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An In-Depth Study of Student Engagement

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A report on an action research project submitted in partial fulfillment of the requirements for Master of Arts in the Department of Teaching, Learning, and Teacher Education, University of Nebraska-Lincoln

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Abstract

In this action research study of my classroom of 5th grade mathematics, I investigated student engagement levels in the classroom, with a specific interest in how to raise the levels of engagement which students were demonstrating before the study began. I defined student engagement based on students' posture, thinking, responsibility level, participation, and test readiness. Each day, students were given an engagement rubric where they would rate themselves on the previous five criteria. Students enjoyed the opportunity to grade themselves, and their engagement levels significantly improved over the course of the study. I discovered that giving students specific guidelines and criteria for my expectations, as well as modeling those expectations on the rubric by using pictures, and then having students grade themselves were all key factors to increasing the level of engagement that students demonstrated. As a result of this research, I plan to continue to use engagement rubrics not only in my mathematics class, but also in my classes for other subject areas.

In this study, I am looking closely at the levels of engagement which students demonstrate in class. Engagement, for the purpose of this study, is defined by a student's posture, thoughts, level of responsibility, participation, and test readiness. This is an action research project where I studied my own classroom of fifth grade students. This was my second year of teaching fifth grade. Before I began this study, there was quite a lack of student engagement in my classroom, and I wanted to find out why, despite all of

my efforts, students were disengaged and what I could do to increase the level of

students' engagement.   As a researcher in this project, I collected data on students by

using my own observations, students' self-assessments on their engagement rubrics,

interviews, and the observations of Dr. Ruth Heaton.

Problem of Practice

My initial problem of practice encompassed student engagement on two levels:

homework and participation in class. As I dug further into the process of researching my

own class, I believed that this problem was too broad, and would be overwhelming to

thoroughly research. I revised my problem of practice to focus solely on student

engagement and participation during class time, although I still included homework as a

component of their participation. Student engagement directly involves the teaching of

the teacher and the learning of the students. In my opinion, student engagement is the

key to the purpose of the lesson, student learning. I believed that student engagement

was within the focus of my control, and I sought to discover how to control it. I wanted

to increase and improve the level of student engagement in my mathematics classroom.

On some rare days in my classroom, I had a "good" level of student engagement.

What is meant when I say student engagement is that there is evidence, from the students,

that they are listening to the lesson, thinking about the concepts being taught, and

learning from their participation in class. Students who were engaged were able to

answer and ask higher-order questions about the lesson, engage in conversation about the

concepts with a peer partner, and even help a peer by explaining a concept or skill.

Students who were able to pass their homework quiz the following day or their test at the

end of the chapter were also able to show evidence that they were engaged in the lessons

covered in the assessment. Although such evidence was encouraging and pleasing to me, it was rare to find the majority of my students demonstrating such behaviors.

Keeping with Lincoln Public School's theme, "from good to great," I wanted the level of participation in my class to rise from rarely good to consistently great. On any given day in my classroom, you could have found several of my 20 students off task. This off task behavior took on many forms. Students may have been fidgeting with something under their table, playing with the beads in their hair, leaning back in their chair, searching for supplies, shooting dirty looks to another student, whispering, gazing at something in the room, laying their head on their table, or looking right at me while they daydream away. Ideally, I wanted my students to be prepared for class before we began, attentive during class, and responsible for preparing for the next class after a day's lesson is finished. What this translates to, in terms of students' behavior, is that students are sitting up straight with their chairs on all four legs and pushed under their desks. Students would also have two pencils sharpened, and would have their math book and notebook out. Also, students would always look at the speaker, whether that is me or another student, during the lesson. Students would give evidence that they are not only looking at the speaker, but also listening to the speaker, by being able to participate in discussion. Students would be able to answer questions without needing to have the question repeated and would be able to ask questions about the content being taught. There was quite a gap between what was happening in my classroom and what I desired.

I commonly hear the words student engagement used in the world of education. It is not so common, however, that I hear the term being explained, justified, or defended. I believe that on all three levels, that of my own teaching, the teaching of those in my

immediate community, and the teaching of the larger community of educators, the task of engaging students in class is a real and regular struggle. Within my own classroom, this subject is of great value to me so that I can learn more about the dynamics of my classroom community. To learn how to increase student participation, it was necessary for me to look closer at the distinct individuals in my classroom, and what makes each individual active and interested (or not) in their learning. The more I knew about my students, the more connections I could make between math and their own lives. The more relevant math is to my students' own lives, the more engaged they will be. As student participation in class increases, I predicted that student learning and achievement would also increase.

