of situations (Creswell, 2013). Meaning and understanding are obtained through deep reflection and
consideration, which can be enhanced through effective interaction between the participant and the interviewer (Ponterotto, 2005). This dynamic interaction “is central to capturing and describing the lived experience of the participant” (Ponterotto, 2005, p. 131). Rubin and Rubin (2012) pointed out that the emphasis on open-ended inquiry through interviews allowed researchers to “explore in detail the experiences, motives, and opinions of others and learn to see the world from perspectives other than their own” (p.3). Utilizing the qualitative approach provided the opportunity to hear the perspective of teachers in the areas of seating arrangements and assignments, and any other issues relevant to the decision making process.

Participants

The participants in this study were five lower-school teachers at a New England independent school in Massachusetts. The five lead teachers, three women and two men, all have master’s degrees. Examining the ways that this small sample size was alike and different in their thoughts and ideas provided “variability within the group” (Smith et al., 2009, p. 51). In order to gain perspective from teachers across grade levels, volunteers were sought from second through fifth grade. There was one teacher from Grades Two, Three, and Four, and two teachers from Grade Five. Collectively, the participants have 81 years of teaching experience. Abby, Larry, and Margaret have less than nine years of experience, while Cathy and Steve each have been teaching for over 25 years.

Setting

The New England independent school is situated on a 17-acre campus serving affluent families from 40 different towns. There are a total of 405 students in Pre-K through Grade Nine. There are approximately 19 students per class in Grades Two through Five. Grade Two and Three have two teachers per class, Grade Four has one and half teachers per class, and Grade Five has one teacher per class. The overall student/faculty ratio is eight to one. As with many
other independent schools, class size is relatively small. Teachers have the flexibility and independence to decide how to design their classroom and assign seats without monetary limitations. The actual size of classrooms is quite large. In addition to student seating, each classroom has space for a library and meeting areas on the floor, with room for students to move around.

**Recruitment and Access**

After a final institutional review board approval was granted by both the independent school and Northeastern University, a recruitment email was sent to potential participants (all second through fifth grade teachers) inviting them to take part in the study. The email summarized the purpose of the study and informed potential participants about the interview procedure. It also served as the single method of recruiting volunteers. The researcher sent a follow-up email to volunteers to confirm the date, time, and location of the interview. As noted in the recruitment letter, Appendix A, no incentives were offered to the participants.

**Protection of Human Subjects**

Participants must be protected while participating in a study (Rubin & Rubin, 2012). In order to protect the confidentiality of the teachers, pseudonyms were created for all participants, as well as the school in which the study took place. They were used consistently throughout all oral and written records. The researcher was personally responsible for transcribing all interviews. This method of confidentiality ensured that both the participants and the school remained anonymous.

**Obtaining Informed Consent**

Each participant was provided with the material needed to learn about the purpose of the research. In addition, a Consent-to-Participate Form (Appendix B) was given to each teacher. The form described the purpose of the study and explained that participants had the ability to
withdraw at any time. Participants were assured that their involvement was completely voluntary. As adults, all participants were able to make decisions for themselves. The purpose of the study, role of the interviewees, benefits, and contact information were described in detail. There were no anticipated risks to the participants. They had the opportunity to ask questions or withdraw from the study at any time.

IRB Approval

Per the institutional parameters, the following steps were taken prior to engaging the interview process: an “Application for Approval for Use of Human Participation in Research: to Northeastern University’s Institutional Review Board (IRB) (Appendix C) was submitted; a letter of permission was obtained from the head of school and the head of lower school (Appendix D). These documents, along with participant consent forms (Appendix B), interview questions (Appendix E), and other supporting materials (Appendix F), were submitted for approval. Upon receipt of IRB approval, I began the interview process in earnest.

Data Collection

The qualitative research methodology allows for a natural, yet purposeful, dialogue between the participants and the researcher. “This purpose is informed, implicitly at least, by a research question” (Smith et al., 2009, p. 57). Smith et al. (2009) stated that interviews are the most effective tool for collecting data for qualitative research as they allow for participants to “tell their stories, to speak freely and reflectively, and to develop their ideas” (Smith et al., 2009, p. 56). Interviews were crucial in understanding the experiences of teachers when making seat assignments and arrangements. In order to collect the necessary data, audiotaped semi-structured interviews with participants were conducted at a location selected by the participant that lasted about 60 minutes each. Semi-structured, in-depth interviews, balanced the framework of a structured interview with greater spontaneity and detail. I engaged with the participants through
flexible dialogue. Questions and discussion topics were prepared in advance, and follow-up questions were developed throughout the interview based on each participant’s response (Kvale, 2007). Active listening, free from presumptions, encouraged the participants to elaborate on their thoughts and ideas (Smith et al., 2009).

**Data Storage and Management**

Each interview was digitally recorded. They were then uploaded to a protected account on a personal password-protected laptop. The protection of confidentiality was imperative. In addition to the recordings, notes taken during interviews, transcriptions, and observations were collected, gathered, and stored in a locked file cabinet or within the password-protected laptop. Only the Principal Investigator and I had access to the files and notes collected for the study. Information was gathered during research specific times and not during other points of contact with participants throughout any day. Signed consent forms will be destroyed within three years of the completion of the study.

**Data Analysis**

I attempted to understand and then summarize the participants’ meaning by utilizing a variety of tools to analyze the data collected. In qualitative research, it is particularly important to capture the participants’ responses to the interview questions. After carefully transcribing the interviews, transcripts were read, reread multiple times, and initially coded. Developing themes emerged and identifying connections were made across themes and across the participants’ experiences with classroom seating and arrangements.

I used Initial Coding and In Vivo coding to break interview responses into categories (Saldaña, 2009). Initial coding is the first step in analysis. Smith et al. (2009) describes this as an “exploratory” stage (p. 83). Saldaña (2009) points out that coding is not just labeling, but also linking ideas to data simultaneously. Smith et al. (2009) note that at this stage of the cycle each
interview is broken up into parts. During the initial coding, I kept detailed notes in the margins for later analysis. These notes included descriptive, linguistic, and conceptual comments (Smith et al., 2009).

Themes and discrepancies emerged from the data as part of the participants’ reflections and my own interpretation. As suggested by Smith et al. (2009), after each transcript had been analyzed individually, I then looked for connections among participants, completing a group analysis. This led to the development of larger themes. The coding process continued through several cycles, producing more categories and gaining meaning of the participants’ experiences (Saldaña, 2009).

Within the final stage of analysis, teachers’ perceptions in regards to seating arrangements and assignments were fully explored to create a narrative account. The participants’ comments were linked to the identified themes and discussed in relation to the theoretical framework. Recommendations were made based on a combination of existing literature, theory, and the results of the study (Smith et al., 2009).

**Trustworthiness**

I took several measures to protect the trustworthiness of the research. Many different perspectives and terms were used when discussing qualitative validation. Creswell (2013) considered validation to “be an attempt to assess the ‘accuracy’ of the findings, as best described by the researcher and the participants” (p. 207). With this in mind, the purpose of the next section was twofold: to examine potential threats to internal validity, such as my own opinions and experience; and to discuss the steps that I took to minimize these threats (e.g., member checking and use of rich description).

**Potential threats to internal validity.** My background as a teacher and as a member of the school community fostered a trust between the participants in this study and myself. I am
immersed in the school culture and understand the dynamics of the elementary classroom. This relationship and shared experience helped to maintain a natural discourse during interview sessions. While this affiliation with the participants was beneficial, it could have also hindered the study. I bracketed my own opinions through the use of a journal, in which I recorded my experiences and acknowledged biases with regards to classroom seating (Creswell, 2013). I avoided discussing the study outside of interview sessions in order to ensure that the participants were not influenced by additional conversations.

Member checks. To support applicability in other contexts, a commitment to ensuring trustworthiness was vital (Guba & Lincoln, 1985). The member checking process of verifying information with the participants was employed, as participants were asked to review the interview transcripts. Errors of fact were corrected.

Rich description. “Rich, thick description” was used throughout the data collection process and when reporting the findings and analysis. In order to support a high level of trustworthiness, I provided a detailed account of both the setting and the participants in the narrative account (Creswell, 2013). The rich description also allowed the reader to decide if the research is transferable to other contexts, settings, or people (Guba & Lincoln, 1985).

Conclusion

Chapter three presented the research design used for this qualitative study and the steps that were taken to complete a thorough exploration of teachers and classroom seating and arrangements. The methodology, design, and tradition were explained, along with why a qualitative study was an appropriate approach. The design components described were effective in supporting a thorough study that led to the subsequent research findings and analysis.
Chapter Four: Research Findings and Analysis

This chapter presents the findings of this qualitative study, exploring teachers' perceptions as they design arrangements and assign seating in their elementary, independent school classrooms. The central research question that guided this study was: How do elementary teachers in Grades Two through Five describe their experiences with seating assignments and classroom desk arrangements and do they make decisions to foster the social, behavioral, and/or academic success of their students? These questions facilitated an understanding of how teachers perceive the role of seating assignments and desk arrangements in meeting goals for their classrooms and enhancing the development of their students. The chapter begins with participant profiles, followed by research findings and analysis.

Participant Profiles

This section briefly describes the participants, five teachers in Grades Two through Five at a New England independent school that is deeply grounded in the liberal arts tradition. The school’s mission statement was based on providing an education that inspires a love of learning and encourages children to embrace academic challenge. Of the five Caucasian participants, three were female and two were male. As children, the participants’ classroom experience varied. Four of the five teachers attended public elementary schools, while only one participant, Margaret, attended a private elementary school. As adults, all of their teaching experience had been in independent schools. The brief portrait of each individual included a profile of his/her experience as a teacher and his/her personal experience with classroom seating and arrangements as both a student him/herself and an educator. These portraits described a key element in Bandura’s Triadic Reciprocal Model, each person’s personal characteristics.

Abby was a third grade teacher who had been teaching in independent schools for eight years. She taught Grades Six and Four and was teaching Grade Three. As a child, Abby attended
a highly regarded public school in a highly affluent town in New England. At a young age, she was not fond of school. Abby’s teachers did not seem invested in getting to know their students or understanding their feelings. Later, as a student in fifth grade, she felt as if the pupils were given too much freedom with seating arrangements at a particularly “awkward social time.” She was not comfortable with students being allowed to select their own seats. She felt that it was the teachers’ responsibility to make those choices. It was not until high school that Abby felt that she was noticed and recognized by her teachers. It was then that she felt discovered.

These experiences shaped Abby’s teaching style and the decisions that she made in her classroom. She helped her students to feel comfortable by knowing them as individuals and getting to understand their needs. “As a teacher, I feel like I really know the kids. I know their body language and I understand what they need on a day to day, hour to hour, and minute to minute basis.” Abby’s seating arrangements were designed to help her to meet her goals of “attentiveness, kindness, engagement, participation, and overall, happiness” for each child.

Cathy was a second grade teacher who had been teaching for 25 years in various independent schools. Over those years, she taught Grades Two, Three, and Four. Cathy described how seating arrangements have changed significantly from her time as a student. These thoughts shaped how she approached her own classroom as a teacher:

I’ve noticed that seating in general has transitioned over the last 25 years that I’ve been teaching. Work then was individual. You did your work. You struggled through your work. You did your work alone. How we teach has changed a lot, so seating arrangements have changed a lot, too. Today, I see more group seating, where before it was individualized.

She recalled that as a child, students sat in rows and columns, with little focus on collaboration and discussion. Cathy felt lonely as a child in the elementary school classroom and
shared her perception that the seating arrangement led to feelings of isolation and seclusion. Cathy’s memory of seating in the classroom elicited the sensation of losing control and she sensed that her teachers did not consider her comfort level. Instead, they were only concerned about the curriculum and the completion of the work placed in front of each child. The rows and columns felt isolating and sent the message that her job was to get the work done. Discussions were not encouraged and therefore, the feelings of the students were not considered. As a teacher, Cathy aimed to make the environment comfortable and collaborative for her students, allowing them to have some control of their learning.

**Larry** was a fifth grade teacher who had been teaching for five years in independent schools. He has taught both fifth and sixth grade. As a young child, Larry attended public school in an economically diverse suburb. The school that he attended as a child was much different than the school where he now works. When reflecting upon seating as a student he recalled feelings of resentment towards seating assignments and restrictive classroom designs. “When I was a kid, I would always get really resentful of a teacher or a learning environment when I felt that it was becoming dull.” Furthermore, he was always very frustrated if he “had to stay in one place for a really long time.” Larry felt as if the school classroom was restrictive and controlling. Seating design and assignments contributed to these emotions. Larry’s experience shaped his goals and approach in his current classroom.

My biggest fear as a teacher is having the environment’s relationship with a child become adversarial. I combat this by allowing small moments of agency for the child. You can’t be adversarial if someone is giving you choice.

Larry believed that by giving students a new position regularly, it kept the environment new and different, allowing them to feel more invested with their educational environment. He strove to create a classroom that enhanced the students’ sense of autonomy and control, while developing
a strong sense of community through mutual respect for one another.

Margaret had been a lead teacher in a Grade Five independent school classroom for four years. As a child, she too, attended independent schools. Margaret noted that she felt fortunate to attend a school “where collaboration was encouraged.” At a young age, Margaret sensed that she was part of a community at school. Students were placed in groups so that they could work together and collectively explore the daily activities of the academic world. She detected that the selected seating arrangements supported the ability for student to collaborate effectively and support one another. If the seating design were different, her school experience would have been significantly different as well. As a child, she never felt isolated and alone. Margaret shared that if she had to sit in rows she would have felt remote and uncomfortable.

Margaret’s belief that seating significantly influenced the school experience is evident and she makes decisions based on this notion. The positive experience that she had sitting in groups shaped her views and approach as a teacher. She strove to create a collaborative environment much like that of her own childhood classroom, where students could see one another. Margaret used seating arrangements to support her goals and enable students to speak to one another easily. Later in this chapter, her philosophy and the designs that she utilized will be discussed in greater detail.

