

Engagement Through Activity: How does frequent change and diverse styles  
of learning affect students' time on-task?

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## Table of Contents

|                                   |         |
|-----------------------------------|---------|
| Background Information.....       | Page 1  |
| Teaching Context.....             | Page 1  |
| What Led Me to this Inquiry?..... | Page 1  |
| Research Findings.....            | Page 2  |
| My Wonderings.....                | Page 4  |
| My Inquiry Plan.....              | Page 5  |
| What I Have Learned.....          | Page 16 |
| Claim 1.....                      | Page 17 |
| Claim 2.....                      | Page 18 |
| Claim 3.....                      | Page 19 |
| Future Directions.....            | Page 20 |
| References.....                   | Page 22 |

Appendix A: Organizers for Collecting Data

Appendix B: Lessons and Data Collected

Appendix C: Student Surveys

Appendix D: Gettysburg Lesson Information and Pictures

## *A: Background Information*

My experience in the Professional Development School as an intern has led me to grow and evaluate myself as a teacher. This year-long process has led me to my immense growth and increased confidence in my own teaching context. My classroom is in a fifth grade setting with twenty-three students. In my class, we made sure that our classroom functioned as a community. We allowed the students to make certain choices about how our classroom would run to give them ownership and make it a place where they felt comfortable. This allows the students to feel confident in sharing ideas and know that all ideas and suggestions are welcome. My students have led me to many wonderings about myself and my teaching throughout the course of the year. They led me particularly in one direction which has been beneficial for me as an educator to grow in one area that I now feel even more confident in.

My students led me to question my lessons and myself when I would reflect on the outcome or result of each lesson. What I decided to focus on was my students' level of engagement during each lesson. I looked at my students' engagement level from a variety of aspects and also focused my lessons in a variety of ways so that I could truly see how I, as a teacher, would prove to be most effective for my students. I have realized how important it is for the students to enjoy the information being presented to them, since some of the information covered in my fifth grade classroom can be uninteresting. I noticed my students walking away from lessons with negative attitudes which is exactly what I did not want to happen once I took over teaching. I decided to take this observation and turn it into a question that I would try to answer through my teaching.

My goal was to have my students walking away with a positive attitude and with hopefully a few pieces of gained knowledge to take with them about the concepts I was presenting.

Research has shown that there is a high lack of interest in schoolwork among students once they reach the middle school level. Also, by high school, there is a significant amount of students who are not motivated to succeed which leads to a high dropout rate (Lumsden, 1994). This emphasizes that it is important for teachers to introduce and encourage a high level of engagement and motivation within the classroom at an early age. Starting in elementary school, students should be able to enjoy activities and lessons in order to keep the lack of interest at a minimum once moving on to middle school. If we, as educators, can keep student motivation high when sending them off to the next level, hopefully this will ensure a higher work ethic and decrease the number of student dropouts.

A student's motivation is influenced both inside and outside the school setting. According to Lumsden (1994), the earliest influences on children's motivation to learn are right within their home setting, beginning with their parents. I agree with this statement since I had the opportunity to communicate with one parent on a frequent basis about her son. Her interest in his education is high, and she is very involved in encouraging him to keep increasing his motivation and produce his best work. In my experience, this parent and I work together to keep him interested by encouraging him and praising his best work. It is important for all students, especially this particular student, to know that education is very important and that it is fun. Students need to be introduced to learning as a fun and exciting concept at a very young age so that hopefully

their attitudes towards education stay at a positive level. “When children are raised in a home that nurtures a sense of self-worth, competence, autonomy, and self-efficacy, they will be more apt to accept the risks inherent in learning” (Lumsden, 1994 p.3). Seeing that a teacher cannot ensure that all of his or her students are being raised in such an environment, we must set our expectations and goals for our students to let them know that learning is fun and very important.

A strong definition of engagement is given by authors, Skinner and Belmont:

*“Engagement versus disaffection in school refers to the intensity and emotional quality of children’s involvement in initiating and carrying out learning activities... Children who are engaged show sustained behavioural involvement in learning activities accompanied by a positive emotional tone. They select tasks at the border of their competencies, initiate action when given the opportunity, and exert intense effort and concentration in the implementation of learning tasks; they show generally positive emotions during ongoing action, including enthusiasm, optimism, curiosity, and interest. The opposite of engagement is disaffection. Disaffected children are passive, do not try hard, and give up easily in the face of challenges...[they can] be bored, depressed, anxious, or even angry about their presence in the classroom; they can be withdrawn from learning opportunities or even rebellious towards teachers and classmates.” (p. 572.)*

I have noticed that at the fifth grade level, some students have already begun to drift towards having a lack of motivation and engagement. I noticed my own students starting to “slack” in the classroom and in their assignments. This has become especially apparent now that we are so close to the end of the year. I have found my job, as their teacher, growing more difficult as the weather gets nicer and the students taste summer break just around the corner. This time is still crucial for them to focus and gain as much knowledge as possible while still in fifth grade. It is difficult when their level of engagement has already started to diminish and as a teacher, this should be the time to push them the most to learn those skills needed to make them successful in their difficult

years to come. These observations led me to my many wonderings about how to be that teacher that makes learning fun and engaging. I want my students to have a positive attitude towards learning and school.

