What's So Smart About *Smart Seats*?:
How Student Seating Impacts On-Task Behavior

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Teacher Inquiry – April 2010
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Abstract

When two new students joined us this year, our classroom carpet had already exhausted its supply of personal squares. Because of our growing class, two students began sitting in chairs in place of the carpet during whole-group instruction. These students’ newfound attentiveness during whole-group instruction made me question the value of “carpet time” and wonder how students’ physical placement in the room affects their on-task behavior. Throughout my inquiry, I compared a variety of seating options to determine which arrangements optimize on-task behavior.

Description of Teaching Context

My first grade classroom is located within the cluster of classrooms in Panorama Village Elementary School. The cluster is a section of the school that houses four self-contained classrooms, the Title 1 classroom and the computer lab with students’ coat closets in the middle of the cluster. None of these six rooms have doors and all of them are constructed with collapsible wall partitions. This often proves to be a noisy and distracting learning environment.

Inside my classroom, there are 22 students, including 7 boys and 15 girls. Three children receive Response to Intervention for reading, three children have been referred to the Instructional Support Team, four children are on behavior modification plans, one child has Attention Deficit Hyperactivity Disorder, and two children are in the process of being assessed for Attention Deficit Hyperactivity Disorder. Some of these circumstances are overlapping and some are not. One female student missed every day of school between January 4, 2010 and March 4, 2010 due to an aggressive leg surgery. When this student returned to school following spring break, she was confined to a wheelchair with an apparatus around
her leg that required the leg to be extended outward at all times. Due to the size of her wheelchair and the vulnerability of her fragile leg, my mentor and I decided that replacing the 22 desks with four tables would make our classroom the most practical for her.

Nearly all large group instruction occurs on the carpet. The two students who are being assessed for Attention Deficit Hyperactivity Disorder sit in chairs next to the carpet during whole group instruction. The carpet contains 20 squares with 5 squares across and each row is 4 squares deep. Students are assigned to a carpet square that is usually distant from their close friends in order to avoid socialization during whole-group instruction. Because our class contains twice as many girls as boys, this can be difficult.

Although they have assigned carpet squares, students are free to select Smart Seats during independent work periods, such as writer’s workshop and math. Smart Seats give students the choice to work anywhere they wish in the classroom as long as they are safe and productive. At the beginning of the year, my mentor discussed what makes a Smart Seat “smart” and how to effectively choose where to sit. For example, a Smart Seat would not be next to someone that you like to talk to or under a table. Many students elect to sit on the floor and use a lapboard to complete their work, while others sit at their assigned table spot.

**Rationale**

The two students who sit in chairs during carpet instruction led me to my inquiry question. Since moving these students from carpet squares to the chairs, they have both shown growth in their greatest, respective, underperformance areas. One student has been exited from Title 1 Reading services and the other has been
demonstrating increasing maturity, such as being able to follow directions and work cooperatively with peers in a group. This has helped him to develop academically and socially.

I discussed this observation with my Professional Development Advisor who recalled her former second grade class and informed me that during the weeks of high-stakes testing, she would reconfigure her students’ desks in single file rows. She noted that some students performed better in this setting because it yielded fewer distractions than groups of desks.

Once I began noticing the success of the two students sitting in chairs for carpet instruction, I also began noticing off-task behaviors exhibited by students who are less at-risk and sit on assigned carpet squares. I began to question if sitting on the carpet is the best physical location for large group instruction. I decided to explore this topic in order to learn how students’ setting impacts their ability to stay focused, specifically during calendar, writing and math. I did not include language arts centers in my research because, by the nature of centers, there is little whole-group instruction. Additionally, I did not include science or social studies in my research because we do not study them daily and the method of whole group instruction for these subjects is constantly changing. I also wanted to learn how students’ choice of where they sit affects their attentiveness. I expect to find that both the carpet and the desks are effective places for keeping students on-task during instruction, depending on the subject and what is expected of students during the lesson. I also anticipate that each student will perform differently in each whole-group instruction situation. (See Appendix A for entire Inquiry Brief)
**Main Wondering**

How does student seating affect on-task behavior for independent work time and lessons intended for the entire group in a first grade classroom?

**Sub-Questions**

- When are *Smart Seats* most effective?
- How does student choice of seating during independent work time affect on-task behavior?
- How does a classroom carpet affect students’ attentiveness during whole-group instruction?
- Where are students most comfortable learning during whole-group instruction?
- How can we keep students more on-task during instruction as well as independent work periods?

**Data Collection**

I collected a variety of data before, during, and after implementing strategies that aimed to keep students more on-task during whole-group instruction as well as independent work times. These methods of data collection came in the form of a student survey, systematic observations, anecdotal notes, student work collection, a class meeting, and interviews with students and my mentor teacher. Throughout my inquiry process, I used this data to assess the effectiveness of my interventions.
Prior to implementing any interventions, I conducted a student survey and collected baseline data by completing systematic observations and anecdotal notes. I chose to administer a student survey before carrying out any interventions, because I wanted to be aware of the class’s preferences in terms of where they work as well as how students feel about their ability to choose *Smart Seats* before receiving a formal lesson about it. We completed the survey together as a large-group. Students sat at their desks and responded to the questions as I read them aloud. The survey asked six questions that served two purposes. First, it gauged students’ feelings toward *Smart Seats* and assigned seating. Second, it required students to self-assess their attentiveness during calendar math, writing, and math. (See Appendix C for Student Survey)