Steve was a Grade Three teacher who had been teaching in a variety of capacities in kindergarten through eighth grade for 39 years. For 31 of those years, he taught third grade in an independent school classroom, which utilized desks. Throughout the years, he has used a variety of seating arrangements and discussed his positive and negative experiences with all arrangements.

As Steve recalled his own childhood in the classroom, he remembered sitting in a rows and columns design. As a teacher, especially most recently, he rarely used this arrangement. To
him, it sent the message, “Don’t talk to each other, and listen to me.” While he was never particularly fond of this design, Steve’s main concern was not the setup, but rather the frequency in which the arrangement is changed. As with all of the other participants, Steve shared his notion that seating highly influences the environment of the classroom and the manners of students.

In his classroom, Steve used seating assignments and arrangements to support his academic, social, and behavioral goals. Since his objectives for each of these three areas were consistently changing and evolving, his seating assignments also were fluctuating. Steve formally changed his classroom seating arrangements six to eight times per year by thoughtfully planning an arrangement and drafting a design. He made frequent and informal changes more regularly, based on instinct and the need for immediate change when he deemed that it was necessary to support the learning environment.

**Emergent Themes**

Four themes emerged in relation to seating assignments and arrangements and were discussed in detail by all participants: understanding students’ needs and planning, variety of classroom goals, seating utilized to meet individualized student goals, and how manipulating the physical environment is optimized by teachers. The following sections described both the themes and the subthemes through the participants’ narrative accounts. In addition, links to the themes and the theoretical framework were identified.

**Theme 1: Understanding Students’ Needs and Planning**

When asked about design consideration and planning, the teachers’ shared that they spent a minimal amount of time on the desk arrangements and assignment of seating in their classrooms. Teachers spent more time considering seating assignments early in the year when they were less familiar with their students. As they began to familiarize themselves with the
students, they were able to make quicker decisions about seating. Thus, they were able to spend less time planning the arrangements.

Table 1 presents an abbreviated narrative of the participants’ description of design consideration and planning in their classroom.

Table 1

*Participants’ Reflections on Design Consideration and Planning*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Abbreviated Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>I change my seating every two weeks and on demand if something does not work right away. I change it. I don’t wait on it. I know when something is not working if there are arguments, frustrations, or traction.</td>
</tr>
<tr>
<td>Cathy</td>
<td>Maybe 20 to 30 minutes of reassigning seating assignments happens once a month. However, it’s happening on the fly maybe every day. I might spend ten minutes considering seating for a specific unit. For example, I might want them arranged in a certain way if we are using our social studies folders and we are working on our country projects.</td>
</tr>
<tr>
<td>Larry</td>
<td>It’s intentionally informal, in the sense that they do have a certain amount of agency. I describe it as, learning and engagement is what happens when you have a certain amount of agency within a certain structure. And so the structure that I create as a teacher is reactionary, in response to where I feel they are as a group. So in the beginning of the year, I might be more prescriptive. I might say you know, so and so needs to sit here, but generally because I have the table not desks, I’ll usually say sit according to gender identity.</td>
</tr>
<tr>
<td>Margaret</td>
<td>It doesn’t take me a ton of time to determine who is going to work well and who is not.</td>
</tr>
<tr>
<td>Steve</td>
<td>At this point in my career, I sit down and plan it out. Trying to see which groupings are going to work best, balancing all the different parameters that teachers have to contend with. I don’t think it matters as much how you position the room. I think what matters is how you rearrange the room and that’s a thing that I do frequently.</td>
</tr>
</tbody>
</table>
For Larry, who utilized a round table, planning was minimal and seating assignments were reactionary to the lesson and activity at hand. He did not spend time assigning seats for any extended period of time. Rather, any decisions that he made regarding seating assignments were created based on the needs of the class at any given time. For example, while students were allowed to select their own seats around the table in his classroom, he would modify this choice by imposing guidelines. For example, during student-led discussions, he required them to “sit differentiated by gender identity.”

I say so sit with someone whose gender identity is different from yours. Because then that way, students at this age tend to sit next to someone with a similar gender identity, so that encourages or rather it mitigates side conversations. For the same reason of limiting extraneous conversations, he did not allow students to “sit in the same spot more than once a day and next to the same people.” For example, when students transitioned from various lessons within the class, a writing lesson to a math lesson, or back from a special subject class with another teacher, such as art or music, the students then needed to choose a new seat. As a fifth grade teacher, Larry found that his students were mature enough to meet his expectations with little guidance.

Like Larry, Margaret, another fifth grade teacher, admitted that she too, did not spend a lot of time on design consideration, both seating assignments and arrangements. While she was mindful about them throughout the year, she did not spend a considerable amount of time on the process, though admitted that was more of a challenge earlier in the year. Margaret shared:

It is a lot of guesswork because I don’t know the students that well yet. I like to put both boys and girls at the same pod. I’m given information about which kids need preferential seating so I try to put them in a pod towards the front and often one where they don’t have to turn their body towards the other. Then I’ll bring it to the fourth grade teachers to
see if they see any major red flags in any of that. Those groups may only last a week or two until I get to know them and then I’ll move them again.

Later in the year, she allowed them to determine their own seating assignment in the classroom. She encouraged them “to choose people who are good for them.” Students were asked to sit with students whom they could work well with and who would allow them to focus on academic discussions.

When reflecting on how much time she spent on seating, Cathy considered both the planned arrangements of seating and the more impulsive reassignment of seating due to an eminent need. She spent approximately 20 minutes to plan; ten minutes were spent considering a particular design and the assignments, and the other ten minutes was spent reacting to the needs of students throughout the month. Even when instinctively reacting to students, it might take a minute or two each time she decides to move a student during a lesson. When moving a child, she considered the impact on others. She had to move one or more classmates around to meet the child’s needs. Perhaps, they were disrupting those around him or her, or not producing work because they were distracted. During those times, Cathy relied on instinct to determine the assignments that were best suited for each student. As highlighted in her excerpt, these decisions were happening “on the fly every day.”

Within the theme, understanding students’ needs and planning, a detailed review of the transcripts produced subsequent subthemes: (a) personal childhood experiences, (b) utilization of colleagues’ experiences, and (c) changes in students’ needs and curriculum.

**Subtheme 1a. Personal childhood experiences.** Considering the needs of students was the primary focus for teachers as they designed their classroom. However, their own personal experiences in the classroom also influenced their goals. The teachers’ responses when asked about personal experiences with classroom seating demonstrated that their past shaped their
current decision-making. Cathy, Abby, and Larry each shared negative experiences with seating as students in the classroom. Therefore, they aimed to create a classroom that was nothing like the one that they recall from childhood. Margaret had a positive experience as a child and she described how she purposively strove to emulate a similar environment for her students. In all cases, the teachers’ past helped to form beliefs and ideas that shaped their decision-making with classroom seating.

Cathy shared her strong feelings of being alone and isolated in her childhood classroom due to a rows-and-columns design. She was committed to avoiding that lack of control in her current classroom and therefore, utilized designs that supported a sense of inclusion for students such as clusters or a U-formation. Steve did not speak in detail about his childhood experience, but he did recall sitting in a rows and columns design and the message that it sent. “The message is don’t talk to each other, listen to me.” He shared that he rarely uses that design in his current classroom. Abby’s negative classroom experiences shaped her current thinking. “At the youngest age, I didn’t really like school. I felt like no one really cared. As a child I was given too much freedom.” In later elementary school, Abby was often allowed to pick her seat. She explained that this made her feel uneasy and was the reason why she carefully arranged the classroom and assigns seating. Abby utilized both the pod design and a u-formation arrangement. Within those designs, Abby assigned seats and made changes regularly. Larry longed for a learning environment that provided student autonomy and a sense of community. He aimed to create the experience that he desired as a child for his own students. He did not want them to feel resentful of the space that he created for them.

I remember, personally, as a kid, I was always really, really, frustrated when I had to stay in one place for a really long time. When I was a kid, I would always get really resentful of a teacher or a learning environment when I felt that it was becoming dull.
On the other hand, Margaret was pleased with her childhood classroom design and felt as though she reaped the benefits of an environment that fostered collaboration and discussion. 

I went to a school where collaboration was encouraged and I think that is fostered when you can see each other. Either when you’re in the big circle and you’re able to discuss or when you can physically talk to each other. I was lucky because I never sat in rows.

She sat in small groups or U-formations throughout her childhood. Therefore, like Cathy, Margaret applied that experience for current decision-making, but in her case to emulate her past. Her design decisions mirrored her desire to create a collaborative environment. As a teacher, Margaret utilized arrangements such as a circle or U-formation to encourage conversations and collaboration.

When reflecting upon his or her personal history with seating, each participant articulated the emotions tied to the arrangements that were used, or in Margaret’s case avoided. Their responses reflected strong emotion and visceral feelings. For example, it is mentioned that Abby’s experience with seating made her feel uneasy and the rows and columns design left Cathy feeling isolated. Larry felt that he was controlled and longed for a sense of autonomy. Margaret was grateful that she felt a sense of collaboration in her classroom. The responses reflected their convictions that seating arrangements influenced their school experience. It also showed how personal characteristics, the experiences that shape them, influenced the decisions that they make as teachers.

Subtheme 1b. Utilization of colleagues’ experiences. At the start of the year, teachers spent time with their students’ previous teachers to determine if proposed designs met the needs of individual students. For example, Cathy and Margaret created a proposed classroom arrangement and seating assignments and then consulted with the previous year’s teacher to inquire about whether the design would work for individual students. This discussion led to
changes based on the other teacher’s knowledge and experience with the students. Cathy explained:

I often invite the grade level teachers from the year before and say, can you look this over? Are any of these kids going to be upset or not able to learn from where I put them? Have I got a war on my hands in here? I remember a teacher coming in and saying, “Wow, this group is going to talk. You might want to do a little shift.”

Margaret added that at the start of the school year she was given information about students that need preferential seating. She then brought her seating plan to the “fourth grade teachers to see if there are any major red flags.” If approved, those groups would last a week or two until she got to know them and could move them based on her own observations in the classroom. By conferring with students’ former teachers, the current teachers developed a stronger and quicker understanding of what their new students needed and how those needs could be supported through seating.

Cathy and Margaret spoke about how they relied on their colleagues to help make seating assignment decisions. This collaboration was especially useful at the start of the year, because they had not yet developed a relationship with their students. While the other teachers did not speak about how they specifically used colleagues to help them with seating assignments, every teacher spent time with the previous year’s teacher discussing the needs of each student. Teachers relied on both the information given to them about each child and on the experiences of their colleagues when making seating assignments and arrangements early in the year. This demonstrates a level of trust and reliance on others when making classroom decisions.

**Subtheme 1c. Changes in students’ needs and curriculum.** Change in seating arrangements and assignments were also a consistent theme throughout the interviews. Except for Larry, the teachers shared that their assignments and/or designs changed throughout the year
depending on student needs and curriculum. Margaret explained that she allowed for greater choice later in the year as she prepared students to be more independent.

I typically start off the year with pre-assigned seating arrangements and throughout the course of the year, I mix up arrangements and the seating arrangements and then most recently, the final third of the year, they are allowed to sit wherever they want an the arrangement because next year when they are in middle school they are given free reign.

Cathy attributed the modifications in arrangements to her own need for change, so as not to be bored. She also believed that the students need change.

I find that in the beginning of the year I like to cluster them in groups of three or four so that they can learn to work together, so that they can work cooperatively. Later, I would branch out and do a big U and put kids in elbow partners. Kids whose elbows touch. I kind of arrange it with kids who would work well together.

Teachers agreed that decisions had to be made at the beginning of the year without truly understanding the depth of each student’s needs or the dynamic of the classroom environment. As the school year progressed, the demand for change became clearer as the teachers came to personally understand what would benefit each child. Teachers explained that the act of changing seats became almost intuitive. By knowing the students better, they knew what the children needed to find greater success either academically or socially. As mentioned earlier, Steve found that changing arrangements frequently was more important than the designs used. He explained how his focus changes over time.

Partway through the year we go to a cluster of four and five and that is associated with a project, but also it’s an important transition for them. The routine of the class has been established and I like to see more discussion and debate, group work back and forth. I’m not going to go more than about two or three weeks without shuffling things up. When
we got into pods it was because it was tied into a simulation, a project that revolved around groupings, I probably wasn’t going to shuffle them up much.

None of the teachers interviewed utilized formal methods, such as notes or charts, to keep track of observations and to reflect upon the seating arrangements in the classroom. Cathy admitted that she took no written notes and relied “on memory.” Margaret reflected on meeting classroom needs “entirely through informal observations.” With fifth graders, she listened to her students as they shared their needs and preferences. “They’re able to verbalize why they like one thing or another. So I’ll ask them, but that’s also pretty informal.”

The participants’ reflections demonstrated that only one of the five teachers spent their time on formally designing and assigning seats in the classroom. Steve was the only teacher that spoke to sitting down regularly to consider the positive and negative aspects of various designs. The other teachers spoke at greater length about making decisions instinctively, based on a need in the classroom, such as limiting extraneous conversations or partnering students up for a project. When considering seating assignments, teachers spent only a minimal amount of time formally considering those of the students. Rather, they relied on personal experiences, professional support, and quick decision-making when assigning and arranging seats in the classroom.

Teachers recognized the importance that seating played in their school experience and identified their views on the various arrangements. The participants shared that some of their own childhood classroom experiences led to feelings of loneliness and resentment. They understood that seating had the power to make a person either feel isolated or included. This knowledge drove them to make decisions that would have a positive impact on their students.