When introduced to the idea of having to come up with my wonderings, I immediately started thinking about what questions I had over the course of the year. I found it difficult to come up with an idea that I was really interested in since I knew how important it would be for me to be passionate about the topic I would be researching. I decided to do something that would benefit me for years to come and really help me maintain focus and control over my class. This is why I chose to focus on the concept of engagement. I really feel that it is important for me to keep my students engaged in the curriculum so that they are able to gain as much knowledge as possible from the information presented to them. My initial wonderings were as follows:

- What is the best approach to keeping students engaged throughout a lesson?
- What factors impact students' level of engagement during lessons?
- What techniques are useful in keeping students engaged?
- What are the relative strengths and weaknesses of different strategies for keeping students engaged?

Once I had my initial wonderings, I also thought of sub wonderings which helped me to finalize my plan for inquiry.

- What different techniques will I use?
- How are different students affected by different strategies?
- Are certain strategies more appropriate for lecture type of lessons?
- How do learning styles and multiple intelligences relate to the different strategies?
- What have I already done that does or does not work?
- How would my level of enthusiasm help to keep students engaged?
- How can I best utilize my mentor and PDA in this process?

- What will hold their attention throughout a lesson?

These questions helped me to narrow down my ideas and find the path that I wanted to take. I also felt that the topic I was most interested in, engagement, was such a broad area. How would I ever be able to narrow down my topic? This was all answered in the end by just letting my inquiry carry out over many weeks.

### *B: My Inquiry Plan*

After much debate and scrutiny over this topic, I realized that I would just carry out the process and let the pieces fall into place. I began in my classroom by making careful observations during my lessons. I began asking myself further questions after I would reflect on the lesson. Examples of the questions that I would ask myself were the following:

- How enthusiastic were the students?
- How enthusiastic was I?
- Did I deliver the content in the best way possible? Are there other ways?
- Did I meet my objective?

This self-questioning and reflecting was really helpful in being able to see what I believed worked and didn't work. Thinking about my sub-questions and the new questions I was creating, I decided more specifically the plan I wanted to use to carry out the inquiry in my classroom. I decided to look at many different areas and then see if I could find patterns within the different areas in order to eventually make my claims. I felt that by collecting information on all of these areas, I would be able to choose one and focus on it more in depth. This is not the way the rest of my inquiry ended up occurring. I decided to focus on the following areas: my enthusiasm, where the students were sitting,

different types of assignments (large or small groups, pairs, individual, etc.), time, and variety of lessons. I was able to take notes and have my advisor record observation notes for me. His notes proved very useful in getting a read on how effective the lesson was. It is also difficult when I am teaching to see everything that is going on and remember all of this at the end. His input, as well as my mentor's, helped me to collect data that I may not have been able to or didn't see. Overall, I used a variety of teaching techniques and resources in order to collect my data.

Starting in January, I began taking observation notes on my students' behavior during a reading lesson. I took into consideration the time of day also which was right before our lunch period. I was teaching a reading lesson and beginning a new book, *A Family Apart*. I was able to observe my students being very restless and even talking to their neighbor often. I had a hard time introducing this new book since they had lost focus at this point in the morning. One of my students commented, "Only ten minutes until lunch", which was obvious that they were hungry and their attention span had diminished. I was also repeating myself by asking questions to attempt to maintain control and keep them engaged. I also found that many of their eyes were glancing at the clock quite often in order to be "released" into the lunch room. I found this time of day to be a factor in the level of student engagement. It was very hard for them to concentrate and really stay focused on the lesson when they were hungry and in need of a break.

I did a social studies lesson later that afternoon which made it easy for me to compare student engagement according to the time of day. I wanted to see if after they had eaten, they would be able to remain attentive during instruction. I asked them to



complete a worksheet and also read with a partner. This brought out several groans and mumbles at first which I had anticipated due to my students being slightly negative at times. However, after we started our discussion, I was able to make a few comments which seemed to raise their level of concern. I told them, “Oh, I love how many hands I am seeing.” This encouraged the students and even engaged more students since they were able to see their peers’ participation. I was very pleased with their level of engagement during this lesson compared to the morning. I was able to come to the conclusion that by the time lunch is close, they seem to be easily distracted by the hands of the clock and the idea that lunch is only a few minutes away. The afternoon proved to be a much better time to engage them in a lesson. I also noted that my comments, such as acknowledging their participation, helped them to see that I was aware and pleased with their contributions.

On January 25, 2005, my advisor was able to do a time on task analysis of my spelling lesson. An article by Acheson and Gall emphasizes this technique of keeping records through time on-task observations. To designate what is on-task, specific letters are used depending on the lesson being taught and activities that may be occurring. For example, an on task activity may be reading along, writing, reading aloud, listening, or answering a question. Examples of off-task behaviors may be that the student is playing with other objects, out of the room, talking, or just cannot be determined. Often times you will notice a key somewhere on the paper in order to interpret and analyze the information at a later date. This way the recorder can quickly write one letter to represent the type of task for each student. These records allow a teacher or supervisor to easily record a large amount of information or data onto one sheet of paper. I have provided

examples that my supervisor has documented as well as charts and methods included in the Acheson and Gall article in Appendix A. This type of data collection also makes it easy to determine whether students are on-task for the majority of the lesson, and also at which specific times do they become off-task. The room “sweeps” as we call them, are best used to determine any patterns that may be occurring during a lesson or activity. An article by Elaine Chapman also discusses the many types of data collection for student engagement. She states that one of the most effective ways of collecting data is through observations. She discusses a very similar method to the “sweeps” and collection method that Acheson and Gall discuss in their article. Although it is very similar, she emphasizes the importance of the observation data collection since students are often not able to give accurate results of themselves regarding their own personal engagement level.