The knowledge of how to engage students is important to those around me because it is necessary and relevant to helping educators create a school-wide community of learning. Imagine what fifth-graders would be like in class if they had been taught how to participate in class when they were in kindergarten and had practiced being engaged in learning all the way through their elementary school career. Also, as a society of educators, increasing student engagement in the classroom will also have a positive impact on our test scores. In the world of No Child Left Behind, it is necessary for our survival that all children are engaged all of the time. The bottom line, for me, is that student engagement fosters a community of learners where anything else, besides learning, is unacceptable.

This problem of engaging students in the classroom relates to the NCTM's problems of practice that deal with equity and learning. It is quite difficult to support a student who is sleeping during math class or who has no desire to be supported.

Expecting students to perform well in class is not relevant when students could care less about your expectations or beliefs. In order to create an equitable classroom, I felt that it was necessary that students come to their own conclusion (with my subtle help) of the importance of their participation in class.   Also, in order for students to learn, they have to have prior knowledge to build upon. If students float through their education without mastering and understanding the initial concepts of math, they will struggle to succeed later. Student engagement is a necessary component of every single day of a student's education.

Literature Review

As teachers and educators across the nation continue to labor to meet the national standards for success from our students, there is non-stop discussion about how to meet the needs of students who are just not making it. Test scores seem to be the end all in our educational system, and teachers and students alike are feeling the stress that results from the pressures of such tests. In my own classroom, I feel more compelled than ever to teach more concepts in shorter amounts of time. Time is such a precious commodity, and there is none to waste! As I am trying to squeeze as many concepts as possible into every minute of instruction; one of the major struggles that I combat every day is that of student engagement. Previously in this project, I defined engagement as:

> Students who are engaged are focused on the learning going on in the classroom. This focus is demonstrated by the student's attentive body language (good posture, eyes on the speaker, chair pushed in, and head up). The student is also prepared for the class by having their book and notebook, sharpened pencils, and completed homework. Not only is the student prepared with the appropriate materials, but the student also makes good use of the materials. The student is thinking about math, asking clarification questions, participating in group discussions, and providing examples of the concepts being taught. The student is positive and assertive, and takes ownership for his or her own learning.
> (Parn, Research Questions, 11-11-05)

Through this literature review, my definition of engagement has expanded. The component of engagement that I was missing, and that I believe a lot of educators are missing, is that of student interest and desire.

As teachers, we are getting so busy and burdened with the federal, state, and district requirements that we forget to think about the emotional needs of our students. It is not common that we have time to stop and think about what our students want or desire, but according to Damico and Roth (1994), it is necessary for the success and engagement of our pupils.   As I read other studies on engagement, which spanned from pre-school to high school and dealt with reading and math, it became obvious to me that engagement deals with more than behavior. Jackson (1999) and Ortiz (1997) both point out that engagement includes behavioral and emotional elements. Finn and Pannozzo (2004) refer to two types of engagement: academic engagement, that refers to learning behaviors, and social engagement, that refers to pro- and antisocial behavior. For the purposes of my study, I was interested in students' academic, emotional, and social engagement levels.

In addition to the multiple facets of engagement, it also makes sense to me that there are different levels of engagement. To be truly engaged, students should demonstrate a real interest and commitment to the tasks at school, as well as a commitment to not engaging in activities or behaviors that detract from their learning (Finn & Pannozzo, 2004). However, some students are able to just do what is asked of them, and go through the motions, without truly engaging in their education (Steele, 1993). The bottom line, according to Ortiz is that " . . . the goal of researchers and

educators should not solely be to get kids to learn, but also to help kids <u>enjoy</u> learning (p.16)."

As I study engagement, I become more and more curious about the subject, and less confident that I know a great deal about it! One of the questions that continues to nag at me concerning this subject is "What is the outcome intended from engaged students?" Why do I want my students to be engaged? At the beginning of this project, my cut and dry answer was so that students would be more successful on their assessments. Although passing tests and meeting benchmarks are critical to the success of our students, I became convinced that as an educator I need to check my motives. Typically, our motive and goal for everything that we do in our classroom is ultimately to improve test scores. Is there anything wrong with this motive? There are plenty of legitimate reasons we could use to defend such thinking, but Daoud, Hershberg, Hudley, Polanco, and Wright-Castro (2002) disagree with such intentions. These authors suggest that the main purpose of engagement is to help students maintain their curiosity for learning. In order to optimize their educational opportunities, students must desire to learn for the sake of quenching their own thirst for education, rather than for receiving an external reward or gratification. As a result of such engagement, teachers and students alike will enjoy the extra benefits of high test scores and state percentages (Jackson, 1999), but it must be noted that the greatest success will be that of fostering a child's mind to love to learn!