Even though teachers recognized the connection between personal aspects of their lives and their experiences, they did not relay this insight to colleagues. When teachers met with one
another for support they did not share the goals that they had for the environment. Furthermore, they did not utilize a formal method of considering their design decisions and the perceived impact on the classroom environment and/or individual students. Personal experiences, particularly time spent in the classroom as a child, and their influence on current decision-making, were left out of the conversations when teachers met with colleagues for support.

The theme and subthemes described demonstrate the relationship within the theoretical framework between personal experiences and the environment. Teachers shared how their classroom environment shaped their experience and personal characteristics. When the teachers discussed student needs with colleagues as described in subtheme 1b, they were highlighting the relationship between the environment and personal characteristics. Colleagues gave advice for seating based on the personal characteristics of students. The same can be said for the final subtheme as teachers changed the environment based on individual needs of students.

Although seating shaped the teachers’ school experience, they spent only a minimal amount of time planning seating assignments and arrangements. A more thorough self-reflection and open conversation among teachers could result in a better understanding of the overall seating process. The focus on personal experiences, without comparing ones’ characteristics with those of others, was counterintuitive in helping to meet the vast differences among students. By placing greater emphasis on personal experience, understanding the perspectives of colleagues, and committing more time to the planning process, teachers might be able to make more informed decisions and broaden their understanding of how to meet the various needs of students.

**Theme 2: Variety of Classroom Goals**

The second theme to develop from the interviewees’ responses was the variety of goals that the teachers had for their classrooms. This was different than the individual goals set for
each student. Classroom goals referred to objectives that the teacher had for the entire classroom community. These goals influenced the decisions that teachers made in regards to seating and the overall behavior in the classroom. This once again highlighted the reciprocal relationship between environment and behavior (Bandura, 1986). The following excerpts described the participants’ feelings associated with the phenomena of classroom seating and demonstrated their understanding of seating and how it is utilized to meet the classroom goals.

Table 2

*Participants’ Reflections on the Power of Seating and Classroom Goals*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Abbreviated Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>The classroom is a microcosm of the school. We need the kids to behave in the same way that they will in the world, working in pairs and quads or groups. Over the course of the year students will have an opportunity to work collaboratively with everyone in the room. This is not always easy but the process will help to prepare them for the realities of life outside of school.</td>
</tr>
<tr>
<td>Cathy</td>
<td>I like to cluster them in groups of three or four so that they can learn to work together, so that they can work cooperatively. That’s a big goal in the beginning of the year.</td>
</tr>
<tr>
<td>Larry</td>
<td>Everything that I do has some element of choice because then the child hopefully will not grow to resent their positionality in space. Ultimately what I’m hoping to accomplish is that all the students feel engaged and invested in their own learning. I don’t want students to ever be able to hide in the classroom.</td>
</tr>
<tr>
<td>Margaret</td>
<td>My focus is mostly social and behavioral and it adapts given each class. There was a group I had a couple of years ago and they were extremely social. They couldn’t work because they were so social. So they had to work in groups of two. They had pairs all over the room. This group is far more independent, not as socially charged. So the circle works well for them.</td>
</tr>
<tr>
<td>Steve</td>
<td>I like to see more discussion and debate, group work, and back and forth. We are trying to maintain positive relationships with kids. We want to maintain peace.</td>
</tr>
</tbody>
</table>
When reviewing the transcripts, it was clear that all teachers had classroom goals. For example, Margaret aimed for a discussion-based fifth grade classroom. She hoped that when someone walked into her room he or she would see students interacting with one another, asking questions, and discussing the topic at hand. This was a goal for her entire class, not just one individual student. It was meant to shape the overall classroom environment.

Two subthemes became evident when analyzing the interviews: Collaboration, and the Impact of Classroom Seating. When discussing desired classroom outcomes, teachers spoke about their goals for the classroom, but more specifically about collaboration and the role that classroom seating played in meeting their vision for the learning environment. This supported Bandura’s (1986) notion that the environment and behavior are related.

**Subtheme 2a. Collaboration.** When discussing classroom goals, each teacher described an objective that included collaboration. The teachers’ goals reflected an appreciation for a supportive, engaging classroom community. Cathy wanted students to be able to work together. She fostered this development throughout the year by creating an environment that promoted effective collaboration between students, helping her to meet the academic and social goals. Effective collaboration meant that students worked well together, stuck to the assignment at hand, and each took an active role in learning. She assigned students to work in pairs or small groups in order to support discussion and interaction among peers. Larry also revealed that his overall goal was to accomplish a classroom climate where students felt “engaged and invested in their own learning.” Larry used a round table so that all students could each other and because “everyone was on the same level no one could sit back and be passive in their learning.”

As mentioned, both Larry and Cathy desired an interactive environment where students interacted with one another and their environment. Larry and Cathy presented opportunities to
achieve it. Abby shared a similar desire and added that her ultimate goal for students was to prepare them for life away from school. She integrated the sense of community and importance of collaboration into her vision for her class. Abby assigned seats so that children sat next to every member of the class at some point throughout the school year. Abby strove to create a caring environment because she did not feel cared for in her younger years. Because of her own negative experience in school, she controlled the “seating environment to provide a sense of security for the children.” She did so by considering the needs of students and assigning seats within any given arrangement.

Like Abby, others sought a sense of inclusion within the classroom. They wanted students to feel as if they belonged in the environment. Steve aimed to connect with students at the start of the year by regularly making eye contact with every child. He used a U-formation design to support his ability to see all students while teaching. Steve found it important to connect with his students, to allow every child to feel part of the classroom, and to form what he considered to be healthy habits.

I like to start the year in an expanded horseshoe so I can expect and make eye contact with every single kid. Not simultaneously, but as I’m speaking. I can look up at a child and expect that they will be looking back at me. I think that that is an important habit for kids to develop. So I like to start the year that way. I also like to have them expect to see each other. I’m fortunate to have enough floor space that I could arrange that.

Margaret’s goals were similar to Abby and Steve’s and she sought to create a collaborative and supportive environment where everyone felt as if they were part of a larger group working together “as one.” She shared how she utilized designs to help bring students together. For example, the use of a U-formation helped her to meet this classroom goal early in the year. “By starting the year with the horseshoe, it’s like we’re all in this together. You have
new kids that might not know others and that’s nice for them to all sort of know we’re all here.”

The teachers sought to create an inclusive community through the development of connections. They strove to support positive interactions among the children such as working collaboratively regardless of differences of opinions or ideas. Steve added that as a teacher, he aimed to make personal connections with his students. A review of the transcripts produced the examples that demonstrated how the teachers used seating to support these classroom goals. Furthermore, they showed how the teachers utilized the environment to control behavior and create a sense of collaboration in the classroom.

**Subtheme 2b. Impact of classroom seating.** All of the participants used seating to create a learning environment that they believed to be supportive, collaborative, and inclusive. Each teacher described how seating helped them to support their vision and his or her desired outcome. The participants shared a belief that seating had a significant influence on the classroom environment and that they could use arrangements to create a cooperative and encompassing space where students felt a sense of belonging. In order for Steve to connect with students via eye contact, he regularly used a horseshoe arrangement that allowed him to see each child. Abby mentioned that she controlled her seating by assigning students to seats within a given arrangement to allow them to feel secure and to relieve them from any pressure to make difficult social decisions, such as who to sit next to or who to avoid. She added that she tried to “keep it really fair, where all kids have a friend. I tried not to stack personalities and skills. You need someone who is going to be empathetic and helpful.”

The teachers strongly believed that classroom seating was beneficial in helping them to create the preferred learning environment. For example, Larry explained that proper physicality of an arrangement creates equality. “Physically, if you are in a circle, you are all on the same level. That is the most salient form of inclusion there is.” His classroom seating decisions were
based on the needs of the group at any given time. “The structure that I create as a teacher is reactionary, in response to where I feel they are as a group.” Margaret described how the use of a specific design allowed individuals, including her, to get to know one another early in the year. She utilized a pod design to allow students to get to know a small group of peers at a time, strengthening the broader classroom connection. Margaret used the environment to enhance the relationships among the class.

All of the participants strove to create collaborative communities and they used seating arrangements and assignments to meet their classroom goals. This demonstrated their understanding that seating designs were a method in reaching desired results. Throughout the interviews, teachers repeatedly mentioned classroom arrangements in relation to a perceived outcome, showcasing the belief that seating positively influenced the environment in both positive and negative ways. The teachers expressed their acceptance that seating played an important role in determining the overall classroom environment. In particular, they spoke about the ability that seating had in supporting collaboration among peers. The participants sought arrangements that promoted connections among students. They valued relationships and utilized assignments that fostered collaboration. This highlighted the teachers’ understanding that seating arrangements and assignments shaped behavior that influenced the overall environment.

Teachers’ classroom goals were reflective of their personal characteristics and experiences. Once again, this showcased the relationship between two of the three factors in the Triadic Reciprocal Causation Model. Their experiences in the classroom, both positive and negative, led them to favor a collaborative environment that they designed and implemented for their students. This demonstrated an assumption that what they desired based on their personal characteristics and experiences was best for their students.
Theme 3: Utilization of Seating to Meet Individualized Student Goals

Individualized student goals were separate from the overall classroom goals. These personalized goals were designed with one child in mind. For example, if a child was very quiet and not participating, a goal for him or her might have been to verbally participate more regularly. On the other hand, if someone spoke out freely, a goal might be to listen first to the ideas of others. These are only two of the many possible individual goals that a teacher might have for his or her students. Four subthemes emerged from the findings within this third theme: Meeting Academic Needs, Positive Social Structures, and Behavior Management, and Self-Selection of Seats.

Subtheme 3a. Meeting academic needs. Participants revealed that many of their decisions regarding seating were influenced by the academic needs of their students. Teachers wanted their students to perform well, so they sought to understand the needs of each child throughout all academic subjects. With this in mind, seating frequently changed depending on the subject being taught. Larry, who regularly utilized a whole group circular design in his classroom to support his overall classroom goal of collaboration, used clusters for both reading and math groups. Math was “definitely a subject where group work is helpful. I’ll pair students off randomly and then I’ll have pairs meet with another pair and then I’ll have fours meet up with fours and then we’ll bring it all together.” He explained that this is a method of scaffolding that helped to meet students’ individualized academic needs in groups, while then allowing them to build upon their skills by discussing the thought process with the larger group. Larry’s ultimate goal was for “the maximum amount of students to be invested in the activity as possible.” When seated in a larger group, he made them sit “differentiated by gender identity.” He explained that, “students tend to sit next to someone with a similar gender identity.” Gender identification was a personal characteristic that Larry considered as he made seating decisions.
He found that this arrangement promoted greater participation, particularly among individuals that were easily distracted or inclined to talk to friends during academic sessions.

Margaret spoke about meeting the individual needs of students so that they could learn effectively. For example, she explained that some students needed to be positioned close to the board for vision purposes or to avoid peer and classroom distractions. While she realized that she was trying to avoid a specific behavior, such as talking to a peer about a topic unrelated to the academic discussion, she noted that she used seating to meet the “behavioral needs that feed into the academics. A student would likely be closer to the front of the room or close to my desk to complete tasks to the best of their ability.” Another example that Margaret provided was that she used a circular design when taking a standardized test “so that students could not see each other’s work.” This design was based on the desire to create privacy for each student that resulted in the avoidance of cheating.

Teachers found that seating assignments, such as being close to the board or sitting next to someone of the opposite gender identity, along with the overall seating arrangements, helped students to focus on a given task. The examples provided in this subtheme showed that teachers considered a child’s personal characteristics, such as gender identity, social behavior, academic traits, and vision issues, as they utilized seating assignments to help students meet their academic goals. This showed a consideration for Bandura’s model and the belief that seating assignments and personal characteristics interact and influence behavior, specifically those related to learning. Three of the five teachers paired similar achieving students together. They paired high achievers together, as well as low achievers. The other two teachers purposefully paired those that needed support with academically strong students. While teachers understood that students interacted with one another and influenced learning, the narratives suggested that not all teachers agreed on which type of seating assignments best met the academic needs of students.
Table 3 presented an abbreviated narrative of the participants’ reflection on the power of seating to meet individual student goals.

### Table 3

**Participants’ Reflections on the Power of Seating and Academic Goals**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Abbreviated Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>I would want a high achiever to have someone to bounce something off of. I want everyone to have something to offer and to learn from.</td>
</tr>
<tr>
<td>Cathy</td>
<td>If I have two kids that need a challenge. I may put them side-by-side for a while and let them challenge each other. If I have kids that are in a lot of need of support, particularly reading support, I almost never put them alone. I never put two reading supports together. Because then they’re both lost. I might have a student like I have this year who has a good math brain next to a student who has a good reading brain and they kind of help each other.</td>
</tr>
<tr>
<td>Larry</td>
<td>They have groups of people they are comfortable with and who they know intellectually that’s going to work for them. Often times I’ll just have students pick a partner. Or I’ll say if you want to work alone you can, if you want to work with a group you can.</td>
</tr>
<tr>
<td>Margaret</td>
<td>I find intermixing is often the most beneficial for them because those who struggle the most or need more time need friends they could ask. They know that everyone feels confused at times and needs help. They are very aware of the people in their pod or even behind them. They’re used to asking for help and I think the more advanced are willing to help.</td>
</tr>
<tr>
<td>Steve</td>
<td>I will pretty regularly consider whether there is someone in the room who could be a support for a weaker student and I’ve relied on those supporters quite extensively.</td>
</tr>
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</table>

**Subtheme 3b. Positive social structures.** Teachers spoke directly about how seating could help to meet the social needs of students. This demonstrated the relationship between environment, behavior, and personal characteristics. Social needs may include the development of friendships, the navigation of the give and take of conversation, being inclusive and respecting others’ differences. The participants understood that seating influenced the social environment in
the classroom and they used both design methods and seating assignments to support their goals. Abby and Cathy used seating assignments to develop a social support system and friendships for students. They selected and partnered students up based on who might support one another and work well together. Steve and Margaret pointed out that students have unique social needs. As mentioned earlier, Steve believed that teachers were “trying to maintain positive relationships with kids.” Sometimes you want to pair kids up because they need support, sometimes you may need to separate them.” Steve strongly believed in the importance of recognizing the social needs of the third graders:

I am always trying to acknowledge their social needs because I think it’s somewhat of a fool’s mission to try to subvert the social behaviors of students, at least with the age group that I have. They are kind of going to do what they want regardless. There is a bit of accommodation that occurs. Seating can be used to support and/or discourage relationships when appropriate.