For my spelling lesson in January, I was able to use this information to make a note that my students were slowly becoming more off-task as I introduced the spelling activity. The sweeps were done every two minutes by my advisor. As you can see in Appendix B section 1 for January 25<sup>th</sup>, the students were attentive resulting in the number of students that were off task or “other” on the sheet, to jump up from one to eight students. Once I switched activities, student engagement increased. This was the pattern throughout the entire lesson. I was able to note this particular pattern and see if it compared to other lessons in the future. At the end of the lesson, I was able to get feedback from my students to see whether or not they enjoyed the activity. I asked them to give me a thumb up or thumb down or in between depending on how they would rate the activity. The majority of the students gave a thumb up or in between which gave the

sense that this type of activity, or variation of this activity would be appropriate to use in the future.

At the end of January, my next lesson was observed through the same method as my spelling except that it was a social studies lesson which was more hands-on. This activity consisted of my students working in two large groups where they were putting together covered wagons for our Westward Ho! Unit. During my direct instruction, modeling, and explanation of the activity, the students totals for on and off-task were 88 counts on and 38 counts off. This data showed me that the majority of the group was being attentive and preparing to do the activity. Once I finished explaining and modeling, the students were put to work for approximately twenty minutes. During this portion of the lesson, the students were 157 counts on-task and only five counts off. They were working beautifully together and these numbers truly demonstrate their level of engagement (see Appendix B, section 2 for data sheets). The pattern or evidence that I was able to take away from this lesson and data collected was that the students' engagement is very high when given a hand-on task where they are all assigned a role. This holds each student accountable for his or her portion of the activity. This was also slightly competitive since they were seeing which of the two groups could produce the most wagons in the same amount of time. This is also highly motivating for the students to be able to compete against their peers. Overall, I took away some strong evidence away from this particular lesson.

I then focused in on a different setting which was my small reading group on February 2, 2005. During this lesson, we were seated in our regular reading group circle where we took turns reading. I often stopped to ask questions and check understanding

of vocabulary. After analyzing the data collected, I was able to determine that after I would stop the students to ask a question, they would be more engaged. The more often I stopped, the more engaged the students were. For example, I started with all 11 students on-task. I slowly had one off-task, then two, until it was up to five students off-task. At this point I paused and asked a question. After answering my question, my number of off-task students dropped back to zero. Using this information, I compared it to my previous lesson on January 25<sup>th</sup> where every time I changed activities, the students were more engaged. This proves to be true with this lesson since every time I changed the pace from reading along to questioning, the students seem to be more engaged and focused on reading aloud or along with their peers. This evidence, which is located in Appendix B section 3, further developed one of my soon to be claims for increasing time on-task.

There are fifteen of my twenty-three students who switch to a different class for math. I was interested to collect data on how their level of engagement would differ being in another classroom with another teacher. I went to the other fifth grade classroom with my students on Thursday, February 17, 2005. On Thursdays we have math class right before lunch so I was observing them from 10:45 am until 11:30 am. I kept in mind that my previous spelling lesson, when done right before lunch, had a very low level of student engagement. After taking extensive observation notes, I was able to analyze the information and notice that there was a significant amount of time spent off-task. Many students would take every extra minute to their advantage by turning around and talking to their neighbor. In this particular room, there were three adults for this lesson. There is the teacher, a paraprofessional, and a parent volunteer. Seeing this, I

would have predicted that their presence and monitoring would have deterred the students from not paying attention and following instructions. I noticed that the students did not seem to be influenced by this unless spoken to directly by an adult. There seemed to be a lot of extra time in between transitions which made it easy for the students to become off-task. I have provided my notes in Appendix B, section 4, in order to provide further evidence to back up my conclusions for this lesson. I also felt that this lesson may have been more off-task than usual considering that it was before lunch as was my reading lesson I mentioned earlier. A few significant observations that I made were transition times and being that this class occurred in the time slot right before lunch. These both prove to be fitting into more patterns that I have noticed throughout my lessons.

For another social studies lesson on February 22, 2005, I was able to let my students work in pairs for a reading assignment. I gave them the option of selecting their own partners which is often a test. This would allow me to look at their level on engagement when seeing who they would select as an appropriate partner that they could work well with. For this particular assignment, they were able to work well with their chosen partner since this is something that I do not let them do too often. I know that allowing them to do this every once in a while is good since they are able to stay engaged since they are pleased with who they are working with. My totals for this activity were 68 on-task and 12 off which is approximately eighty-five percent on-task (see Appendix B, section 5). This is very high considering I allowed them to choose their own partners. I was pleased with this activity, but knowing that I can only allow them to choose their own partners every so often so that they can view this as a special time for them to prove themselves to me that they can behave in self-selected situations.

I designed a science lesson on February 23<sup>rd</sup> where I enabled the students to move around the room using microscopes. They were responsible for using their homemade slides with a partner and looking at them through different powered lenses. They also needed to illustrate them. During my instruction at the beginning, we labeled the parts of a microscope and discussed its' use. This ended up taking about thirty minutes and the students were starting to get very off-task and not paying attention. I realized I had had them sitting in their seats for much too long so their attention had drifted somewhere else. Once we started using the microscopes, I immediately noticed some silly behavior while others were working well at their microscope. The problem seemed to be that since I did not have enough microscopes for each partner, those who were not viewing their materials, were wandering and off-task since they had nothing else to do. I reflected on my actions and realized two things. One, I needed to have them out of their seats sooner since I eventually lost their attention towards the end of our discussion. Two, I needed to have an alternative activity for those students who were not at the microscopes. Due to these two factors, my results ended up being that I had 75 students on-task and 39 off-task (see Appendix B, section 6). These notes were just from the actual microscope portion of the lesson. This does not include our discussion time prior to the activity. All students were off-task at least once during this portion. As a teacher, I used this information to reflect on the lesson and how I would be able to modify it to better suit the students. I would shorten my discussion or design it in a way where they were not sitting for that long a period of time. I would also make sure that I had another activity planned for those who could not be at a microscope.