In addition to the student survey, I collected a great deal of data using systematic observations, particularly during calendar math and writing instruction. With the classroom carpet that is divided into four rows of five squares, it was easy to make timed sweeps every minute to keep track of students that were “off-task.” I designed and printed a grid in this shape with each student’s name in his or her respective square. In the margins, I took notes every five minutes about what the group was doing during the lesson. I used these notes to determine if there were certain activities that provoked more off-task behavior as well as when students were becoming off-task during lessons. I marked a student as off-task if he or she was not making eye contact with the speaker, if the student was moving around a great deal, or if they were talking to a classmate when they were supposed to be listening. (See Appendix D for a sample of Systematic Observations)
During

While exploring different options that aimed to keep students on-task during whole-group instruction and independent work times, I collected data primarily through anecdotal notes. Because one of these interventions included removing our classroom carpet, my grid was not as useful and I found it easier to maintain anecdotal notes about changes and trends that I observed in terms of students’ off-task behavior. (See Appendix E for Anecdotal Notes) To supplement my anecdotal notes, I devoted at least a paragraph of my weekly journals to reflecting on my inquiry process. These reflections gave me the opportunity to reread my notes while the experiences were still recent and memorable. In these reflections, I tried to highlight any strong findings from the week and make inferences based on what I observed. (See Appendix F for Reflections)

In addition, I collected student work to assess how on-task students were during calendar math when they were permitted to select Smart Seats. The work that I collected was a calendar math packet that I designed to engage the students and ultimately keep them more on-task during calendar math. This packet contained a calendar on which students could draw the day’s calendar piece. It also had a page for students to graph the day’s weather, a hundreds chart, a time-telling activity page, and a blank page for creating equations. My hope was that this interactive packet would keep students focused. (See Appendix G for Student Work Collection)
After exploring alternative seating solutions and other strategies for keeping students on-task during whole-group instruction and independent work times, I concluded my inquiry with interviews of four students and my mentor. During the student interviews, I asked questions very similar to the initial student survey. I wanted to learn if students preferred the learning environments that, according to my data, lent themselves to the most on-task behavior, or if students preferred the learning environments that encouraged off-task behavior. Additionally, I wanted students to identify why they preferred these work and instruction spaces. For example, I wondered if a student who likes to choose Smart Seats has this preference because he or she likes having independence, or if the student views Smart Seats as a social opportunity. When selecting the four students to interview, I examined my previous data and attempted to choose two students who are consistently on-task and two who are consistently off-task. (See Appendix H for Student Interviews)

I also interviewed my mentor teacher, because I valued her opinion throughout my entire inquiry process, and I was interested to see if she made observations that confirmed or refuted my beliefs.

Data Analysis

I tried to analyze my data weekly so that I could use this information to reflect about my inquiry process in my weekly reflection. This practice helped me to observe any trends, re-evaluate my hunches, and modify any of my interventions if needed.
I began by reviewing my first piece of data: the student survey. I found that half of the class felt that they were always on-task during calendar and the other half felt that they were sometimes on-task during calendar. This response catalyzed my idea to create a calendar math packet. The goal of this four-page packet was to keep children more on-task during calendar math by providing them with an interactive tool to use during calendar. Also, most students reported that they enjoy and work best at Smart Seats during writing. This drew my attention to their attentiveness during writer’s workshop and caused me to devise alternative seating arrangements for writing time. Their opinions about seating placement while playing math games were less conclusive, so I chose not to focus on that aspect of the day as much as writing and calendar math.

I used systematic observations to collect baseline data regarding students’ attentiveness during calendar. With this organized method, I took note of who was off-task, at what point in the lesson this occurred, and the content that was being discussed at the time. I soon learned that same handful of students were consistently off-task during calendar math. This data led me to question if these particular students are more likely to be off-task or if the placement of their assigned carpet squares somehow impacted their attentiveness.

Upon implementing my interventions, which included removing the carpet, utilizing calendar math packets, trading tables for desks, and trying new seating strategies for completing independent work, I began relying heavily on anecdotal notes and my reflections of the notes. These detailed notes about my interventions helped me determine the success of Smart Seats and drove my first claim.
By collecting my students’ calendar math packets, I was able to assess the value of this tool in terms of keeping students engaged and on-task. This piece of data helped me realize that keeping students engaged is crucial to keeping them on-task. However, with the temptation to scribble and doodle in the packet, teachers must also be very vigilant when using them as an instructional tool.

The interview I conducted with my mentor was extremely helpful in evaluating my own claims. It was especially interesting to learn her thoughts and observations about my inquiry that I had not even considered, such as how removing the carpet from our class has forced her to set expectations for students every time we meet on the floor, rather than relying on “a false sense that little boxes on the floor will create the expectation to listen” (Williamson 2010). My conversation with her drove many of my future wonderings.

**Explanation of Findings**

**Claim 1: Smart Seats** are effective with respect to student attentiveness during Writer’s Workshop in a first grade classroom.