Margaret agreed. She used seating assignments to both form relationships and encourage disconnections when necessary.

I match-make like you’ve never seen, cause I think to myself, ‘oh those two people would get along if they could just spend some time together.’ And I’ll put them together.

Or, those people are causing each other some tension and strife, we’ll move them.

She explained that using seating techniques was helpful to strengthen the academic focus by supporting positive social behavior:

What can become deathly palpable in fifth grade is romance and it can be very distracting in the classroom. So I try to break up couples. It’s mostly social and behavioral and it adapts given each class. There was a group I had a couple of years ago and they were extremely social. They couldn’t work because they were so social and so had to work in
groups of two. They had pairs all over the room. My current group is far more independent and not as socially charged. So the circle works well for them.

Cathy considered the relationship between students when determining seating assignments: “Sometimes I just have two kids and I just need them not to fight. And I think this kid will not pick on this other student. They’ll help the other get through the work.” Like Cathy, Abby assigned seats with social goals in mind: “I want all kids to have a friend. I try not to stack personalities and skills.” She did not group students by their strengths and abilities; rather, she considered the need for students with various personalities and strengths to work together.

“Students need someone nearby who is going to be empathetic, helpful, and accessible.” She assigned seats within a pod design in order to foster relationships and a supportive social environment. Each of the examples demonstrated how teachers utilized seating to either support positive social interactions or deter negative situations.

Table 4

Participants’ Reflections on the Power of Seating and Social Goals

<table>
<thead>
<tr>
<th>Participant</th>
<th>Abbreviated Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>Over the course of the year students have an opportunity to work collaboratively with everyone in the room. This is not always easy, but will help to prepare them for the social realities of life outside of school.</td>
</tr>
<tr>
<td>Cathy</td>
<td>I tell them it’s because when you work closely with someone for a whole month you get to know them better. You need to get to know everybody so we want to change that a lot.</td>
</tr>
<tr>
<td>Larry</td>
<td>I think that kids especially in fifth grade where sort of like developmentally they are beginning to, well kids are always wanting to explore their environment. My biggest fear as a teacher is having my relationship of the environment’s relationship with a child becoming adversarial. So, the way that I combat that is by allowing small moments of agency for the child because you can’t be adversarial if someone is giving you choice.</td>
</tr>
</tbody>
</table>
Margaret: There are some breakout tables in the corners. You might see some kids go to those, but I think primarily it’s a social driven thing.

Steve: Once I know their personalities and I see their friendships develop I don’t handle that statistically. It’s still a basic gut instinct. But you can tell there’s a friendship that actually they help each other and they are more successful sitting side by side. It’s too dominant and it subverts the class need or interest.

Subtheme 3c. Behavior management. This theme emerged as all teachers shared ways that they used the seating environment to encourage or discourage behaviors. Larry, who was reluctant to assign seats, used seating as a way to help manage behavior in the classroom. If a child were threatening the positive learning environment, he would ask that child to relocate to another area in the classroom in order to minimize the behavior and allow the child to refocus. This not only helped to meet the behavioral needs of this individual child, but the needs of the entire class. Cathy mentioned that physically moving from one seat to another location in the room supported learning. Meeting behavioral needs helped to support academic needs. “Moving helps students to focus better, sit down more, and face the board when needed.” She believed that “seating has an ability to help students focus.” Moving a child to stop an action demonstrated a belief that environment influences behavior.

Margaret recognized that there was often “a huge, wide range of attention issues. For some kids it’s important that my teaching assistant or I go to a student and work one on one to get them in a place that works for them.” She provided them with a separate seating area, “either a table or the two or three satellite desks that are strategically placed away from the group.” Similarly, Steve allowed students to access separate seating areas for short durations of time throughout the day. If a child needed a quiet workspace they could go to a designated area of the room for some time or work in the hallway. “It’s just a person moving to a new location to do a specific task and return to their space.” Not only did he determine when this is needed, but he
also encouraged students to decide if they need a break from the group in order to regain focus or control of their work environment. “I basically make it clear if you need to move, get up and move.”

Abby employed several strategies to help monitor behavior. If students were not successful when working together, she would move them away from a friend. If the seating arrangement or a particular seating assignment was not working for a child, Abby offered time away from the seats to remediate negative behavior. She added that, “I am more likely to get kids outside to play for a break before changing the seating arrangements.” Like Cathy, she recognized that momentarily moving students away from their assigned seats could help them to regain focus and control.

Table 5
Participants’ Reflections on the Power of Seating and Behavioral Goals

<table>
<thead>
<tr>
<th>Participant</th>
<th>Abbreviated Narrative</th>
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</thead>
<tbody>
<tr>
<td>Abby</td>
<td>There has to be someone who is making sure the seating and the behavior is appropriate. Seating can support everything else. For me and anyone else. We put a lot of thought into seating because it works. It can support the community code.</td>
</tr>
<tr>
<td>Cathy</td>
<td>Kids that I know I can count on. I can put them on the roof and they’d be perfect and there are others who it doesn’t seem to matter where I put them. I’m constantly moving them to help them focus better, sit down more, face the board, whatever I need them to do.</td>
</tr>
<tr>
<td>Larry</td>
<td>If you have a group of kids that are too chatty then that’s a very immediate threat to the environment. Noise and disruption are immediate threats that need to be resolved. I really don’t like asking kids to move, but I will if it’s a threat to the learning environment.</td>
</tr>
<tr>
<td>Margaret</td>
<td>There are certain kids that know that’s a space for them to use and the other kids know that they don’t need that so they just stay at their desks. And when we were picking seats I knew that there were kids that weren’t a good combo and they couldn’t sit next to each other.</td>
</tr>
</tbody>
</table>
Subtheme 3d. Self-selection of seats. This theme emerged through a discussion of students’ ability to choose seats. There was a bit of a divide between the teachers of students in the younger grades and those in the older grades. In Grades Two and Three, students were rarely allowed to select their seats. Abby, a third grade teacher, believed that students were too young to make this decision. Her response suggested that allowing individuals to choose their seats presented unnecessary pressure for them and could have a negative impact on the entire learning environment:

They are not ready to make a decision based on their needs. It would be a lot of social pressure. Somebody would be left out or others would be asked by a lot of people and they’d have to choose. It’s not worth it.

On the other hand in Grade Five it became a regular practice. Margaret shared that students have the freedom during their independent work to leave their desk:

If you come in my room and it’s free work time you might see some kids lying on the ground in the middle of the circle. There are some breakout tables in the corners and you might see some kids choose to go to those.

Larry believed that not allowing students to choose their seats had a significant impact on how each student felt about themselves and the teacher in the room. “No human being likes to be told where to put their body. I think that the students in my classroom feel very safe because they feel very valued and respected and empowered.” One of Larry’s concerns as a teacher was having the “environment’s relationship with a child become adversarial.” He added that choice and “allowing small moments of agency for the child” combats this anxiety. Both fifth grade
teachers agreed that the act of letting the students choose their seats was also necessary because it prepared them for the following grade where they would have had more seating options. In sixth grade, students attended a greater variety of classes with various teachers. Sixth grade classes did not have assigned seats. Therefore, students had the opportunity to choose where they would like to sit in the classroom and with whom.

Overall, the participants’ responses showed a wide variety of ideas on how they implemented seating strategies to meet students’ academic, social, and behavioral needs. There were some commonalities among the educators, but also some differences. Academically, all teachers utilized students’ academic abilities to guide seating decisions. Three of the five teachers paired similar achieving students together. The other two believed that students benefitted when they were placed with students of differing abilities. Teachers believed that the characteristics of students influenced one another and they assigned seats to meet their students’ academic needs, but there was no consensus on the best method of seating assignments to support learning.

Similar to the method that was used by some teachers to support academic needs, teachers used the pairing of students to foster relationships. Teachers recognized the social and behavioral needs of students and they used seating to support and/or discourage relationships. They agreed that moving students could be an effective way to remediate behavior. Furthermore, teachers mentioned that in doing so, they helped to support a positive social environment. They reduced negative situations by moving students apart from one another or taking a break from an activity. There was more agreement among teachers in how to meet the social and behavioral needs of students than the academic needs.

Opposing views emerged in regards to choice and autonomy. Teachers in Grades Two through Four rarely allowed students to choose their seats. Abby shared strong feelings about her
belief that students were not ready to make seating decisions. Larry and Margaret, the fifth grade teachers, disagreed. They implemented choice for students to prepare them for the greater autonomy that they will face in fifth grade. Larry felt strongly that this choice also impacted how students felt about themselves. He, along with the other teachers, recognized that seating arrangement and seating assignment decisions could greatly influence student experiences in the classroom. The variety of ideas and opinions on meeting the individual needs of students suggested that teachers were relying on their own observations and instincts. Without sharing classroom experiences and comparing methods, it was unclear which utilization of seating was best in meeting the individual needs of students.

**Theme 4: How Manipulating the Physical Environment is Optimized by Teachers**

It is clear that the participants utilized seating arrangements and assignments to create an environment that supported the overarching goals of the classroom, as well as the individual goals determined for each student. The participants reflected on how designs had specific implications and were used for various purposes and in a variety of ways. The four designs that emerged in the interviews were clusters, u-formations, circles, and rows and columns. The teachers shared their ideas on how the designs encouraged various behaviors in the classroom and how they choose to select and utilize the arrangements. It was clear that all teachers believed that the environment led to specific behaviors within the classroom, as noted by both Bandura (1986) and the literature findings. While overall classroom goals were very similar between teachers, opinions on the use of arrangements solicited differing thoughts and ideas.

Table 6 presents an abbreviated narrative of the participants’ views of various seating arrangements.

Table 6

*Participants’ Reflections on Seating Arrangements*
<table>
<thead>
<tr>
<th>Participant</th>
<th>Abbreviated Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>The pod is more collaborative. If you have them in rows it is presented as teacher driven. Pods are more discussion based and more student-driven.</td>
</tr>
<tr>
<td>Cathy</td>
<td>I think because there is a certain memory for me that says you’ll sit in your desk no matter how uncomfortable you are. You can even cry until you figure it out. You’re alone in this. I don’t like that. I’m getting a little emotional right now.</td>
</tr>
<tr>
<td>Larry</td>
<td>I’ve done the horseshoe, pods, free seating, and now I have them all sit at a round table. I use a round table but it breaks apart.</td>
</tr>
<tr>
<td>Margaret</td>
<td>I was lucky. I went to an independent school I never sat in rows.</td>
</tr>
<tr>
<td>Steve</td>
<td>I certainly sat in rows. I guess that’s what I recall. I mean we’re talking a long time ago. I don’t remember too much of it. That’s what the model was.</td>
</tr>
</tbody>
</table>

**Subtheme 4a. Clusters.** In order to meet her goal of collaboration, Cathy clustered students in small groups. She believed that this was an effective way to build relationships and the teamwork that she desired in her classroom. Abby also preferred the use of clusters or “pods” as she calls them, in order to support collaboration. While agreeing that pods supported collaboration and built relationships, Margaret added that while pods can be good, “you have to switch them up more often. It can be beneficial to allow a pod to get into a groove and develop pod pride. But that also could be a little detrimental to the other people in the class if it becomes exclusive.” Larry was a bit hesitant to use pods or clusters in his classroom. While he admitted to using this design for groupings in reading and math, he shared distaste for this type of ability grouping. “Clusters would be fine if you’re really trying to create an environment that privileges differentiation.” Larry believed that randomly selecting students to sit in small groups would be more appropriate than grouping them by similar abilities.

Steve’s use of pods was not socially or behaviorally driven, but rather used to support his
curriculum in third grade. “It had an overlay to a specific kind of extended project that was going on. It was tied into a simulation, a project that revolved around groupings; I probably wasn’t going to shuffle them up much.” He added that if he needed to change the arrangement due to social or behavioral issues, such as students who are not getting along or those who are talking too much, he “came up with some reason,” such as an “adjustment to the project, to make it seem like it was sort of part and parcel with what was really happening.” By minimizing the discussion of seating changes with the students he was able to keep the focus on the academic task. The pods were designed solely because of an academic focus, and altered, if necessary, for social and behavior issues.

**Subtheme 4b. U-formation.** While other designs were utilized, the U-formation was the most positively mentioned. Margaret used seating in a variety of ways throughout the year to meet her many goals, but most commonly, and particularly in the beginning of the year, she used a horseshoe design for the sole purpose of making all students feel comfortable and part of the new classroom community. Each year the class was made up of a new group of students. “You have new kids that might not know others and that’s nice for them to all know we are all here together.” While Cathy preferred the use of pods, she recognized that the use of clusters was not always optimal and at times might prefer to “branch out and do a big U, while assigning elbow partners for students. I would arrange it so the kids would work well together.” She added that the benefit of a U-formation was that it allowed more space for groups to come together and collaborate on the floor. Students could go from whole group discussions in a U-formation to partner or smaller group discussions as they sat on the floor in smaller groups.