At this point in my data collection, I wanted to consider my students' seats within the classroom. In March, I decided to conduct a survey to find out if they felt that this atmosphere was most conducive to their learning. The factors I took into consideration when devising this survey were the following: their position in the classroom, who they were sitting next to, what type of environment they felt was best for them. I wanted to see how they felt about their own learning since they know best how and where they would be most comfortable. I understood that some students would not be completely honest since they would want to sit near friends or not be aware of their own actions when rating themselves on how well they use their time in class. Overall, the consensus on these surveys was that most students felt that the arrangement of the desks was good since they could easily see the board and the teacher. The only pattern I noticed was that a few were honestly saying that who they sat next to would often be a distraction or name certain people who they knew they would not be able to handle sitting next to. I have listed several student examples in Appendix B which show the students' responses to my survey. I took several of the students' suggestions into consideration when re-arranging their desks. After doing this, I allowed the students to be in these seats for a few weeks before post-assessing them.

After changing their seats, I conducted several lessons which were useful to my inquiry. On April 4<sup>th</sup>, I taught a social studies lesson on the life of a soldier in the Civil War. This lesson was primarily direct instruction where I asked the students to take notes along with me. This proved to be a "dry" lesson where my students were not engaged in much of the information. I analyzed the lesson as you can see in Appendix B, section 7. I realized that my level of enthusiasm as well as planning for the lesson was done in a

non-engaging way. I knew that I needed to find a better way to deliver the information by having my students take more ownership for the lesson. After discussing this with my advisor and mentor, we came up with a few modifications which would potentially raise their level of concern and engagement. The options were to jigsaw the students so that groups would be responsible for a portion of the information and delivering it to the rest of the class. The other option was to break down my direct instruction into chunks. This would allow the students to have a change of pace instead of being so monotonous. Overall, this lesson was a true demonstration of how to design a lesson to be more engaging. I took away a lot of valuable lessons from my own teaching during this instruction.

After many lessons which also followed the patterns that I had been noticing throughout my data collection, I decided that I needed to do a post-survey. My students had been in their new seating arrangement for about four weeks. This was longer than I had planned but due to PSSA testing, I wanted to extend the time period slightly. The questions were very similar with a few changes. I have provided a sample of the survey as well as student examples in Appendix C. Since my classroom is rather small, it is difficult to arrange the desks in a way that is best for all students. I did attempt to accommodate certain needs, but based on the surveys, many students still feel that they would be better suited in another area in the room. They all agreed that it is nice having everyone facing front and able to see the board. However, there are still many who are not happy due to the amount of space being limited. It is difficult to move around the room with the desks in rows. The majority of the students did say that they preferred the new seating arrangement over the old one. They had a few minor complaints, but they



were all simple adjustments that could be made while keeping a similar setup. Using the post-survey, I plan on implementing a few changes so that the students feel most comfortable in their environment and are comfortable learning. This will enable me to further investigate this aspect of my inquiry and monitor their level of engagement.

The most recent lesson that I was able to teach deals with the concept of spatial dynamics. Spatial dynamics is an instructional strategy where a large-scale model is created by teacher or students in order to simulate an environment so that the students are captured and completely immersed in the lesson. This strategy allows the students to participate and have an active role in the lesson rather than being given direct instruction from their desks. I was able to use an article from ERIC by Carl R. Siler. He emphasizes the high level of engagement that results from these types of activities. This is a hands-on, minds-on type of lesson which I was very excited to try with my students. There are many methods of spatial dynamics which can be implemented but I chose to do a floor model. Our focus for this lesson was Gettysburg. I took it upon myself to set up the room to look like the town and battlefield of Gettysburg. I moved desks, covered them with fabric, and made sure that everything was labeled. I also assigned each student a role with a name tag. This gave the students a sense of ownership in the activity which forced them to pay attention since they had to know when their part was coming up. I was the narrator and walked them through the three days of battling. With slight silliness, which was directly related to the lesson, the students were very highly motivated and engaged throughout this lesson. Just by conducting this type of lesson, I included all of the elements which I believe to be necessary when ensuring total

engagement of my students. I have included my lesson, the spatial dynamics article, my advisors notes, and photographs from the lesson in Appendix D for further evidence.

As I have stated in many of my lessons, I was able to easily analyze my data. I took each lesson into consideration and how it was organized. If I taught similar lessons, I would look for patterns that were occurring between them and also across all of my lessons. It was easy for me to notice certain patterns that were occurring. I could then test them out by trying them again to see if my data collected would be consistent. I also was able to look for. I also was able to look at all of the lessons that I taught and organized them according to their similarities. This was whether it was in a pattern that I saw or if the lesson was constructed in a similar way. I also did a lot of self-reflection after my lessons which helped me to see what went well and what didn't go well. This helped me to continue thinking of previous lessons where I encountered similar problems or positive results. My inquiry analysis seemed to revolve around finding patterns in my data and focusing in on what may have worked and what did not work. I found this to be the easiest way for me to organize my ideas and data and to place the categories accordingly.