**Evidence A**

According to the student survey that I conducted early on in my inquiry, the majority of students reported that they liked being allowed to choose *Smart Seats* during writing and that they do their best work when they able to do so. Because nearly 60% of students claimed to do their best work at *Smart Seats*, I am confident that they appreciate *Smart Seats* for their fostering of quiet and independent workspaces, as opposed to a potentially social atmosphere. With students’ positive
responses about *Smart Seats* during writing, I was eager to continue investigating their effectiveness.

**Evidence B**

Throughout my inquiry, I attempted several seating strategies for writer’s workshop, including *Smart Seats*, stations, and assigned seating at desks and tables. While implementing these strategies, I maintained detailed anecdotal notes about students’ on and off-task behavior. While observing *Smart Seats* during writing on March 19, 2010, I noted that five students chose to complete their work (writing a thank you note) at their table spaces, eleven chose to work with lapboards on the floor, and two were assigned table spaces because they could not choose a place to sit in a timely manner. The classroom was quiet as students worked and 16 out of 18 students completed their thank you letters during writing. This note proved that students were on-task when given the choice of *Smart Seats*.

I did not have the same success with stations or assigned seating, according to my anecdotal notes. On March 25, 2010, I attempted to use 3 fifteen-minute stations as a method of keeping students on-task during writing. On that day, I noted that only 12 of 20 students completed a handwriting activity that involved tracing and writing the letter “Q” in both lower case and upper case multiple times. On the same day at a different station, I observed that children spent more time describing their picture plans and future stories to their neighbors than they spent actually writing. I also found it difficult to conference with students without distracting the six other students. I felt that both of these problems occurred because students were in such close-proximity to one another during an activity with no finite ending. Likewise, on April 5, 2010, students were instructed to spend
writer’s workshop at assigned table spots. On this day, I noted that all four tables required redirection due to talking and one student was relocated to my mentor’s table because he was distracting others. I quoted a student complaining, “I can’t work here. Can I please move to the back table?” These two days proved to me that *Smart Seats* offer students the physical space they feel is necessary to be comfortable during writer’s workshop.

**Evidence C**

My mentor, who has been implementing *Smart Seats* in her classroom for several years, presented the final piece of evidence that supports *Smart Seats* during writing when I interviewed her. She said, “The activities that are most conducive to *Smart Seats*, are activities that do not need many materials, and where students are well practiced in what they are to be doing. It is crucial that it is more or less an independent activity.” Writer’s workshop is an activity that requires few materials, has expectations that are very familiar, and is completely independent; therefore, it satisfies both stipulations that my mentor mentioned. My mentor’s expert opinion of *Smart Seats* matches my claim that they are effective for writer’s workshop in a first grade classroom.

**Claim 2:** Seating location preferences are highly individualized.

**Evidence A**

After I removed the carpet from our classroom, I collected anecdotal notes and began noticing patterns in where students chose to sit for whole-group instruction. Children tend to sit in the same place whenever we meet on the floor for whole-group instruction. Most students try to sit in the middle of the front row.
This often resulted in one very long first row and a diminishing number of students with each row following, which created a “V” shape. I do not believe that all of these choices of seating were made by students based on their own intent to be more on-task. In fact, in all three of my anecdotal notes that were taken after the carpet had been removed, I noted that my mentor asked off-task students to move to a different spot on the floor, which was usually closer to the middle of the front row. The students that she chose to move were typically sitting on the edges of the very long front row or way in the back. I also noticed that several children who consistently chose to sit in the back were frequently redirected for laying down, crawling around, or touching table and chair legs.

**Evidence B**

While many students who are not centrally located on the floor during whole-group instruction are susceptible to off-task behavior, several students are able to stay on-task while also enjoying the extra personal space our classroom has without the confinement of the carpet. I noted on at least two occasions (March 30, 2010 and April 13, 2010) that one student, who consistently chooses to sit far behind the group, was on-task for the duration of the writing mini-lessons on both days. When I asked him why he likes to sit in the back, he said, “I like sitting in the back, because I have room to think.” This particular student was never redirected or moved to another seat due to off-task behavior. He almost always maintains eye contact and frequently participates. Although many of my students could not handle the physical liberties associated with sitting far away from the teacher, this child proves that some first graders are able to exercise the self-control that is required to do so.
Evidence C

Referring back to the anecdotal note that I recorded on March 19, 2010 during writer’s workshop, students elected to sit in a variety of places while choosing Smart Seats. During this productive writing period consisting of 18 students, 7 students sat at tables and 11 chose to sit on the floor. The 11 students on the floor spread out to very different work areas. Some chose to sit up and lean against a wall, while others decided to spread out in the middle of the room and lay on their chests. All of these observations prove that students are individualized in not only their seating location for whole-group instruction, but for independent work periods as well. They have different preferences about their physical location in the classroom and sometimes these preferences are conducive to on-task behavior and sometimes they are not.

Claim 3: Students’ level of engagement influences their attentiveness more than their seating.

Evidence A

The calendar math packets that I designed served as an interactive tool for students that helped engage them in the material. They gained the hands-on experience of manipulating a calendar, creating a bar graph, and using a personal hundreds chart. During calendar math, students are often asked to mentally create “Incredible Equations” using any numbers or operations they want to arrive at a certain number. In their packets, students have blank paper to facilitate this activity; therefore, students who may not have been on-task during the optional mental math activity before are now forced to record some of their thoughts on paper. The calendar math packets are helpful in engaging students; however, they
do run the risk of distracting some students and causing them to be off-task.