Steve utilized both the horseshoe mode, and very rarely, a reverse horseshoe, where students were looking outward rather than in. This alternative method was used when Steve sought less interaction among students. He found that the reverse horseshoe method, like rows
and columns, discouraged discussion among students. He believed in the value of change and stated, “Even in a horseshoe mode, I’m not going to go more than about two or three weeks without shuffling things up.” Steve agreed with others, like Margaret, that the U-formation allows for inclusion and interaction because everyone could see one another. Margaret shared, “collaboration is encouraged and fostered when you can see each other. You’re able to discuss things more easily because you can physically see each other.” The teachers interviewed were in agreement that the U-formation accomplished this goal. Larry commented, however, that while the students were more accountable due their own visibility, the teacher was ultimately the leader of the group. Therefore, the students had less ownership of their learning than in a circle formation. While Larry utilized this design at times throughout the year, it was clear that his overall goal of collaboration had an impact on his decision-making. Therefore, he more regularly utilized the full circle arrangement.

**Subtheme 4c. Circle or round table.** According to several teachers, a circular design or the use of a round table had a similar outcome as the U-formation. It supported discussion and collaboration. Larry utilized a round table so that no one could hide. As mentioned earlier, he aimed for every individual to feel that they were “on the same level” and he believed that this design helped him to reach his goals. In a circle, no seat is better or worse than another.

This whole notion of collaboration, at least as a big group, is great. I love the idea of 18 or 20 kids collaborating together. A circular design allows a certain type of collaboration. There is an expression: everybody has an oar in the water and the boat won’t move if you don’t move your oar. So I think kids also respond to it because there is a sense of voyeurism. Whereby, even if you are passively engaged with the activity of a full group discussion you’re still immersed in it. I think it’s sort of like watching television. They get to watch their peers argue with each other. The maximum amount of students can be
invested in the activity as possible.

Unlike Larry, Margaret used the circular design to create a sense of isolation for each child during test taking. Individual desks were arranged in a circle. This created some space and distance between students while preserving the ability to see one another, but not their work. The design was meant to provide privacy for students during formal testing. She noticed that students respond positively and much like Larry’s observations, the arrangement promoted involvement and engagement among students.

We were testing and a student said, “Hey, if we organize our seats in a circle, no one could see each other’s work.” We did it and really liked it. It helps promote discussion; everyone is really involved and could see each other. In terms of space it’s nice for getting everyone involved.

Margaret attributed her engaged classroom environment to the circular arrangement. Although the design took up more space than a cluster or pod design, she believed that the end result far outweighed any functionality issues or limitations such as not having as much room to move walk around the room easily.

**Subtheme 4d. Rows and columns.** Unanimously, the participants responded negatively to the rows and columns design. They shared feelings of being isolated, controlled, and alone. Furthermore, it was mentioned by both Cathy and Steve that this was the design used not only in the early stages of their careers, but also when they were students. Cathy was particularly vulnerable when discussing her own experience with this design. She shared that the rows and columns design brought back “a certain negative memory that says, ‘you’ll sit in your desk no matter how uncomfortable you are. You can even cry until you figure it out. You’re alone. You’re alone in this.’ And I don’t like that.” She proceeded to get quite emotional about how this seating influenced her self-worth. “It just feels too alone and too structured and too
Abby also remembered sitting in rows at a young age. She felt “invisible and like no one really cared.” Therefore, she never used a rows and columns design unless students were taking a test. For test taking, she would temporarily rearrange a design into rows and columns and would then move back into the original design when testing was complete. Otherwise, she felt strongly that it had no purpose in the classroom.

The younger teachers shared similar sentiments, even if they did not personally experience this design as students. Margaret considered herself lucky to not have had that occurrence in the classroom. She noted:

My classroom is never in rows and the desks are never solo. My desks are never floating solo. I was lucky. I went to an independent school and I never sat in rows. I have bad vibes about rows. It’s like what you see on bad television shows. I think it is very sterile and not healthy for a classroom. You are in a land all by yourself and I don’t like that.”

For all teachers, the rows and columns design felt isolating and counterintuitive to the desire for an interactive and supportive environment. In classrooms where participation and engagement was expected, this design was not deemed to be an appropriate method to meet the teachers’ objectives. Teachers were vocal and emotional when sharing their distaste for the arrangement.

Teachers made the connection between specific seating arrangements and how they were used to meet goals. Pods or clusters were found to be beneficial when working on a project or to support a sense of collaboration, but there was disagreement among teachers in the value of this arrangement. While Abby, Cathy, and Margaret believed that this design could be socially beneficial, Larry and Steve only used the design to support an academic assignment. Both the u-formation and the circular design were recognized for allowing students to see one another,
which promoted collaboration and discussion. The rows and columns design was strongly opposed by all participants. When discussing this design, participants reflected on how this arrangement negatively impacted their childhood experience in the classroom or how grateful they were to have avoided this arrangement as a child.

It was clear that various arrangements had positive or negative qualities. Overall, teachers were in agreement about the value of a u-formation or circular design. They also agreed that a rows and columns design was isolating and inappropriate. Participants found the pods and clusters design useful, but for various reasons. They were used either to support a particular project or to meet behavior goals. Teachers recognized that seating arrangements and assignments have distinct purposes. This once again reiterated the notion that seating is influential in helping teachers to meet both classroom and individual goals.

**Conclusion**

Teachers vividly recalled and considered their childhood experiences with seating assignments and arrangements. They determined their goals with both individuals and their environment based on these recollections. Furthermore, they made seating decisions centered on the social, behavioral, and/or academic needs of their students. This supported Bandura’s (1986) theory that personal characteristics, environment, and behavior are intertwined. The teachers’ past experiences caused them to take action that directly influenced the environment and the students in the classroom.

Collaboration was the overarching theme for teachers as a classroom goal and they utilized a variety of seating arrangements and assignments to support their desired outcome. They aimed for students who were engaged and participated in classroom discussions. In addition, teachers wanted to create agency for the students that allowed them to feel as though they played a role in the classroom community.
In addition to classroom goals, teachers set individual goals for each of their students. As mentioned, teachers shared how students were assigned seating within a given arrangement to meet academic or social needs. The individual needs of students were considered in relation to classroom seating arrangements. Seating was used to encourage greater focus, promote or discourage social interactions, and limit disruptive behavior. These goals often required more frequent changes within the larger design. While given seating arrangements remained the same for a period of time, students had their assignments changed more regularly. For example, while a pod design was used in Margaret’s classroom, the seating assignments within that design changed regularly based on the activity and social needs of students. The participants utilized both seating design and assignments to meet greater individual needs in a variety of ways.

The themes highlighted in this chapter were central to the experiences that the participating teachers had in the classroom in regards to seating assignments and arrangements. They provided insight into the relevance that they placed on seating and their views on how each arrangement influenced children academically, socially, and behaviorally. The teachers’ personal experience influenced the creation of their goals and their views on specific arrangements. The four major themes that emerged were: (a) understanding students’ needs and planning, (b) variety of classroom goals, (c) utilization of seating to meet individualized student goals, and (d) how manipulating the physical environment is optimized by teachers. The following chapter will compare the findings in relation to the literature review and the theoretical framework, and will include implications for practice and research, the limitations of this study, and a statement of my personal journey and future plans for this research.
Chapter Five: Discussion and Implications for Practice

As described previously, the study focused on understanding the experiences of five independent-school teachers in Grades Two through Five and the impact that classroom seating has on the environment and in meeting the social, emotional, and behavioral needs of students. This final chapter summarizes the study’s research findings and interprets them in relation to both the theoretical framework and the literature review. These sections will be followed by the identification of the limitations of this study, recommendations for future research, and finally, personal reflection and goals.

Summary of Findings

Four themes emerged from the interviews that explored teachers’ perceptions of seating assignments and arrangements and their intent when designing their classroom: understanding students’ needs and planning, variety of classroom goals, utilization of seating to meet individualized student goals, and how manipulating the physical environment is optimized by teachers. The themes developed because each participant spoke in detail about their experience and perception about seating, particularly in relationship to these topics. The transcripts were evaluated to collectively form the themes and subthemes.

Theme 1: Understanding students’ needs and planning. Cathy, Margaret, and Abby described the positive experiences that they had as children in the classroom. They purposefully strove to either create a similar environment for their students. Abby and Cathy also reflected on their negative classroom experiences and how they avoided classroom designs that promoted undesirable memories. Cathy’s feelings of isolation led to an avoidance of a rows and columns design in order to support a sense of inclusion for students. In each case, the participant’s past guided beliefs and ideas that shaped his or her decision-making with classroom seating.
There was minimal discussion about how teachers utilized the support of colleagues to inform design considerations. Teachers did mention that at the beginning of the year, they consulted with teacher in the previous grade level for obvious flaws or concerns in their design. The other teacher would know the students better since he or she had just worked with them in the previous school year. Other than this initial act, teachers did not consult with one another or share thoughts or ideas on the effectiveness of specific seating arrangements or assignments. They considered only their own experiences with seating arrangements. Classroom teachers felt confident in making these decisions without consulting others for alternative considerations throughout the year.

An examination of the interviews revealed that teachers changed their designs throughout the year without the use of an evaluation system to access the effectiveness of their arrangements in relation to meeting their overall classroom and individual student goals. Cathy admitted that she took no written notes and relied “on memory” and Margaret reflected on meeting classroom needs “entirely through informal observations.” Teachers relied on instinct, impulse, and change to meet the needs of the classroom and individual goals. The only time teachers received support to design their classroom was in the beginning of the year when they utilized their colleagues to help make seating assignment decisions. Throughout the school year, no formal observations or notes were taken that prompted the seating arrangements and changes.

**Theme 2: Variety of classroom goals.** Each teacher identified the overall classroom goals that they strove to create in the school space. This topic was distinguishable from the individual goals that were set for students. Teachers formed classroom goals to shape the environment. As noted in Chapter Four, Abby, Cathy, Larry, and Steve, sought to create an inclusive, interactive atmosphere built upon collaboration. They wanted students to feel engaged and invested in their learning and they believed that by doing so, students would meet their
academic and behavioral goals. They accomplished these objectives through the design of the classroom. This suggested that they placed a significant value on the influence that seating had on the classroom environment. Teachers acknowledged that seating played an important role in creating the classroom setting, specifically when recognizing how seating supports collaboration among peers. This highlighted the teachers’ understanding that seating arrangements and assignments shape behaviors within the classroom that influences the overall environment.

**Theme 3: Utilization of seating to meet individualized student goals.** Aside from these overarching classroom goals, teachers described the objectives set for individual students. Four subthemes emerged from the interviews, Academic Needs, Social Needs, Behavioral Needs, and Choice and Autonomy. As mentioned in Chapter Four, there was an overlap between the academic needs and the behavioral needs. Margaret explained that some students benefitted from being positioned close to the board for focusing purposes in order to avoid peer and classroom distractions. She used seating to meet the “behavioral needs that feed into the academics.”

Teachers provided other ways that they utilize seating to support student goals such as, being separated from the group to regain control or focus and being positioned near the teacher to access support more easily and to work “to the best of their ability.” The notion that seating could help to meet the needs of individual students, once again demonstrated a teacher’s belief that seating arrangements and assignments were impactful and influenced students in a variety of ways.

As described in Chapter Four, under the subtheme, Behavioral Needs, Cathy, Larry, Margaret, and Steve, utilized a separate working space for students who were having difficulty focusing. These students worked in a separate area for some time before rejoining their cluster or larger group. It was unclear if this method had a long-term positive impact on meeting the needs of those students. In order to protect the integrity of students, Abby felt strongly that this method
should only be used in extreme circumstances. Abby shared that while she saw the benefit of moving students, she preferred taking quick breaks outside over changing designated seating due to behavioral issues.

**Theme 4: How manipulating the physical environment is optimized by teachers.**

Teachers recognized that the four main arrangements (clusters, u-formation, circle, and rows and columns) produced very different outcomes in the classroom. They described how arrangements directly impacted the students and the overall environment. This demonstrated the teachers’ belief in the value that seating arrangements has on supporting their goals. Often they connected seating arrangements with their desire for a collaborative classroom.

Teachers shared that clusters allow for students to have the experience of offering their thoughts and ideas with others, but in a smaller, contained setting. Some teachers utilized the arrangement to support projects that were specific to curriculum and others, for ability grouping. All participants felt positive about the use of U-formations and circular designs. They mentioned that the visibility for every student helped to create involvement and allowed students to feel included and invested in the class activity and overall, classroom environment. The circular design was employed to promote discussion. Larry used this design and shares that his sole purpose is to create inclusivity and a mutual respect for one another. In addition to allowing students to select their own seats, he often purposefully removed himself from the circle in order to strengthen the feelings of autonomy for the students. This teacher shared that his decisions were driven by the negative feelings that were imposed upon him as a child in the classroom. He attributed personal feelings of resentment towards seating arrangements that take away students’ sense of power and control.

Finally, regardless of whether or not teachers had personal experiences with a rows and columns design, they found this arrangement to be objectionable. The teachers described the
design as one that creates a sense of control by the teacher, one that isolated students, and one that did not exhibit care for the individual needs of students. Feelings of resentment and negativity drove them to utilize arrangements that were deemed as more inclusive and welcoming. Those that did not experience this arrangement also avoided it because they strongly perceived it as an isolating and negative design. While the arrangement may have helped a child focus on a given task, the negative aspects outweighed any benefit.

**Findings in Relation to the Theoretical Framework**

The Social Cognitive Theory, specifically the Triadic Reciprocal Causation Model, explained how learning resulted from continuous interactions among three factors: personal characteristics, behavior, and the environment. These factors, as described in greater detail in Chapter One, determine and shape one another. Overall, the Triadic Reciprocal Causation Model helped to interpret the meaning of teacher decisions and to consider their beliefs in how classroom seating influences student behavior. The model also helped to identify ways that teachers can deepen their understanding of seating arrangements and assignments. By understanding how personal characteristics, behavior, and environment are intertwined, teachers can make more informed decisions about seating arrangements and assignments that directly impact students.