### *C: What I Have Learned*

Based on the patterns that I have encountered throughout my data collection, it was easy for me to devise claims that I felt confidently about. I took these patterns and created lessons that emphasized the points that worked for my students and verified that they indeed were successful ways of engaging my students. I have listed several claims

that I feel confident in making and also much evidence that supports why I believe in my claims about student engagement.

*My enthusiasm about a concept will influence my students' level of enthusiasm.*

Throughout this year, I have noticed that often times when I am enthusiastic about a concept, my students will often become more excited or interested in what we are learning about. When teaching a concept that I may or may not be particularly interested in, this reflects onto my students and they are able to see that since I am not interested or enthusiastic, they also do not need to be. One example that has led me to this claim is when I taught my life of a soldier social studies lesson. I personally was not too excited about the lesson or the way I chose to deliver the information. I noticed that my level of enthusiasm was not high since I did not feel passionate about the information or the way I was presenting it. This proved to significantly lower my students' level of engagement as you can see in Appendix C. The numbers make it evident that not only were the students sitting too long, I was not as engaging as I needed to be in order to make this type of information fun for them to learn. On the other hand, when I presented a lesson such as the Gettysburg simulation, I was extremely excited. My enthusiasm and excitement was high from the moment I started setting up the room during recess. I could not wait for my students to come in from recess and walk into the town of Gettysburg. I know that this enthusiasm was easily evident in my expressions, body language, and even in the way that I was delivering the lesson. The students couldn't help but be just as excited as I was about this concept. I know that a positive attitude influences others to be positive just as enthusiasm influences others' enthusiasm about a topic. This is why I truly believe that a

teacher is a major influence on the level of enthusiasm and engagement for his or her students.

*My students will remain engaged if the lesson is structured so that they are not sitting for more than about fifteen minutes at a time.*

I can make this claim based on my many lessons taught which have either failed or succeeded. The lessons that have failed are the ones where there has been about thirty minutes or more of direct instruction. I have stated in my data collection that during my Civil War lesson on the life of a soldier, my students were sitting for about thirty minutes. My evidence in Appendix B clearly demonstrates that in several lessons I have been able to change the pace in order to hold students' attention. This proved to be true for my small reading group when I would pause and ask them questions. This also worked both positively and negatively for my science lesson using microscopes. The students had been sitting for quite some time which led them to become disengaged. Once I switched activities and the students had the opportunity to move around and investigate with their microscopes, their level of engagement went way up. Also, during one of my student goal-setting conferences, one of my students re-stated what he had said in his goal reflection sheet. He said "I know that when the teacher is talking for more than fifteen minutes, I start daydreaming." When asked what he would prefer, he said that it would help if we would do an activity in between to break up the lesson so that he would be able to pay better attention to the lesson. This proved to me that I need to consider his needs as well as the fact that many other students probably feel the same way.

These lessons, as well as many other lessons since have been evidence for me to be able to claim that my students learn best and are most engaged when they are sitting

for small chunks of time. They need to have a change of pace in order to remain engaged on the activity or lesson at hand.

*My students learn best when they are involved in a hands-on lesson where they can take ownership for the concepts presented.*

After having the opportunity to teach in a variety of ways, I have been able to discover that my students are able to be the most engaged when involved in a hands-on activity. The best lessons for me have occurred when I allow my students to take part and have some sort of ownership in the activity. There are many examples of this as I have stated in my data collection where the number of students time on-task greatly outnumbers the amount of students off-task. For example, during our social studies lesson where students were assembling wagons, each student had a role that they were responsible for and they were slightly competing against another group. This gave them a goal and gave them the extra push that they needed to try and be completely successful. They were constantly moving and working together as a team in a hands-on activity. This was completely engaging for them and even proved to be a great lead into the tail end of the lesson. There was a great deal of participation since every student was involved in some way with the activity. This time on-task data sheet is presented in Appendix A for further reference.

The most significant lesson which proves my claim is my Gettysburg lesson. The students again had ownership in the lesson since they were all assigned a role. It was also engaging and fun for them since our classroom had been somewhat transformed into the town of Gettysburg. The students were able to move around the room and pretend to be their person in a simulation that proved to be very effective. At the end of our

simulation, the level of participation was extremely high and all of the students were eager to participate. As I have noted previous, my notes, pictures, and lesson are represented in Appendix D to further demonstrate the effectiveness of this type of lesson. I would be extremely enthusiastic about doing this type of spatial dynamics lesson again with my students if I were to have this immense level of engagement.

#### *D. My Conclusions and Future Directions*

After completing this inquiry project, I have been able to develop many claims which I can easily implement in my future years of teaching. I have found the importance of being enthusiastic and continually finding new ways to instruct students in order to engage them. I have implemented a variety of lessons using the claims that I have come across which have helped me to keep my students engaged in many different areas. As a new teacher, I understand the importance of self-reflection and analysis of lessons. This tool has helped me throughout my inquiry paper and is a tool that I will be able to carry with me throughout my many years of teaching. With this tool, I can prove to continuously improve my lessons by seeing what may have worked or didn't work for my group of students. I understand that there are always changes and improvements that can be made on a lesson in order to engage a specific group of students. It is my job, as an educator, to constantly be reflecting and searching for ways to improve my lessons and teaching strategies. If I keep this in mind, I will be able to find new ways of engaging my students and keep them motivated to learn!