Students that needed to be redirected several times for drawing in their packets at inappropriate times reminded me that the packets require teachers to set clear expectations for students. To see an example of a completed calendar math packet, refer to Appendix G.

**Evidence B**

As I used systematic observations to collect baseline data during calendar math on February 8, 2010, I noticed a high level of off-task behavior. Seven of sixteen students were off-task for at least four of the ten sweeps. One of these students was off-task for nine of the ten sweeps. However, on the tenth sweep, all sixteen students were on-task. During this sweep, a classmate was modeling an array to solve 2x5 at the board.

All sixteen students were on-task during that sweep because they were highly engaged for two reasons. The first reason was student participation. Students were eager to watch a classmate demonstrate his math knowledge. They were excited to see if he would be successful and how he would explain his thoughts. The second reason was because it was a novel concept. Multiplication is not part of first grade's calendar math curriculum. It is something challenging and new. By giving a student the opportunity to expand upon a very predictable situation, like calendar, teachers are able to keep students engaged, which will ultimately keep them on-task.
Evidence C

On March 2, 2010, I wrote an anecdotal note that illustrates how an engaging activity can promote a productive independent working environment. On March 2, my mentor read *The Cat in the Hat* to our class. She ended the book early and asked students to spend their writing period brainstorming and writing their own ending to this book. The students were thrilled with this assignment and began working immediately. I instructed students to sit at their desks only. Although I feel that *Smart Seats* optimize on-task behavior for writer’s workshop, students did not have a problem completing this assignment at their desks. There were only three children who needed redirection. Two other students were talking about how to correctly spell words they were using in their stories; therefore, they were still on-task. The fact that students could complete this writing activity at their desks proves that students’ level of engagement dictates their on-task behavior even more so than their seating placement.

Reflections and Implications for Future Practice

This inquiry process has served several purposes with respect to my professional development. First, it gave me firsthand experience with designing, planning, and conducting my own inquiry. In addition to becoming skilled in the area of conducting inquiry research, I have learned what a “successful” inquiry process looks like. Through this experience, I have realized that the goal of inquiry is not to solve a problem or find a perfect solution, but to become more aware of your classroom climate and to discover new strategies that could be applied to situations in your class. I will be able to carry this understanding with me into my future in the teaching profession and continue inquiring about education topics.
My inquiry research has also increased my awareness of how student seating impacts student learning. The most overarching belief I have taken away from my research is that students are all different in terms of their attentiveness during large-group instruction and independent work times. Students make different choices that affect their time on-task. Some students are flexible in where they are able to stay on-task, while others require more structure. I have learned that it is important for teachers to also be flexible in allowing their students to sometimes deviate from a predetermined physical location for whole-group instruction and independent work times in order to best meet the needs of the child. For example, if a student is more on-task during writing when he or she has the freedom to choose a Smart Seat, the teacher should grant the student this opportunity, even if this seating strategy is not common to the teacher's writer's workshop.

Finally, my inquiry has also led me to future wonderings about the topic of student seating and its impact on on-task behavior. These new questions would be valuable to examine in the future and would supplement my current understanding of how student seating influences attentiveness. My new wonderings include:

- What does on-task behavior look like?
- How does student eye contact with the teacher relate to attentiveness?
- How does student interaction during independent work times affect their time on-task?
- Would students be more productive at their tables if they were accustomed to that type of work environment?
Appendix

Appendix A: Inquiry Brief

What’s So Smart About *Smart Seats*?:
How Student Seating Impacts On-Task Behavior

**Context**

My first grade classroom is located within the cluster of classrooms in Panorama Village Elementary School. The cluster is a section of the school that houses four self-contained classrooms, the Title 1 classroom and the computer lab with students’ coat closets in the middle of the cluster. None of these six rooms have doors and all of them are constructed with collapsible wall partitions. This often proves to be a noisy and distracting learning environment.

Inside my classroom, there are 22 students, including 7 boys and 15 girls. Three children receive Response to Intervention for reading, three children have been referred to the Instructional Support Team, four children are on behavior modification plans, one child has Attention Deficit Hyperactivity Disorder, and two children are in the process of being assessed for Attention Deficit Hyperactivity Disorder. Some of these circumstances are overlapping and some are not. One female student missed every day of school between January 4, 2010 and March 4, 2010 due to an aggressive leg surgery. When she returned to school full-time following spring break, this student was confined to a wheelchair with an apparatus around her leg that required the leg to be extended outward at all times.

Nearly all large group instruction occurs on the carpet. The two students who are being assessed for Attention Deficit Hyperactivity Disorder sit in chairs next to the carpet during instruction that takes place on the carpet. The carpet
contains 20 squares with 5 squares across and each row is 4 squares deep.

Students are assigned to a carpet square that is usually distant from their close friends in order to avoid socialization during whole-group instruction. Because our class contains twice as many girls as boys, this can be difficult. All of the students typically cooperate and are friendly toward one another; however, there are several groups of close friends that are evident throughout the classroom. These groups of girls and boys usually play together during recess, stand together in line, and enjoy working together in class.