**Personal characteristics.** It was evident that the personal experiences of the teachers guided their decision-making, as discussed in the theme titled, understanding students’ needs and planning. Considering one’s childhood experiences that led to action may help teachers to understand and reflect upon their seating decisions. Social Cognitive theorists believe that participants’ understanding of experiences, along with the three-way reciprocal interaction of personal, behavioral, and environmental factors influence goals and actions. The teachers’ experiences within their childhood classroom environment led to specific feelings and behaviors.
As adults, both positive and negative experiences and feelings led to their beliefs and helped to shape the objectives for their own classroom. They used seating arrangements and assignments to meet those goals.

Personal experiences induce reactions from one’s environment, causing changes in behavior (Bandura, 1986). For this study, the personal characteristics included the mental and emotional considerations of both teachers and their students. The participants recalled memories of their experiences with seating as children in school. These recollections led to strong feelings towards various arrangements. For example, Abby and Cathy had negative personal experiences while sitting in rows as students. As mentioned earlier, these experiences were part of their personal characteristics such as cognition, motives, and personality (Bandura, 1986). Their negative experiences made them want to create a different type of environment for their own students, influencing the decision-making in their current classroom. On the other hand, Margaret had a very positive experience in the classroom. The discussion-based, collaborative environment that she enjoyed was one that she wanted to emulate for her students. The negative or positive experiences shaped the participants’ thoughts and ideas on the type of classroom that they envision for their students.

It is important to consider that personal characteristics vary across individuals. People have different experiences from one another and differing personalities. Students also have diverse dispositions. Encouraging other teachers to reflect upon their personal experiences could help to them make more informed decisions in the classroom in regards to seating.

**Behavior.** Behavior refers to one’s actions. It creates the immediate environment and shapes personal characteristics such as a person’s expectations and beliefs, which react to that environment, all of which give shape and direction to behavior. In this study behavioral patterns included the act of self-evaluation of the teacher and the actions of the students.
A close examination of the interviews showed that the teachers’ experiences with classroom seating as children shaped their current thoughts about seating arrangements and assignments. This thinking then shaped decisions that led to outcomes, which shaped their students’ experiences. They reacted to their emotions and goals accordingly by creating and implementing designs to meet their needs.

The teachers’ behaviors were affected by their personal characteristics, such as their emotional factors and experiences (Bandura, 1986). By self-evaluating what drives their actions, teachers can more carefully design their classroom. According to Bandura (1986), decisions with seating arrangements and assignments then cause reactions from the students, demonstrating the complex interaction that occurs between the factors that influence behavior. The personal characteristics influence a behavior pattern, which ultimately alters the social environment. Teachers constantly make decisions based on their desired outcomes. Therefore, it is important for teachers to consider the personal characteristics that influence behavior and the impact of behavior on the other factors.

Environment. The environment is comprised mainly of the physical and social aspects that surround an individual. The environmental factors of the classroom, such seating arrangements and assignments, and how the students react to the design and changes, influence the teachers’ decision-making and continuous assessment of the environment (Bandura, 1986). All of the participants used seating to create a learning environment that they believed to be supportive, collaborative, and inclusive. The students reacted to the constructed environment and teachers continuously make decisions according to student behavior and their personal characteristics that determined their goals and objectives for the class. This demonstrated the teachers’ understanding of the relationship between the environment and behavior. This study encouraged teachers to reflect on their personal characteristics in relation to the classroom
environment. Though beneficial in making informed classroom decisions and in understanding the phenomenon of classroom seating, this is not an exercise that occurs regularly.

**Findings in Relation to Literature Review**

While the literature on classroom seating demonstrated the influence of seating on students and the classroom environment, it did not reference teachers’ thoughts, ideas, and the process at which they make decisions regarding classroom design. The literature reviewed demonstrated that seating can help a teacher meet the individual objectives set forth for his or her students and focused on three areas related to seating assignments and arrangements: social implications, behavioral implications, and academic implications. This section provided a description of the three themes that emerge from the literature review and in greater detail, their relationship with the findings.

**Social implications.** The findings of this study showed that teachers believe that arrangements and assignments have special social implications on individual students. They used both design methods and seating assignments to support their goals. They selected and partnered students based on who might support one another and work well together. Teachers used seating assignments to support students who need to build friendships or break apart unhealthy partnerships. Several studies in literature showed how specific arrangements and assignments could help teachers to meet social goals. In the literature review, Van den Berg and Cillessen (2015) demonstrated that by manipulating the distance between seating assignments in classrooms, the teacher could influence the relationships between peers. Margaret shared her understanding of this concept. She described how she placed students close to one another to strengthen a relationship and when needed she created distance between them to deter interactions.

The findings of this study showed that the teachers understand that social behaviors in the
classroom guide the overall learning environment. For example, Larry strove “to create a classroom that enhances the students’ sense of autonomy and control, while developing a strong sense of community through mutual respect for one another.” By focusing on individual student behavior, he supported a more productive, respectful community. The findings from this study in connection with the literature demonstrated that teachers understood the relationship that existed between the classroom environment and the social behavior of students and they utilized methods to meet the social needs of students.

**Behavioral implications.** All teachers spoke at length about the behavioral implications that seating has both on individuals and the overall classroom environment. Teachers perceived each arrangement (clusters, U-formation, circles, rows and columns) to have different behavioral outcomes. The cluster arrangement was described as leading to more discussion; the U-formation led to student involvement and class engagement; the circular design led to an environment where students take greater control of the discussion and their learning; and rows and columns, while viewed negatively, were perceived to provide isolation and privacy when working and an extreme focus on the teacher.

The literature review mirrored the teachers’ understanding that seating influences behavior. Margaret utilized the front of the room for students who need to be “positioned close to the board in order to avoid peer and classroom distractions.” The Rosenthal et al. (1985) study showed that students who sat in the front of the room were more engaged and participated more readily than those that sat in the rear of the classroom. Furthermore, Rosenthal et al. (1985) suggested that students that sat in the front of the classroom showed greater self-control. This showcased a connection between the teachers’ understanding of seating assignments and the research. Wannarka and Ruhl (2008) found that communication increased when students sat in a semi-circular arrangement. With this design, teachers were able to present more active and
collaborative lessons, while enhancing peer interaction, and supporting relationships (Fernandes et al., 2011). Cathy, Steve, and Margaret agreed. Participants considered this formation to be the most desirable arrangement for supporting positive interactions and overall behavior. For these examples, the research coincided with the understandings of teachers that shared similar understandings. However, this was not always the case. When exploring academic implications it was apparent that there was a disconnection between the studies in the literature review and this research study.

**Academic implications.** A review of the literature concluded that the physical environment, including seating arrangements and assignments, acted as a “silent curriculum” and could support student learning (Taylor & Vlastos, 2009, p.25). It put emphasis on the academic implications of seating assignments within the arrangements. For example, Perkins and Wieman (2005) showed that students who were assigned to sit in the front of a classroom received better grades than those who sat in the back of the room. The research within the literature also focused on how specific arrangements influenced academic success. In terms of arrangements, the literature suggested that the rows and columns design supported educational goals.

The findings in this study showed agreement with the research that the academic needs of students were a focus of the teachers’ classroom goals. Many of the participants’ choices regarding seating were driven by the academic concerns that they had for their students. Seating arrangements and assignments were utilized to meet goals and they changed depending on the subject being taught. A whole group circular design may be used to support a classroom goal of collaboration, while clusters were then utilized to support reading and math goals. The participants believed that the same seating formations that had positive social and behavioral implications met students’ academic needs. Teachers in this research study strongly disagreed
with the literature that suggested the rows and columns design was effective in meeting academic goals and objectives.

A comparison of this study in relation to the literature review demonstrated the need for research to include teachers’ perspectives. This study demonstrated that teachers did consider seating in relation to academic implications. However, none of the literature presented in the literature review included the teachers’ perspective on seating arrangements and assignments. Therefore, discrepancies existed between the literature and the study. While the literature review findings demonstrated that rows and columns are academically beneficial, the teachers in this study completely disagreed. The rows and columns design did not help them to meet their academic goals. Without an understanding of the goals of teachers, research studies cannot suggest positive or negative academic implications.

**Limitations**

Though the study contributes to prior research on classroom seating arrangements and assignments, it does have limitations. One potential limitation is my role as the researcher. As a faculty member at the school, I know each of the teachers who were interviewed. Due to our ongoing working relationship and their volunteering to take part in the study, it is possible that the participants wanted to provide answers that were deemed ‘correct’ or ‘impressive.’ They may have been more apt to please and provide responses that they believed to be favorable. Another limitation was the sample size. The small group of five participants supported the ability to explore the lived experiences of seating arrangements and assignments in detail. However, one cannot generalize the findings because of the small number of teachers involved.

All of the participants, including myself, worked at the same school. Therefore, the demographics within the study were limited. Since the study took place in a single independent-school, there may have been factors specific to this environment that influenced the responses of
the participants. This may make the research findings less applicable to schools with differing demographics, such as public schools or those in urban environments. The school’s overall design and the shape of the classrooms might have influenced the teachers’ decision-making. With large classrooms and a relatively small number of students in each class, the teachers had a broad range of choices with seating. Other schools may not have the space to consider the wide range of options that the participants were afforded due to the sizable classrooms. Based on these limitations, and other insights developed through the research, recommendations for future research will be identified in the following paragraph.

**Changes in Positionality**

As mentioned in Chapter One, I needed to bracket my own experiences regarding classroom arrangements and students, and my relationship with the participants, to accurately interpret the interviews. I was surprised to find that this was quite a challenge. When reflecting upon my journal entries, I discovered that I was uneasy about the change in my role from a colleague to a researcher among my peers. I found it awkward to reach out to my colleagues in a formal manner. For example, when emailing the participants I needed to utilize my Northeastern University email address as opposed to my work email. It felt strange since I email colleagues informally on a daily basis. Furthermore, the semi-structured interview process also felt more contrived than the collegial conversations that occurred regularly with the participants. This experience has shed light on the various roles that I have as educator, but now also as a scholar-practitioner. Moving forward, I will work towards becoming more comfortable in the latter role and will further reflect upon how the role as a researcher fits in with my work as an educator.

**Implications for Practice and Research**

The findings of this research hold implications for both practice and research. Reflective practice could lead to more thoughtful acts regarding classroom design. Since seating influences
the daily school experience for students, administrators should devote time to provide professional development in this area. Teachers should reflect upon what type of environment they seek to create in their classrooms and how they plan to reach goals through seating assignments and arrangements. A consideration of how personal views interact with behavior and the classroom environment in the planning process will encourage a deeper understanding of how seating influences students. Exploring the belief systems of teachers is in an essential step in gaining further knowledge regarding seat assignments and arrangements. As a scholar practitioner, I can begin this conversation at my school by continuing the discussion with the participants and broadening the conversation to include the entire faculty.

The participants in this study had emotional reactions when asked about their childhood experiences in the classroom. These strong emotions seemed fresh in the teachers’ minds, though for all of the participants 15 to 50 years have passed since they were students in an elementary classroom. This highlights the emotion connected with seating assignments and arrangements the influence that it has on the school experience. These reactions were evidence that the classroom design, specifically seating arrangements and assignments, influence one’s school experience. With this in mind, it seems imperative that teachers put forth greater effort into considering their goals for individuals and for the classroom environment, and the role that arrangements and seating play in meeting their objectives.

Prior to the start of each school year, teachers should consider the personal positive and negative influences that impact their design choices related to classroom seating and arrangements. Teachers are encouraged to answer the questions that were asked of the five participants (See Appendix E). In addition, administrators are encouraged to organize discussions that support reflection upon classroom seating assignments and arrangements. Throughout the year the topic should be revisited with faculty members to encourage ongoing
thoughtful decision-making regarding classroom design.

These independent-school teachers all spoke about the desire to create a collaborative, inclusive environment. The understanding that classroom arrangements and seating play an important role in shaping the school experience highlights the importance of including young voices into the discussion. It would be beneficial to explore students’ perspectives on this issue with respect to a collaborative learning environment. Surveying students to ask them how various classroom designs influence them and their approach to their work may further enhance understanding of the power of seating. Student voices will ensure that the seating assignments and arrangements chosen for them are ones that are best in meeting their academic, social, and behavioral needs.

Of the participants, only one teacher used a formal process to plan his seating design. Is there a system for teachers that could be used to explore the effectiveness of their design? Can we as a faculty create an assessment that measures the effectiveness of our seating assignments and arrangements? Teachers should strive to answer these questions and consider what types of assessments or measurement systems could be used to analyze its effectiveness in the classroom in meeting overall classroom and individual goals through seating arrangements and assignments.

There are several ways that teachers showed their belief that seating arrangements highly influenced the classroom environment and individual students. Yet, there was no formal method or energy devoted to ensuring that they were making appropriate choices for meeting the goals and objectives for their classrooms. Since the decisions of the teachers were based solely on personal experience without the use of reflection or evaluation, it might be helpful to expand the conversation between peers. A discussion with colleagues might enhance the choices we make in our classrooms.
There are several areas that would be worth investigating further in order to enhance research devoted to classroom seating and arrangements. Recommendations have been developed to guide future studies. Future research should include teachers from a wider variety of school settings. By including public schools, multiple towns and cities, a wider range of grades, and a variety of populations, the study can be expanded upon. This would allow for a comparison of findings and better understanding of teachers’ perceptions of seating assignments and arrangements. Personally, I will begin this conversation by sharing my knowledge with educators outside of the independent school world. I will continue my work as a scholar practitioner by asking teachers in a variety of school populations what works for them and why.

I will explore opportunities to present at educational forums that host educators from across the country. Doing so will allow me to extend beyond my school community. For example, the National Association of Independent Schools (NAIS) Annual Conference hosts more than 4,000 participants, representing over 1,500 national and international schools. Presenting my work at a conference would be an outstanding opportunity to widely open up the discussion of classroom seating arrangements and assignments, while gaining a broader perspective of teachers’ experiences in the classroom. The sharing of ideas will promote a deeper understanding of its influences and opportunities to meet the needs of students in the classroom.