I feel that this inquiry has led me to develop many claims which have and will prove very useful to me. It was my goal to hopefully be able to find ways of engaging my students so that they are able to take away some pieces of information from my lessons.

Based on my claims, it is evident that I have found methods that prove to work for my group of students. The new wonderings that I have developed because of this inquiry project are ones that continue to reflect on the concept of engagement and also on time management. I found that doing engaging lessons such as my Gettysburg floor model are very time consuming for a teacher. A new wondering that I would consider would be how to best utilize or structure your time in order to teach these types of lessons often and effectively. I feel that these types of lessons are very important since I witnessed how much my students were able to enjoy that lesson. I also wouldn't mind taking the concept of spatial dynamics to another level by implementing several different varieties and examine their effectiveness. I feel that this would not only be engaging, but also a great way of assessing the students.

Although I had intended to take my inquiry in one smaller direction, I was able to adapt all of my data collection into finding patterns and relating them to all of my lessons. I found out what may or may not work best for my students' level of engagement. My goal of complete student engagement was finalized in my last lesson for Gettysburg. I feel that all of the right components were implemented in that lesson which led to my success. I now have many tools and much knowledge to be able to take with me in the future so that I am able to immerse my students in the concepts that I am teaching.

## References

- Acheson, Keith A., and Meredith D. Gall (1997). *Techniques in the Clinical Supervision of Teachers*. New York: Longman.
- Chapman, Elaine (2003). Alternative Approaches to Assessing Student Engagement Rates. *Practical Assessment, Research & Evaluation*, 8(13). Retrieved March 19, 2005. from <http://PAREonline.net/getvn.asp?v=8&n=13>
- Lumsden, Linda (1994). Student Motivation to Learn. *Emergency Librarian*, 22 (2) 31-32.
- Siler, Carl R. (1998). Spatial Dynamics: An Alternative Teaching Tool in the Social Studies. *ERIC Digest*, ED415179.
- Skinner, E. A., & Belmont, M.J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, p572.



## **Appendix A:**

### **Organizers for Collecting Data**

## **Appendix B:**

### **Lessons and Data Collected**

PRINCIPAL: What kinds of behavior should I observe for the at task? What categories should I use?

TEACHER: Before I forget, remember some of my children are out of the room for music at the time you're coming.

PRINCIPAL: That's right. I'll put it on my checklist so I won't forget it.

TEACHER: Check to see if they're out of their seats, talking, playing, or at task. They will also be reading to my aide or to me.

PRINCIPAL: I'll make a note of the reading aide, and I'll see you tomorrow.

For the purpose of this observation, at-task behavior was defined as independent reading in a workbook at one's seat (A) or as reading with the teacher or aide (R). The principal also recorded several other categories of behavior: out of seat (S), talking (T), out of room (O), playing (P). The categories are shown in the legend in Figure 6.1, together with the completed at-task seating chart.

**Data Analysis**

Figure 6.2 provides a convenient summary of the observations recorded on the seating chart (Figure 6.1). The teacher can see at a glance how many children were engaged in each category of behavior—either at a particular point in time or summed across all the time samples. The last column indicates the average percentage of students who engaged in each category of behavior during the class period. For example, 6 percent of the children were out of their seat on average during the lesson. The numerator used to derive this percentage is the total of 6 children (see total column) who were out of their seat across the 8 observations that were made of the lesson. The denominator (96) is the 8 observations multiplied by the 12 children in the class. Dividing the numerator (6) by the denominator (96) gives the average percent (6 percent).

FIGURE 6.2 Summary of at-task data from Figure 6.1.

| BEHAVIOR                                | 9:20 | 9:22 | 9:24 | 9:26 | 9:28 | 9:30 | 9:32 | 9:34 | Total | %   |
|-----------------------------------------|------|------|------|------|------|------|------|------|-------|-----|
| A. At-task independent reading          | 4    | 1    | 2    | 2    | 2    | 4    | 2    | 0    | 17    | 18% |
| B. At-task reading with teacher or aide | 0    | 0    | 1    | 1    | 2    | 1    | 1    | 2    | 8     | 8%  |
| C. Out of seat                          | 1    | 1    | 1    | 2    | 0    | 0    | 0    | 1    | 6     | 6%  |
| D. Talking                              | 5    | 8    | 2    | 0    | 0    | 2    | 2    | 3    | 22    | 23% |
| E. Out of room                          | 0    | 1    | 5    | 5    | 5    | 5    | 5    | 5    | 31    | 32% |
| F. Playing                              | 2    | 1    | 1    | 2    | 3    | 0    | 2    | 1    | 12    | 13% |

### Collecting Data on Student Engagement

1. Create a seating chart with blocks or circles or simply inserting an "S" to note each student's position.
2. Have the teacher tell you during the preconference what specific behaviors would constitute being engaged (e.g. reading, note taking, answering questions, etc.) during this activity.
3. Have the teacher tell you what specific unengaged behaviors he/she is interested in recording (e.g., socializing, day dreaming, out of seat, etc.)
4. Use these specific behaviors to create a set of codes that you can use to code student behavior, e.g.:

|               |                 |
|---------------|-----------------|
| On Task       | Off Task        |
| Writing - W   | socializing - S |
| Reading - R   | daydreaming - D |
| Answering - A | out of seat - S |
| Thinking - T  |                 |

5. At prespecified intervals, e.g. every 3 minutes, scan the entire room, one row or seating group at a time, and record a code in each student's seating block. (We call this one sweep)
6. Somewhere on the sheet, indicate the exact time when you started each sweep.
7. If you want to, you may also record the teacher's position during each sweep.