**Rationale**

The two students who sit in chairs during carpet instruction led me to my inquiry question. Since moving these students from carpet squares to the chairs, they have both shown growth in their greatest, respective, underperformance areas. One student has been exited from Title 1 Reading services and the other has been demonstrating increasing maturity, such as being able to follow directions and work cooperatively with peers in a group. This has helped him to develop academically and socially.

I discussed this observation with my Professional Development Advisor who recalled her former second grade class and informed me that during the weeks of high-stakes testing, she would reconfigure her students’ desks in single file rows. She noted that some students performed better in this setting because it yielded fewer distractions than groups of desks.

Once I began noticing the success of the two students sitting in chairs for carpet instruction, I also began noticing off-task behaviors exhibited by students who are less at-risk and sit on assigned carpet squares. I began to question if sitting
on the carpet is the best physical location for large group instruction. I decided to explore this topic in order to learn how students' setting impacts their ability to stay focused, specifically during calendar, writing and math. I did not include language arts centers in my research because, by the nature of centers, there is little whole-group instruction. Additionally, I did not include science or social studies in my research because we do not study them daily and the method of whole group instruction for these subjects is constantly changing. I also wanted to learn how students' choice of where they sit affects their attentiveness. I expect to find that both the carpet and the desks are effective places for keeping students on-task during instruction, depending on the subject and what is expected of students during the lesson. I also anticipate that each student will perform differently in each whole-group instruction situation.

**Main Wondering**

How does student seating affect on-task behavior for independent work time and lessons intended for the entire group in a first grade classroom?

**Sub-questions**

- How does carpet seating compare to desk seating during whole-group instruction in relation to student attentiveness?
- How does sitting at tables differ from sitting at desks in terms of students’ on-task behavior?
- What are some alternatives to carpet squares that foster on-task behavior during carpet instruction?
- What are some lesson strategies that can complement seating arrangements during whole-group instruction?
- How effective is whole-group instruction at student desks?
- How does student choice of seating during independent work time affect on-task behavior?
- How does student choice of seating during independent work time affect the completion and quality of student work?

**Timeline**

Week of February 1, 2010

- Begin collecting baseline data of students’ off-task behavior with current seating arrangements during calendar, writing and math
• Search for sources for annotated bibliography
• Begin writing brief and creating annotated bibliography

Week of February 8, 2010
• Continue collecting baseline data of students’ off-task behavior with current seating arrangements during calendar, writing and math
• Finish finding sources, writing annotated bibliography and inquiry brief
• Begin planning calendar math packets

Week of February 15, 2010
• Continue collecting baseline data of students’ off-task behavior with current seating arrangements during calendar, writing and math
• Revise annotated bibliography and inquiry brief
• Finalize/Printshop calendar math packets

Week of February 22, 2010
• Finish collecting baseline data of students’ off-task behavior with current seating arrangements during calendar, writing and math – switch back and front rows of carpet squares to identify individuals who struggle with staying on-task vs. carpet squares that promote off-task behavior
• Collect student work from writing and math with current seating arrangements
• Revise annotated bibliography and inquiry brief
• Organize groups for writing and math stations
• Distribute student survey

Week of March 1, 2010
• Make observations on new solutions to whole-group instruction:
  • Teach calendar math at desks using calendar math packets
• Make observations on new solutions to seating during work periods:
  • Writing time at assigned desks
  • Math work at desks

Week of March 8, 2010
• Spring Break
• During students’ three day week, they will adjust to sitting at tables instead of desks and on the floor without a carpet, in order to make the room more accessible for classmate in wheelchair

Week of March 15, 2010
• Continue making observations on new solutions to whole-group instruction:
  • Teach calendar math at tables using calendar math packets
  • Teach writing mini-lessons on floor without carpet
• Continue making observations on new solutions to seating during work periods:
  • Writing time in stations
  • Math work at tables
• Distribute student survey
• Analyze data

Week of March 22, 2010
• Continue making observations on new solutions to whole-group instruction:
  • Teach calendar math at tables using calendar math packets
  • Teach writing mini-lessons on floor without carpet
• Continue making observations on new solutions to seating during work periods:
  • Writing time in stations
  • Math work at tables
• Collect student work from calendar packets
• Conduct student interviews
• Distribute teacher survey
• Analyze data and begin inquiry draft

Week of April 5, 2010
• Continue making observations on new solutions to whole-group instruction:
  • Teach calendar math at desks using calendar math packets
  • Teach writing mini-lessons on floor without carpet
• Continue making observations on new solutions to seating during work periods:
  • Writing time in stations
  • Math work at desks
• Collect student work from writing stations
• Analyze data and continue working on inquiry draft

Data Collection

Observations
  • I will make systematic observations to calculate students’ off-task behaviors.

  These include: looking away from the teacher, touching objects, talking to
other students and not doing their work.

  • I will also make systematic observations to calculate students’ on-task
behaviors. These include: looking at the teacher, participating in discussions
and doing their work.

Surveys
  • Students will complete a survey asking them if they prefer to work at their
desks or in “Smart Seats” around the room. The survey will also ask students
where they feel they work better.

  • The Panorama Village teachers will also complete a survey asking if they feel
that students’ off-task behaviors impeded on their academic achievement. It
will also ask if they consistently, sometimes, or rarely allow students to choose “Smart Seats” during independent work times.