Lastly, comparing the teachers’ perceptions with those of students in their classrooms might provide further insight into seating arrangements and assignments. Similarities and/or discrepancies between those who design the classroom and those that experience the phenomena of seating could be identified and analyzed. I will begin this practice in my own classroom and encourage other teachers to do the same. By asking students what arrangements they prefer and why, teachers may broaden their perspectives of the influences of seat assignments and arrangements from a child’s perspective. Furthermore, it would be valuable to explore the belief
systems of not only teachers from a broader range of experiences, but also students such as those from schools unlike the setting of this study. Students from public, inner-city schools might offer different perspectives on seating arrangements and assignments.

In addition to these implications for practice and research, several other talking points seemed relevant for further exploration. While expanding the discussion, it would beneficial to explore teachers’ beliefs on student inclusion. One example that surfaced in this study was assigning seating by gender identity. While it was apparent that the teacher that did this was compassionate and astute when it came to issues of gender and gender identity, it is possible that not all teachers have the opportunity to explore what it means to ask a child to define their gender identity day after day. It is important to reflect upon the role that seating has in supporting the needs of all students. What are the implications of asking students to sit by gender identity and what message does it send to the class to do so?

Another topic that deserves further exploration is the strong reaction that some participants had to asking younger students to select their own seats. Abby spoke about her feelings of discomfort as a child when she had to find someplace to sit and someone to sit near. Her current solution to that childhood trauma is to not permit her students to select their seats. If the self-selection of seating causes anxiety for students like Abby, what are the implications for others? Should all students be permitted to find their own seats, or should younger individuals be cushioned from this social difficulty? Opening up the conversation to include a wider range of topics in regards to seat assignments and arrangements will help teachers to maximize the comfort level for all students and, therefore, enhance student learning.

**Final Reflection**

Completing this qualitative research has helped me to grow as both an educator and a scholar-practitioner. It is clear that seating assignments and arrangements play an important role
in shaping the experiences of students in the classroom. Furthermore, I am reminded that teachers’ personal characteristics play a role in the classroom environment and behavior of students. As a teacher I often think about seating decisions and their impact on student behavior and learning, but I do not often think about my role in the process. Why do I make certain decisions regarding seating assignments and arrangements? What parts of my life are driving my choices that impact the variety of personalities in my classroom?

While it is important to reflect, I am also reminded that decision-making is more effective when it is backed by information. I have always understood the value that seating and arrangements have on the classroom environment, but the findings of this research project have broadened my comprehension of the decision-making process and the impact that teachers’ experiences have on classroom design. Teachers are committed to making decisions that are best for their students and we are constantly thinking about their wellbeing. As a scholar-practitioner, I am reminded that in order to best serve students, our work needs to be grounded in theory, research, and practice.

Moving forward, I will reflect upon my own experiences and how they influence the decisions that I make in the classroom. Furthermore, I will continue to explore and discuss research with my colleagues that is directly related to student learning. It is important to me to seek additional information about how personality, behavior, and environment are interrelated in the classroom in order to improve the experience for the entire educational community.

Conclusion

This exploration of teachers’ considerations when assigning seats and designing arrangements provided an understanding of how the five teachers’ personal experiences shaped the decisions that they made in their classroom. Literature demonstrates that seating impacts students socially, academically, and behaviorally. Yet, existing studies leave out the key
perspectives of teachers and of students. We need to know more about this topic. Those of us who teach work every day to enhance the learning and the lives of our students. I hope that a deeper exploration of this topic can in some measure add to the improvement of our efforts.
References


Appendix A: Recruitment Email

Dear Second through Fifth Grade Teachers,

As part of my doctoral research, I am conducting a qualitative study that will allow me to explore classroom seating arrangements and assignments from the perspective of the classroom teacher. I am seeking six second through fifth grade teachers at [Shore] to volunteer to participate in research, which will consist of one face-to-face interview with me lasting about 60 minutes. To meet the criteria for participation, you must teach second, third, fourth, or fifth grade.

I will arrange this interview at a time and location that is convenient for you. This will take place off campus to ensure confidentiality. The interview will focus on the consideration of seating assignments and arrangements in order to meet the academic, behavioral, and social needs of students.

There are no known risks to your involvement in this study. I assure you that the information that I collect and the identity of our school will be treated with confidentiality. Your participation is completely voluntary. If at any time you wish to discontinue participation, you may do so.

If you are interested in assisting me by participating in a 60 minute face-to-face interview, please contact me by email at kinahan.m@husky.neu.edu. At that point, we can schedule a convenient time and location for the interview.

Thank you in advance for your time and consideration.

Sincerely,

Mary Kinahan, EdD Candidate, Northeastern University
Appendix B: Informed Consent Form

Northeastern University, College of Professional Studies

Name of Investigator(s): Dr. Karen Harbeck, Mary Kinahan

Title of Project: Teachers and Seating Assignments: An Interpretive Phenomenological Analysis

Informed Consent to Participate in a Research Study

We are inviting you to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask this person any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?

We are asking you to be in this study because you are a lead classroom teacher at an Independent School.

Why is this research study being done?

The purpose of this research is to provide insight into teachers’ experiences and philosophy when making seating arrangements and assignments.

What will I be asked to do?

If you decide to take part in this study, we will ask you to participate in a single orally based interview. Most questions will be prepared in advance, but follow-up questions will be developed throughout the session. A voice recorder will be used to record the conversation. Once complete, you will be asked to verify the interview transcript for accuracy.

Where will this take place and how much of my time will it take?

In order to protect your confidentiality, you will be interviewed at a time and place that is convenient for you off of the school campus. The interview will take about one hour.

Will there be any risk or discomfort to me?

Within the study, there are no foreseeable risks to the participants.
Will I benefit by being in this research?

There will be no direct benefit to you for taking part in the study.

Who will see the information about me?

Your part in this study will be confidential. Only the researchers on this study will see the information about you. No reports or publications will use information that can identify you in any way or any individual as being of this project.

Recordings and notes taken during interviews, transcriptions, and observations will be collected, gathered, and stored in a locked file cabinet or within a password-protected laptop. Only the investigator will have access to the files and notes collected for the study. All data, including audio transcripts, will be destroyed within three years of the completion of the study.

In rare instances, authorized people may request to see research information about you and other people in this study. This is done only to be sure that the research is done properly. We would only permit people who are authorized by organizations such as the Northeastern University Institutional Review Board to see this information.

Can I stop my participation in this study?

Your participation in this research is completely voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time. If you do not participate or if you decide to quit, you will not lose any rights, benefits, or services that you would otherwise have as an employee.

Who can I contact if I have questions or problems?

If you have any questions about this study, please feel free to contact Mary Kinahan, 214-601-4211, kinahan.m@husky.neu.edu, the person mainly responsible for the research. You can also contact Dr. Karen Harbeck, 781-321-3569, k.harbeck@neu.edu, the Principal Investigator.

Who can I contact about my rights as a participant?

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 490 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

Will I be paid for my participation?

No compensation will be provided for participation.
Will it cost me anything to participate?

There will be no cost for the participant.

Signature of person [parent] agreeing to take part                 Date

______________________________________________________________

Printed name of person above

______________________________________________________________

Signature of person who explained the study to the                  Date
participant above and obtained consent

______________________________________________________________

Printed name of person above

______________________________________________________________
Appendix C: Application for Approval for Use of Human Participation in Research

For NU IRB use:

Date Received: 4/25/16 reviewed 5/23/16  NU IRB No. CPS16-04-16

Review Category:  Approval Date

APPLICATION FOR APPROVAL FOR USE OF HUMAN PARTICIPANTS IN RESEARCH

Before completing this application, please read the Application Instructions and Policies and Procedures for Human Research Protections to understand the responsibilities for which you are accountable as an investigator in conducting research with human participants. The document, Application Instructions, provides additional assistance in preparing this submission. Incomplete applications will be returned to the investigator. You may complete this application online and save it as a Word document.

If this research is related to a grant, contract proposal or dissertation, a copy of the full grant/contract proposal/dissertation must accompany this application.

REQUIRED TRAINING FOR RESEARCH INVOLVING HUMAN SUBJECTS

Under the direction of the Office of the Vice Provost for Research, Northeastern University is now requiring completion of the NIH Office of Extramural Research training for all human subject research, regardless of whether or not investigators have received funding to support their project.

The online course titled "Protecting Human Research Participants" can be accessed at the following url: http://phrp.nihtraining.com/users/login.php. This requirement will be effective as of November 15, 2008 for all new protocols.

Principal Investigators, student researchers and key personnel (participants who contribute substantively to the scientific development or execution of a project) must include a copy of their certificate of completion for this web-based tutorial with the protocol submission.

*************************************************************************************
A. Investigator Information

Principal Investigator (PI cannot be a student)  Dr. Karen Harbeck

Investigator is: NU Faculty  X  NU Staff  ______  Other  __________

College:  Choose an item.  Northeastern University College of Professional Studies

Department/Program  Education (EdD Doctorate Program)

Address  20 Belvidere, Boston, MA 02115

Office Phone  781-572-4628  Email  k.harbeck@neu.edu

Is this student research?  YES  X  NO  ____  If yes, please provide the following information:

Student Name  Mary Pulsifer Kinahan  Anticipated graduation date 11/2016

Undergrad  ____  MA/MS  ____  PhD  ____  AuD  ____  EdD  X  DLP  ____  Other Degree Type  __________

College:  Choose an item.  College of Professional Studies

Department/Program  Education (EdD Doctorate Program)

Full Mailing Address  5 Everett Paine Blvd, Marblehead, Massachusetts 01945
B. Protocol Information

Title __TEACHERS AND SEATING ASSIGNMENTS: AN INTERPRETIVE PHENOMENOLOGICAL ANALYSIS

Projected # subjects _6_____

Approx. begin date of project _04/18/2016_ Approx. end date 10/01/2016

It is the policy of Northeastern University that no activity involving human subjects be undertaken until those activities have been reviewed and approved by the University's Institutional Review Board (IRB).

- Anticipated funding source for project (or none) ___NONE______________________________

Has/will this proposal been/be submitted through:

- NU's Office of Research and Finance (RAF) __No____
- Provost __No____
- Corp & Foundations __No____

C.

<table>
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<th>Will Participants Be:</th>
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<th>No</th>
<th>Does the Project Involve:</th>
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<td>Blood Removal?</td>
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<td>Northeastern University Students?</td>
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<td>Investigational drug/device?</td>
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<td>Institutionalized persons?</td>
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<td></td>
<td>Audiotapes/videotapes?</td>
<td>X</td>
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<tr>
<td>Prisoners?</td>
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<td>X</td>
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</table>
D. What are the goals of this research? Please state your research question(s) and related hypotheses.

The goal of this research study is to explore the lived experience of six teachers as they consider seating assignments and arrangements in order to meet the academic, behavioral, and social needs of students.

Central question. What are the experiences of elementary teachers in grades two through five in making seat arrangements and assignments?

There is no hypothesis for this phenomenological study.

E. Provide a brief summary of the purpose of the research in non-technical language.

This research study is being conducted because students are assigned to seats for over 35 hours per week in a classroom. Research shows that seating has academic, behavioral, and social implications for students. There is limited research available on classroom seating and arrangements. The extent to which teachers use seating to reach social, behavioral, and academic goals and objectives is unclear.

Findings from this study may be used by elementary school teachers and psychologists to better understand the experience that educators have with classroom seating assignments and arrangements.
F. Identify study personnel on this project. Include name, credentials, role, and organization affiliation.

Principal Investigator – Karen Harbeck, PhD; faculty in the Northeastern University College of Professional Studies.

Student Researcher – Mary Kinahan, BS/BA, MA; First Grade Teacher and Humanities Chair at [redacted] and doctoral (EdD) student in Northeastern University College of Professional Studies.

Transcriptionist – Mary Kinahan

G. Identify other organizations or institutions that are involved. Attach current Institutional Review Board (IRB) approvals or letters of permission as necessary.

Teacher recruitment will take place at [redacted]. Approval for the recruitment of teachers has been obtained from [redacted] who provided a signed letter of approval. See Appendix A for letter with signatures.

H. Recruitment Procedures

Describe the participants you intend to recruit. Provide all inclusion and exclusion criteria. Include age range, number of subjects, gender, ethnicity/race, socio-economic level, literacy level and health (as applicable) and reasons for exempting any groups. Describe how/when/by whom inclusion/exclusion criteria will be determined.

Recruitment will take place for six, male or female, lead teachers who teach second through fifth grade at [redacted]. The potential participants range in age from 27 years to 63 years of age. All of these faculty members have a bachelor’s degree and 60 percent of potential participants have a master’s degree.

Describe the procedures that you will use to recruit these participants. Be specific. How will potential subjects be identified? Who will ask for participation? If you intend to recruit using letters, posters, fliers, ads, website, email etc., copies must be included as attachments for stamped approval. Include scripts for intended telephone recruitment.

Participants will be recruited through an email to lead teachers that provides a summary of the study and invites teachers to participate. The text of the email is included in Appendix C. The
recruitment material (Appendix C) summarizes the purpose of the study, informs potential participants about the interview procedure, and serves as the single method of recruiting volunteers.

<table>
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<th>What remuneration, if any, is offered?</th>
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<tr>
<td>No remuneration will be offered.</td>
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I. Consent Process

Describe the process of obtaining informed consent. Be specific. How will the project and the participants’ role be presented to potential participants? By whom? When? Where? Having the participant read and sign a consent statement is done only after the researcher provides a detailed oral explanation and answers all questions. Please attach a copy of informed consent statements that you intend to use, if applicable. Click here for consent form templates.

If your study population includes non-English speaking people, translations of consent information are necessary. Describe how information will be translated and by whom. You may wait until the consent is approved in English before having it translated.