**Tape 1**  
**At Task**  
**Blank Seating Chart**

H.P.W.  
 S.O.

MAX

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

TIMES

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

CODES

~~A - AT TASK (QUEST)  
 P - AT TASK (PASSIVE)  
 O - OFF TASK (OVERT)  
 T - OFF TASK (TALKING)  
 D - OFF TASK  
 (DISTRACTED)  
 DAY DREAMING  
 R - REQUESTING  
 RECEIVING  
 TEACHER HEAD~~

↑  
STEPHANIE

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

←  
TRAVIS

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

↑  
LAURA

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

→  
DAUL

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

↑  
SHIRLEY

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

↑  
SHAWN

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

←  
BAFE

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

←  
ANGELINA

|   |    |    |
|---|----|----|
| 1 | 8  | 15 |
| 2 | 9  | 16 |
| 3 | 10 | 17 |
| 4 | 11 | 18 |
| 5 | 12 | 19 |
| 6 | 13 | 20 |
| 7 | 14 | 20 |

Front of Room

T1 T2 T3 T4  
T5 T6 T7 T8

|      |      |      |      |      |        |       |       |
|------|------|------|------|------|--------|-------|-------|
| LRL  | LRL  | LRL  | LRL  | LRL  | ABSENT | XXXXX | XXXXX |
| SOLL | SLOL | LLLT | OLOT | OTLL |        | XXXXX | XXXXX |
| T    | T    | O    | S    | T    |        |       |       |
| LLRL | LLRL | OLRL | OLRL | LLRL | LLRL   | OOOO  | LLRL  |
| WLOT | LLOT | LSTT | LSLO | LLSL | LLSL   | OOOO  | OLL   |
| T    | L    | T    | S    | T    | L      | O     | L     |
| LOLS | LLLL | OOLL | LLOL | LLLL | LOLL   | LLOO  | LLLS  |
| LTLS | LTOS | OLTT | LLTL | LLTL | LOLO   | OOTO  | SLOT  |
| O    | T    | T    | T    | O    | O      | T     | T     |

Codes

Times Coded

On Task  
L- listening  
R- repeating  
S- speaking  
W- writing  
Q- asking question

Off Task  
T- talking  
O- other

1:30 1:34 1:38 1:42  
1:46 1:50 1:54 1:58  
2:02

Recording Time on Task Data

| Codes          | Sweeps  |   |   |   |   |   |   |   |   |   |    |       |
|----------------|---------|---|---|---|---|---|---|---|---|---|----|-------|
|                | On Task | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
|                |         |   |   |   |   |   |   |   |   |   |    |       |
| Total on<br>%  |         |   |   |   |   |   |   |   |   |   |    |       |
| Total off<br>% |         |   |   |   |   |   |   |   |   |   |    |       |

Jell Spelling 1/25/75

→ 7 on 5 off

G-L  
- 1-W  
- 1-T  
4-O

9-L - all on  
3-W - all on

W: LTO, WWO, LLL  
E: LLL, LWW, LLL

S: LRO, WVV, LLL  
T: LLO, WVV, LLL

8-L - 11 on  
3-W - 1 on  
1-O - 1 off

C: LLL, ROW, LLL

A: LVO, WVO, LLL  
LVO, WVO, LLL

B: LVO, WVO, LLL  
LVO, WVO, LLL

S: LVO, WVO, LLL  
LVO, WVO, LLL

12-20 - review  
25 - writing on board  
34 - group INST.  
38 - game

Sweeps

12:20: 22, 24  
12:26 28, 30  
12:32 34, 36  
12:38 40, 42  
STOP

C: LLL, LLL, LLL  
M: LLL, LLL, LLL  
I: LLL, LLL, LLL

Codes

LISTENING - L  
WRITING - W  
RESPONDING - R  
THINKING - K

TALKING - T  
OTHER - O  
OUT OF ROOM - WMM



SUMMARY

|            | 12:00 | 22 | 24 | 26* | 28 | 30 | 32 | 34* | 36 | 38* | 40 | 42 |
|------------|-------|----|----|-----|----|----|----|-----|----|-----|----|----|
| LISTENING  | 18    | 10 | 8  | 3   | 2  | 8  | 12 | 13  | 15 | 9   | 16 | 17 |
| WRITING    | 0     | 0  | 5  | 7   | 13 | 7  | 0  | 1   |    | 5   | 3  | 2  |
| Responding | 0     | 1  | 0  | 4   | 0  | 0  | 0  |     |    | 4   | 0  | 0  |
| THINKING   | 0     | 0  | 0  | 0   | 0  | 0  | 0  |     |    | 1   | 0  | 0  |
| ON         | 18    | 11 | 13 | 14  | 15 | 15 | 12 | 14  |    | 19  | 19 | 19 |
| Talking    | 0     | 1  | 0  | 0   | 0  | 0  | 0  |     |    | 0   | 0  | 0  |
| OTHER      | 1     | 7  | 6  | 5   | 4  | 4  | 7  | 5   | 4  | 0   | 0  | 0  |
| OFF        | 1     | 8  | 6  | 9   | 9  | 9  | 7  | 5   | 4  | 0   | 0  | 0  |
|            |       |    |    | 5   | 4  | 4  |    |     |    |     |    |    |

\* = ACTIVITY change

- When you changed ACTIVITIES, engagement increased
- When you actually started playing the game, the codes were all engaged or ON TASK for the next 3 Sweeps

Sorry it is so messy

Thurs.  
Math class - 2/17/04 - 10:45 am

Direct Instruction  
1st/11-seats 10:45 - 10:56

• S leaning in chair - corrected by para  
- started to lean again, still raising her hand

\* 10:56 checking H.W. w/ calculator.