Student work

- I will evaluate students’ work after observing their focus during independent work times. I will look for completeness and how much effort they put into the work.

- I will collect work during times when students are assigned seats as well as when students are free to pick a “Smart Seat.” I will be able to compare the completeness and effort from each scenario.

Interview

- My inquiry research will involve trying new seating arrangements on the carpet. Near the end of my inquiry, I will interview my mentor to ask if she prefers having a carpet, as well as any of her ideas on Smart Seats.

Reflections

- I will maintain weekly reflections in reference to participation and time on task. These reflections will assist me in remembering and evaluating which seating arrangements work the best in terms of keeping students focused.

Appendix B: Annotated Bibliography


Arritola and Breen study how classroom social skills influence on-task behavior. They implemented interventions in three different classrooms for thirteen weeks that included teachers modeling social skills, student role-playing,
and teachers verbally reinforcing appropriate social skills and on-task behavior. While the results of their study were inconclusive, Chapter 1 that contains the general statement of the problem and its context was useful in describing the off-task problems within my classroom for my research.


These two professors are also first and second grade classroom teachers who have participated in a penpal letter-writing program with their elementary students for the past eight years. In this document, they describe the success that the program has had in their classrooms and why they feel that it is successful. They attribute this to the carpet setting and the respectful community that it builds among their first and second grade students. Every two weeks, each child opens and reads his or her penpal letter to its peers on the carpet. This resource was applicable to my research in determining if the carpet is the best place for whole-group instruction.


This resource explains what calendar math looks like in an elementary classroom and its benefits, including its content (time, the calendar and money), as well as its fostering of concepts rather than algorithms through patterning, sorting, and seriating through a socially constructed context. It describes how calendar math, particularly in a first grade classroom, can serve as a bridge between early childhood practices and traditional teaching practices. This resource was pertinent to my research because it focused on involving children in experiences with the calendar math concepts, which I am aiming to do during my intervention.


This article focuses on the importance of keeping exceptional learners on-task. It dually notes, however, that a high degree of time-on-task coupled with effective instructional strategies ensure a more successful learning environment for everyone. Although this article devotes a great deal of its content to discussing how
active engagement is imperative for keeping special needs learners on task, the article addresses allocated time, instructional time, engaged time, and academic learning time, which were useful to my research of the engagement level of my students.


This journal article discusses the purpose of whole-group instruction, its applications, its benefits, and drawbacks. It explains that during whole-group instruction, teachers traditionally attempt to teach to the “normal” student and how teachers can make whole-group instruction more educational for all students. It is important to my inquiry research because it gives information and ideas of how to appropriately match student tasks to their abilities during whole-group instruction.


As the title suggests, this text describes physical classroom spaces that contribute to successful instruction and learning. The book focuses on the placement of furniture, materials, and storage spaces, as well work areas, personal space for students, effective classroom displays, ambience and safety. Chapter 3 discusses the design of the whole-group meeting area of the classroom, which was particularly relevant to my inquiry research.


This study aimed to improve the on-task behavior of 46 third graders, 29 high school sophomores, and 22 high school juniors. The researchers collected data on this problem using a student survey, a teacher survey, and an off-task behavior checklist. While the researchers used a different intervention (cooperative learning strategies) than my own to minimize off-task behavior, the questions that the researchers included in the student and teacher surveys were useful and will help me in the formulating of my surveys.

This two-part study investigates the kinds of seating arrangements that elementary classroom teachers employ and their primary reasons for doing so. The researchers found that most teachers use the cluster model. They point to the growing popularity of cooperative learning techniques as the reason. This resource was useful to my inquiry research because, as the researchers note, “A necessary first step is to determine precisely which seating designs are actually used by today’s teachers (given a wide universe of ‘possibilities’).”


Although I do not agree with Sasson’s entire message, she does recommend a couple simple ideas that can help facilitate a change in classroom desk arrangements. She notes the importance of students being familiar and comfortable with one another when transitioning from rows to cooperative learning environments, like pairs or clusters, and how this can help with classroom management. Although I already have a strong classroom community in my first grade room, I felt that there were some perceptive thoughts that I could remember when rearranging my classroom in order to improve on-task behaviors.


This document suggested a month of weekly activities for calendar math in classrooms from kindergarten to sixth grade. Many of the upper grade level activities could be adapted for a first grade classroom. Most of these activities are interactive for students and include them in the learning context, such as writing their names on index cards and creating a bar graph with them upon entering school to illustrate who is present. This resource was useful to my inquiry because it gave me many great ideas to incorporate in my calendar math lessons.

Appendix C: Student Survey
1. Do you keep your eyes on the teacher during calendar?
   - Yes 😊
   - Sometimes 😊
   - No 😞

2. Do you like being allowed to choose Smart Seats during writing?
   - Yes 😊
   - Sometimes 😊
   - No 😞

3. Do you do your best work when you choose a Smart Seat during writing?
   - Yes 😊
   - Sometimes 😊
   - No 😞

4. Do you like playing math games at tables and desks or on the floor?
   - Tables and desks
   - Floor

5. Do you do your best work when you play math games at tables and desks?
   - Yes 😊
   - Sometimes 😊
   - No 😞

6. Do you do your best work when you play math games on the floor?
   - Yes 😊
   - Sometimes 😊
   - No 😞

Results: 17 students surveyed

1. Do you keep your eyes on the teacher during calendar?

   | X | X |
   | X | X |
   | X | X |
   | X | X |
   | X | X |
   | X | X |
   | X | X |
   | X | X |
   | X | X |
   | YES (8) | SOMETIMES (8) | NO (1) |

2. Do you like being allowed to choose Smart Seats during writing?

   | X |
   | X |
3. Do you do your best work when you choose Smart Seats during writing?