Only adult participants with English proficiency will be interviewed in this study. A signed informed consent document (Appendix D) will be obtained at the time of the interview. The Student Researcher will go over the informed consent document in detail to answer any questions the participant may have prior to conducting the interview. Participants will have an opportunity to ask questions about the informed consent document and at any time during the research process. Participants will be given a copy of the informed consent document for their records.

If your population includes children, prisoners, people with limited mental capacity, language barriers, problems with reading or understanding, or other issues that may make them vulnerable or limit their ability to understand and provide consent, describe special procedures that you will institute to obtain consent appropriately. If participants are potentially decisionally impaired, how will you determine competency?
*If incomplete disclosure during the initial consent process is essential to carrying out the proposed research, please provide a detailed description of the debriefing process. Be specific. When will full disclosure of the research goals be presented to subjects (e.g., immediately after the subject has completed the research task(s) or held off until the completion of the study’s data collection)? By whom? Please attach a copy of the written debriefing statement that will be given to subjects.

J. Study Procedures

Provide a detailed description of all activities the participant will be asked to do and what will be done to the participants. Include the location, number of sessions, time for each session, and total time period anticipated for each participant, including long term follow up.

Qualitative data will be collected through one, in-person 60-minute interview conducted by the Student Researcher with each teacher. The interview will take place at an off-campus location that ensures privacy, confidentiality and is convenient for the participant. A copy of the transcript from the interview will be emailed to a secure email address provided by the teacher participant approximately two to three weeks after the interview. The individual will then have two weeks to review the information and provide any feedback in regards to the validity, or make requests for changes.

Who will conduct the experimental procedures, questionnaires, etc? Where will this be done? Attach copies of all questionnaires, interview questions, tests, survey instruments, links to online surveys, etc.

The interviews will be conducted by the Student Researcher (Mary Pulsifer Kinahan) in person at a location chosen by each participant. For the interview questions, see Interview Protocol Form (Appendix E).
K. Risks

Identify possible risks to the participant as a result of the research. Consider possible psychological harm, loss of confidentiality, financial, social, or legal damages as well as physical risks. What is the seriousness of these risks and what is the likelihood that they may occur?

There is no foreseeable risk or discomfort to the teacher by participating in this study. Every effort will be taken to ensure participant confidentiality.

Describe in detail the safeguards that will be implemented to minimize risks. What follow-up procedures are in place if harm occurs? What special precautions will be instituted for vulnerable populations?

Participants will be informed that if for any reason they wish to end the interview, they can let the researcher know and it will end immediately. Participants also have the option to decline to answer any questions during the interview and are free to withdraw from the study at any time.

This information will be shared with them verbally and in the Consent Form (Appendix D).

L. Confidentiality

Describe in detail the procedures that will be used to maintain anonymity or confidentiality during collection and entry of data. Who will have access to data? How will the data be used, now and in the future?

Any information that is obtained in connection with this study and that can be identified with an individual or the school will remain confidential and will not be disclosed. No names will be associated with any interview information. The audio recording of the interview will not be labeled with the participant’s name. A pseudonym will be used when describing an individual participant.

All data files will be encrypted and password protected, and only the Student Researcher (Mary Pulsifer Kinahan) will have access to the files. The data will be used for the Student Researcher’s doctoral thesis project, and potentially for future journal articles, books, presentations, or research. Even in these potential instances, confidentiality will be kept for all participants.
Information regarding confidentiality will be shared with all participants prior to the interview process, both in the Consent Form and verbally.

How and where will data be stored? When will data, including audiotapes and videotapes, be destroyed? If data is to be retained, explain why. Will identifiers or links to identification be destroyed? When? Signed consent documents must be retained for 3 years following the end of the study. Where and how will they be maintained?

Each interview will be audio-recorded on a digital voice recorder. Audio-recordings will not be limited in audio-length, and electronic recordings can be transferred to a computer as an mp3 file. The electronic recordings of the interviews and all other documents will be downloaded and then saved to the Student Researcher’s personal computer. All files will be password-protected.

Interviews will be transcribed directly by the Student Researcher or by a professional transcription service that signs the University’s confidentiality form. Transcripts will be saved in the same secure manner as the electronic recordings.

Any written documents will be kept in the locked desk drawer at the home of the Student Researcher during the period when the investigation is taking place. After the thesis project is complete, any hard-copy materials containing confidential interviewee information will be destroyed. All remaining electronic data stored on the student researcher’s personal computer will remain untouched, and kept in a locked safe in the home of the Student Researcher. These remaining data and documents will be destroyed three years following the completion of the study.

M. If your research is HIPAA-protected, please complete the following;
   Individual Access to PHI

Describe the procedure that will be used for allowing individuals to access their PHI or, alternatively, advising them that they must wait until the end of the study to review their PHI.

N/A
N. Benefits

<table>
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<tr>
<th>What benefits can the participant reasonably expect from his/her involvement in the research? If none, state that. What are potential benefits to others?</th>
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<tbody>
<tr>
<td>There are no immediate benefits to participants.</td>
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</table>

Potential benefits to society include a better understanding of a teacher’s experience with classroom seating.

Successful completion of this study will allow the Student Researcher to complete the EdD (Doctor of Education) program at Northeastern University.

O. Attachments

Identify attachments that have been included and those that are not applicable (n/a).

- **ApxC** Copy of fliers, ads, posters, emails, web pages, letters for recruitment *
- **N/A** Scripts of intended telephone conversations* 
- **ApxA** Copies of IRB approvals or letters of permission from other sites 
- **ApxD** Informed Consent Form(s)* (see our templates for examples) 
- **N/A** Debriefing Statement* 
- **ApxE** Copies of all instruments, surveys, focus group or interview questions, tests, etc. 
- **ApxB** Signed Assurance of Principal Investigator Form 
- **ApxB** NIH Human Subject Training Certificate(s) 

*(Approved forms must be stamped by the IRB before use)*

P. Health Care Provision During Study

Please check the applicable line:
I have read the description of HIPAA “health care” within Section 4 of the Policies & Procedures for Human Research Protection. I am not a HIPAA-covered health care provider and no health care will be provided in connection with this study.

I am a HIPAA-covered health care provider or I will provide health care in connection with this study as described in Section 4 of the Policies & Procedures for Human Research Protection. This health care is described above under “Study Procedures,” and the Informed Consent and Health Information Use and Disclosure Authorization form will be used with all prospective study participants.

If you have any questions about whether you are a HIPAA-covered health care provider, please contact Nan C. Regina, Director, Human Subject Research Protection at n.regina@neu.edu or (617) 373-4588.

Completed applications should be submitted to Nan C. Regina, Director, Human Subject Research Protection with the exception of applications from faculty and students of the College of Professional Studies, which should be submitted to Kate Skophammer, IRB Coordinator for CPS.

Completed applications should be submitted to Nan C. Regina, Director, Human Subject Research Protection with the exception of applications from faculty and students of the College of Professional Studies, which should be submitted to Kate Skophammer, IRB Coordinator for CPS.

<table>
<thead>
<tr>
<th>Nan C. Regina, Director</th>
<th>CPS applications only</th>
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<tr>
<td>Northeastern Univ., Human Subject Research Protection</td>
<td>Kate Skophammer, IRB Coordinator</td>
</tr>
<tr>
<td>360 Huntington Ave., Mailstop: 490 Renaissance Park</td>
<td>Northeastern Univ., College of Professional Studies</td>
</tr>
<tr>
<td>Boston, MA 02115-5000</td>
<td>Phone: 617.390.3450; <a href="mailto:k.skophammer@neu.edu">k.skophammer@neu.edu</a></td>
</tr>
<tr>
<td>Phone: 617.373.4588; Fax: 617.373.4595</td>
<td>Phone: 617.373.4588; Fax: 617.373.4595</td>
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<tr>
<td><a href="mailto:n.regina@neu.edu">n.regina@neu.edu</a></td>
<td><a href="mailto:n.regina@neu.edu">n.regina@neu.edu</a></td>
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</table>

The application and accompanying materials may be sent as email attachments or in hard copy. A signed Assurance of Principal Investigator Form may be sent as a scan, via fax or in hard copy.
Appendix D: Site Permission Form

Dear [Name],

As you know, I am currently a student researcher in the doctoral program at Northeastern University. I am providing you with the following information in order to grant access for my study.

I am interested in interviewing eight of the [Number] Lower School teachers in Grades Two through Five. The goal of this research is to explore the lived experiences of teachers as they consider seating assignments and arrangements in order to meet the academic, behavioral, and social needs of students. To protect confidentiality, all interviews will be conducted off-campus at a location selected by the participant. Any information that is obtained in connection with this study and that can be identified with an individual will remain confidential and will not be disclosed. No names will be associated with any interview information. All data, including audio transcripts, will be destroyed within three years of the completion of the study. There are no foreseeable risks to the teachers by participating in this study.

If you have questions about this study, please feel free to contact me at knahan.m@husky.neu.edu or 214-601-4211 or the principal researcher, Dr. Karen Harbeck, my doctoral study advisor. She can be reached at 781-572-4628. If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 969 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

If you agree to grant me access to your site, please sign your consent with knowledge of the nature and purpose of the procedures. A copy of this consent form will be given to you to keep.

[Signatures]

Printed Name

[Printed Name]

Mary Kinahan

Printed Name

Mary Kinahan

Signature of Head of School

Signature of Head of Lower School

Signature of Student Researcher
Appendix E: Interview Protocol Form

Interview Protocol Form: TEACHERS AND SEATING ASSIGNMENTS: AN INTERPRETIVE PHENOMENOLOGICAL ANALYSIS

Date: _______ Time: ______ Location: __________________________

Interviewee: ____________________________________________

Release form signed, collected, and copy made for participant: ____

Requested and was granted permission to audio record the interview: ____

Welcome: Thank you for your participation. I believe your input will be valuable to this research and in helping teachers to consider the influences and impact of classroom seating assignments and arrangements.

Confidentiality of responses is guaranteed, and you can feel free to stop the interview at any time.

The approximate length of the interview is 60 minutes, and it involves a series of about 15 questions.

Purpose of research:

There is limited research available on classroom seating and arrangements. The purpose of this research is to better understand the experience that educators have with using classroom arrangements and seating to reach social, behavioral, and academic goals and objectives for students.

Data Analysis:

Because your responses are important and I want to make sure to capture everything you say, I would like to record our conversation today. Results will be analyzed and data will be triangulated through the process of coding in order to identify common themes. I can assure you that all responses will be confidential and only pseudonyms will be used when quoting from the transcripts. Only your pseudonym will be attached to the transcript.

I would like to begin recording this session now, is that all right with you? OK, the audio recording has begun.

To meet our human subjects requirements at the university, participants have to read and verbally agree to this Consent Form. I would like to go over this form with you now. You are
being asked to participate in an interview focused on your experiences with classroom seating. There are no foreseeable risks to you for taking part in this study, and there also are no direct benefits. Your participation in this study will be handled in a confidential manner. Only the researchers on this study will see the information you provide during this interview. No reports or publications will use information that can identify you or our school. Your participation in this study is completely voluntary. If for any reason you wish to end the interview, you can let me know and we will stop immediately. You have the option to decline to answer any questions during the interview and are free to withdraw from the study at any time. If you have any questions about this study, contact information for me as well as the Principal Investigator is listed, and contact information also is listed for the Director of Human Subject Research Protection at Northeastern University should you have any other questions about your rights as a participant in this study.

Do you have any additional questions or concerns about the interview process or this form?

We have planned for this interview to last approximately 60 minutes. Do you have any questions at this time?

Interview Questions

Research Question 1: What are the experiences of elementary teachers in grades two through five in making seat arrangements and assignments?

• How many years have you been teaching? What grades have you taught?

• In general, how would you describe your personal experience with classroom arrangements as a teacher? What arrangements do you use and how well have they worked for you? Do you use different arrangements for different purposes?

• In general, how would you describe your personal experience with classroom seating as a teacher? Do you assign seats for students? How often do you change those seating assignments?

• How much time do you spend on arranging and assigning the seats in your classroom?

• Do you spend much time on seating arrangements? Do you spend much time on seating assignments?

• How do you feel about the autonomy that you have to design and assign seating in your classroom?

• What do you consider when arranging seats in the classroom? What do you consider when
assigning seats in your classroom?

• What experiences have you had that influence how you assign seats and arrange your classroom?

• How often do you change your seating based on the social, academic, or behavioral needs of students?

• What determines these changes? What considerations do you make before altering your design?

• How do you keep track of the impact that classroom seating has on the students in your class?

• Describe the seating situations that you use to accommodate students with specific needs (either academic, social, or behavioral).

Thank you, that concludes the interview session.

In the next two to three weeks, I will email you the transcript of your interview. If you choose, you can review the information, and provide me with any feedback or corrections.

I greatly appreciate your participation in this study. If you have any further questions for me, please let me know.

Very Sincerely,

Mary Kinahan
Appendix F: IRB Action For

NOTIFICATION OF IRB ACTION

Date: May 24, 2016
IRB #: CPS16-04-16
Principal Investigator(s): Karen Harbeck
Mary Putsifer Kinahan
Department: Doctor of Education Program
College of Professional Studies
Address: 20 Belvidere
Northeastern University
Title of Project: Teachers and Seating Assignments: An Interpretative
Phenomenological Analysis
Participating Sites: [redacted]
DHHS Review Category: Expedited #6, #7
Informed Consents: One (1) signed consent form
Monitoring Interval: 12 months

APPROVAL EXPIRATION DATE: MAY 23, 2017

Investigator’s Responsibilities:
1. The informed consent form bearing the IRB approval stamp must be used when
recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new
information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses must
be reviewed and approved by this committee prior to being instituted.
5. Continuing Review Approval for the proposal should be requested at least one month
prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any
other university approvals that may be necessary.

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Nan C. Regina, Director
Human Subject Research Protection

Northeastern University FWA #4630