- H - way off task - not checking - S intervenes back on
- C  $\frac{1}{2}$  &  $\frac{1}{2}$  off then on
- S <sup>didn't have H.W.</sup> way off quickly looking through binder <sup>out of ones</sup>
- S moving around & para & helper mom
- H off again - Mom intervenes - didn't have work <sup>show</sup> <sup>answ</sup>  
↳ back off & turned around playing w/ calc. 8 out of 10 min  
↳ maybe 2 min out of 10. I think should be up front  
↳ periodically, throughout class turning around or C turned talking to

• P, M, S, moved around outside of room, not in middle  
↳ these students doing o.k.

11:05  
H.W  
Prob

- going over last problem, much more participation
- using calc. to figure out prob  $\frac{1}{8} = .125$   $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$
- need to review patterns  $\frac{4}{8} = \frac{1}{2} = .5$  no calc. needed
- said only if you were observant you would know =

11:10  
Journals

- gave too much time so many became off task
- had to wait for a 10 min. threatened recess - now on task
- S - 2 min late getting Journal out - reminder from Mom
- C - turned around talking too much time between <sup>every</sup> time
- Some put 10 interspace - not clear on what adjoint was - <sup>many</sup> <sup>SS</sup> <sup>w/</sup> <sup>clear</sup>
- all SS off-task

\* 11:23 - switch to w.s. review on T, now H.W. to finish <sup>para giving</sup> <sup>teach direct</sup>

I Like:  
• if your name is on your paper stand up 😊

## **Appendix C:**

### **Student Surveys**

Name: \_\_\_\_\_

Pre- Survey Questions

Directions: Please CIRCLE yes or no. If you circle YES, please explain why on the lines provided.

\*Do you feel that your seat in the room is the best place for you to learn? YES NO  
If yes, WHY?

---

---

\*Would you be able to learn more information if you were seating in another area of the room? YES NO If you were sitting next to different people? YES NO  
If yes, where would you learn best? Sitting next to whom?

---

---

\*Do you like the set-up of our room? YES NO If yes, why?

---

---

\*Is it easy to learn with the room set-up this way? YES NO If yes, why?

---

---

\*Circle the place where you feel that you are able to pay attention and learn the most information. RUG DESKS

\*Circle the arrangement of desks that you feel is best for you to learn

SM. GROUPS LRG GROUPS ROWS HORSESHOE

\*What situation do you feel is the best way for you to pay attention and learn during a lesson? Rate these on a scale of 1-5 (1 is the worst way, 5 is the best)

RUG \_\_\_ SEAT \_\_\_ GROUPS \_\_\_ INDIVIDUAL \_\_\_ PARTNERS \_\_\_

\*Rate yourself on a scale of 1-10 on how well you use your time in class.

1 = not using much time to do work, do not use time wisely

10= use every minute of time to do work and use time wisely

Your personal rating: \_\_\_\_\_

Name: \_\_\_\_\_

Post- Survey Questions

Directions: Please CIRCLE yes or no. Please explain why on the lines provided.

\*Do you feel that your new seat in the room is the best place for you to learn? YES  
NO  
If yes, WHY?

---

---

\*Would you be able to learn more information if you were seating in another area of the room? YES NO If you were sitting next to different people? YES NO  
If yes, where would you learn best? Sitting next to whom?

---

---

\*Do you like the new set-up of our room? YES NO Why or why not?

---

---

\*Is it easy to learn with the room set-up this way? YES NO Why or why not?

---

---

On the lines below, write what type of arrangement of desks you like best and why.

---

---

\*Rate yourself on a scale of 1-10 on how well you use your time in class in this new seating arrangement.

1 = not using much time to do work, do not use time wisely

10= use every minute of time to do work and use time wisely

Your personal rating: \_\_\_\_\_

Do you feel that this is better or worse than the large groups before? \_\_\_\_\_

## **Appendix D:**

### **Gettysburg Lesson Information and Pictures**

Social Studies

Date: 4/7/05-4/8/05

Objective: The students will visually be able to understand the general battle and outcome of the battle of Gettysburg

1. intro g-burg with interesting facts about the battle. (bloodiest, total # men killed, over three day period, etc.)
2. place map on overhead and explain to ss. Have them see the landmarks and how g-burg is setup.
3. have ss fill in some of what they learned thus far in the L column of our chart
4. prep ss for day to come, that we will be walking through the battle as a class.
5. I will have ss already assigned a role to save time.
6. Friday: give out name tags for ss in their assigned roles. (classroom set-up at lunch time: fabric, carpet area=town, desks-cemetery, comp. -devil's den, etc. label all areas clearly) I as narrator. I will position ss to start. They are responsible for listening to narrator and following directions as things occur.
7. reflect on battle at the end and have ss write three things that they learned during our simulation.
8. have them add to our L chart if time

These pictures are a clear representation of how the room was set up as well as the students' enthusiasm for acting out their role in the battles at Gettysburg.