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YES (9) | SOMETIMES (3) | NO (5)

4. Do you like playing math games at tables and desks or on the floor?

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TABLES AND DESKS (6) | FLOOR (11)

5. Do you do your best work when you play math games at tables and desks?

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YES (7) | SOMETIMES (8) | NO (2)

6. Do you do your best work when you play math games on the floor?
### Appendix D: Systematic Observations

- **2/13/10 Calendar**
  - OT
  - Swaps

- **25 Sweeps**
- **Read aloud and discussion**
  - 20 minutes total

- **2/1/10 Calendar**

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<th>Gavin</th>
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- **On sweep #10, every student engaged while classmate performed 2 x 5 at board**
- **OT:111**

---

- **On sweep #8, every student engaged while classmate performed 2 x 5 at board**
- **OT:111**

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- **2/8/10 Calendar**
  - 9:00
  - LTH LTH LTH LTH
Appendix E: Anecdotal Notes

Anecdotal Notes

- February 24, 2010 (Math) – Students working in homogenous groups; highest with Deb, middle with Sarah, lowest (6) with me; completed two math fact worksheets; all but one finished both worksheets; 2 finished with time to play Subtraction Top-Draw; student who did not finish sent to time out twice (first time for inappropriate use of time, second for making offensive comment to peer); I had the opportunity to work closely with 5 students (not the one in time out)

- February 25, 2010 (Writing) – Three 15 minute stations (Fix It with sub, handwriting with Deb, realistic fiction with me); no RTI today; completed 1.5 Fix Its with sub, Gavin only student wandering/needing redirected; 12 finished handwriting with “Q” and 8 did not; lots of work on picture plans, many students of each group were sharing their picture plans with peers (on-task but not productive), 3 students distracted when I highlighted Maitlyn’s paper

- March 2, 2010 (Writing – independent work) – Finishing the ending to The Cat in the Hat, had to work at their desks, writing for about 30 minutes
  - Redirections: Becca and Ashanti (talking two times), Gavin (distracting Nicky)
  - Talking while remaining on-task: Maitlyn and Olivia (talking about spelling), Amarayah and Mackay (briefly talking about stories)
- “Cooked data”: Students did really well while working at their desks. This could be because they work better at desks or because it was a new and fun writing activity.

- March 15, 2010 (Calendar Math) – No carpet; spent about 3 minutes gathering materials (calendar, pencils) before getting to carpet; everyone participated in drawing picture, completing weather graph, time; during fact families, last “row” (about 4 feet further than end of carpet)
  - Redirections: “Nicky, stop drawing on your packet” (twice), “Everyone put your pencils down.” Demanie to timeout for talking to Nicky
  - “Cooked data”: Time spent gathering materials could be because students are not quite used to new set-up

- March 15, 2010 (Writing – independent work) – Writing memoirs at tables for 15 minutes; Gavin worked at back table; Sydney, Ashanti, Becca and Nicky talking; Hannah talking; mostly quiet

- March 18, 2010 (Math) – Building boxes; students choose Smart Seats; everyone chooses to work at

- March 19, 2010 (Writing – instruction) – No carpet; talking about writing thank you notes; Ashanti, Gavin, Amaryah not looking and all in front row; Meg, Sydney, Olivia also not looking

- March 19, 2010 (Writing – independent work) – Writing thank you notes in Smart Seats; first time writing with tables and not desks; students choose very different areas of room to work without the desks
  - 5 chose to write at their seats and 2 assigned to seats because they couldn’t choose seats
  - 11 sat on the floor using new corners of the room
  - 3 students to finish first were sitting in chairs
  - 16 of 18 students finish work

- March 19, 2010 (Math) – Second day of building boxes; students told to sit at their tables only; “Aw man! Why?”; many students begin by building on floor and eventually moving to tables for comfort and convenience of tape accessibility; Demanie and Olivia are working with partners very far away from each other on floor, Demanie migrates toward Olivia and they end up talking more than building boxes

- March 26, 2010 (Writing – instruction) – No carpet; Demanie moved to front because she was sitting far back and not on-task; Gavin and Maitlyn squirming and crawling; noticing a V-shape to students seating choices

- March 30, 2010 (Writing – instruction) – No carpet; Nicky looking away and touching things near here for all 10 minutes; Ashanti off-task in the beginning; Demanie off-task at the end; Owen, Gavin, Grace B., Jackson are all in back row (Owen and Gavin off-task but Jackson and Grace B. on-task); V-shape
• April 5, 2010 (Writing – independent work) – Students told to sit at tables; all 4 tables have children who are talking; talking stems from stories and turns into off-task conversations; Gavin: “I can’t work here. Can I please move to the back table?”; Nicky is moved to the back table for being off-task; every table requires redirection

• April 13, 2010 (Writing – instruction) V-shape; Nicky, Maitlyn, Amaryah and Mackay sit in front row (Maitlyn is looking at her shoes for a while); Justin, Daniel and Jackson sit very far back
  - Jackson is engaged (raising hand, eye contact)
  - Justin and Daniel off-task (turning around, moving, watching Deb)

Appendix F: Reflections

• February 13, 2010

  I have begun examining the data from my inquiry research. I have noticed that the five girls who sit in the front row of the carpet are among the most off-task. I have realized that before implementing my intervention in two weeks, I would like to try switching some of the seating placements on the carpet to determine if these spots make students off-task or if it is the girls who sit in these spots. The back row of students is the most on-task. I think it would be interesting to swap rows between these students to see how it affects on-task behavior. I suppose this is an intervention of sorts, however, I think that in order to be able to accurately assess the effectiveness of my intervention, I need to determine if these females are prone to being off-task or if it is the placement on the carpet.

  While collecting my data and writing my inquiry brief, I realized that I want to specifically research calendar, math work, and writing. I limited math to only the work time, because I recognized that the demonstration of new games usually needs to be done on the carpet so that everyone can see how to play and how to fill in the recording sheets. Calendar is mostly instructional, math work is independent work time, and writing is a mixture of whole-group instruction (with mini-lessons on the carpet) and independent work time while students write. I felt that this was a strong balance of work and instructional time periods that would provide me with solid data. I elected not to include science and social studies because we do not cover them everyday and with our current unit, we study one subject at a time. Therefore, after next week, we will not discuss social studies at all. I also decided to not include language arts stations, because there is minimal whole-group instruction and there are not many other methods to organizing students’ seating arrangements for stations. I am hoping that the subjects that I have chosen to study will provide me with enough opportunities to make claims.

• February 27, 2010

  I am going to distribute my survey this week for inquiry. I am thinking we will complete it during a language arts station. It will be interesting to see the children’s perspectives on this topic. I predict that students will be honest with in their reporting.
I am having a little difficulty in managing my data collection while still being available to help students during work periods, especially during math. When students are playing math games, I find that I am usually involved by helping them, mediating disagreements, and playing with students whose partners are in the bathroom. I plan on trying to take more anecdotal notes than systematic observations during math in order to facilitate the data collection and not let it interfere too much with teaching.

- March 20, 2010

This week was my first week back from spring break and the students’ first full week with the new classroom setup. They have adjusted surprisingly quickly, with the exception of two students. However, these two students are demonstrating approximately the same amount of time off-task as they were before the room transformation. As I continue to collect data, I am noticing the interesting change that has taken place with “Smart Seats.” Before, students usually elected to sit at their desks or at tables or carpet space in the front of the room. Now, with all of our open classroom space, students are also choosing to sit on the floor in the back of the room. However, they are not necessarily sitting any further apart from one another. During writing, the first three students to complete a task were all sitting at their table spots. I was not surprised to see that these three students were the first to get done, seeing as they fit the profile of students who complete work on time, but it is interesting to note that these three are also the type of students to choose to sit at their desks...

- March 27, 2010

I have started examining my inquiry research and am noticing a pattern for independent writing times. Students are more on-task when they are permitted to choose “Smart Seats” while working. This is clear, because when students must sit at their assigned tables, they are much more chatty. I’m assuming that this is because of their close proximity to each other. This week when I asked students to sit at their tables during writing, one of our students actually told me that he couldn’t work where he was sitting and that he wanted to go to the back table. I obviously allowed him to work at the back table, but it made me realize how infrequently students all sit together to complete independent work. I wonder if students did more work at their tables and were used to that type of work environment, they would be more comfortable with it and more able to stay on-task.

- April 10, 2010

At our seminar on Wednesday, the group that I was participating in the protocol with raised a question about one of my interventions. Someone was wondering why I implemented calendar math packets if my inquiry is focused on investigating how student seating influences on-task behavior. I realized that this does not really relate to my question and my group members thought that my question might be changing. I suppose this is possible. Will this affect my abstract that I submitted for the inquiry conference pamphlet?
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Appendix H: Mentor Interview

1) Since removing the carpet from the classroom, what changes (if any) have you seen in attentiveness?

   One of the biggest changes I think, is in my attentiveness to the kids, as well as setting up expectations on the carpet each time we come together. I think the "squares" may have given me a false sense that little boxes on the floor will create the expectation to listen, rather than me.

2) When do you think Smart Seats work the best? the worst?

   Smart seats do not work well for all kids. I think when working with smart seats you have to give all kids a chance, but be prepared to make choices for the kids who can't handle the freedom. The activities that are most conducive to smart seats,
are activities that do not need many materials, and where students are well practiced in what they are to be doing. It is crucial that it is more or less an independent activity.

3) Have you seen any strategies throughout my inquiry that you believe have affected student attentiveness (for worse or better)?

    I feel that taking out the carpet has been truly beneficial for most students, though it has heightened the inattentiveness of those who were already inattentive. I think that having the kids use calendar packets for calendar increase student involvement, but not necessarily attention. I think during making boxes, forcing the students to work on the floor decreased to cooperative learning. This seemed to be one of those lessons that had a lot of materials that needed to be confined and organized on a table.