Finn and Pannozzo would further contend the need for engagement, starting in the beginning of a student's elementary career, to ensure their success throughout their schooling. As they found, "a predictive relationship between attentiveness in the early

grades and school performance in later grades" was prevalent in many studies of student engagement levels (Finn & Pannozzo, p.79, 2004). Lehr, Sinclair, and Christenson (2004) gave more specific data regarding the intense need for students' engagement starting in the elementary years. Retrospective studies, they found, showed that students who eventually dropped out of high school had more absences than their graduate peers did in first grade, were absent twice as often as graduates by fifth grade, and three times as often by ninth grade. The data agrees with them when they state "The most severe and overt symptom of disengagement from school and learning exhibits itself in the form of dropping out of school" (Lehr, Sinclair, & Christenson, p. 280, 2004). The need for student engagement extends far beyond the objectives that our schools have to meet federal requirements and pass tests. The need is imperative for the success of our students, not only in school, but in life. By all measures, dropping out of school is not a means to success in one's adult life. Slavin (1999) summarizes this point best, as he states "Success in the early grades does not guarantee success in later schooling, but failure in the early grades virtually ensures failure in later schooling." (p.105). I would add that failure in the early grades also yields an extremely high probability of failure in adult success.

Many times, especially with our older students, we pressure them to be engaged in class so that they can be prepared for their future. We ask them what they want to be and tell them that hard work (being engaged in learning) will allow them to accomplish their goals. After interviewing students in urban public high schools, Jackson (1999) concluded that often our students have set high goals for themselves and believe that they are hard workers, but are not fully aware of all of the work required in order for them to

achieve their goals. Even as elementary students, my fifth graders have career

aspirations. However, to tell them that they will succeed in life by memorizing facts and

concepts and paying attention in class is just not fair. In order to achieve their dreams of

being doctors and lawyers and cartoonists, they not only need to have an extreme desire

to learn, but they also need to be taught, in detail, what requirements will be necessary of

them in order to achieve such success. Students have a vague, short-term understanding

of what hard work looks like, but they lack a specific, long-term commitment to

achieving their goals. It is the responsibility of the teacher to promote such work ethic in

the students. In order to do so, a teacher must be extremely specific and in-depth when

teaching students to be persistent and engaged in their learning.

We know that the more engaged a child is in learning, the greater their chance is

for success in school and beyond. The question now is how do we engage our students?

How do we captivate their interests and create a love for learning? There are many

obstacles to overcome while trying to foster an engaging environment. One of the most

challenging hurdles to overcome is that of a student's own self-perception. A way a

student sees him or herself greatly impacts their aspirations for the future (Daoud et al,

2002). The more optimistic their belief is in themselves, the more positive their hopes for

the future are. In addition to a student's own self-perception, their perception of their

value within their classroom community also has great impact on their engagement level.

Students in larger class sizes, more than 20 students, find it easy to shy away from their

individual responsibility to learn and contribute to the learning of the class and let other

students lead the class. Psychologists call this reduced motivation to learn "diffusion of

responsibility" (Finn & Pannozzo, p. 81, 2004). Another factor that affects students'

engagement levels in larger class sizes is the reduced time that the teacher is able to commit to each individual student. In classes of any size, the student's perception of their teacher, whether the teacher cares for them, is fair, etc., greatly impacts their engagement level. When students feel liked by the teacher, they will make an effort to proceed with difficult concepts and take interest in the learning, but if they dislike the teacher they are much less likely to be fully engaged in class (Damico & Roth, 1994).

Ortiz dug deeper into the relationship between teacher behaviors and student engagement. Her study focused on five teacher behaviors: enthusiasm, level of difficulty of lesson, voice volume/inflection, use of inquiries, and use of positive feedback, and the impact that these behaviors had on the level of student engagement. All behaviors showed evidence of impacting student engagement. Not surprisingly, when these teacher behaviors were demonstrated in a positive manner toward students, students generally responded with positive behaviors and high levels of engagement. Of course the opposite, negative demonstrations of teacher behaviors, also generally yielded negative behaviors and engagement levels from students. Most teachers would feel that Ortiz is just stating the obvious, that it is important to be positive and offer challenging lessons. However, Ortiz felt that there is a gap between what teachers perceive to be the relationship between their own behavior and the resulting student behaviors and engagement levels, and the actual correlation between the two.   Ortiz even went so far as to say that teachers, and students, would all benefit if this deficiency were addressed by educators being given "engagement training" (p. 25, 1997).

Other aspects that influence student levels of engagement are the difficulty level of the work they are given, the manner in which a lesson is conducted, and the resources

that are available to learn with (Steele, 1993). Students benefit from being challenged, working with manipulatives, and problem solving within groups. Students prefer to skip long reviews and rote practice and get right to the hands-on math, where they get to experience the problems. I could not resist but to laugh out loud when I read the following opinion of a disengaged seventh grade student: "She just writes so much. We just watch up there. You are just sitting there. There's nothing to do but watch" (Steele, p. 17, 1993). There is no question that this student does not love the learning, or perhaps the teaching, going on in his classroom!

Engaging students in our classrooms is a critical component to help them succeed as a learner in school and in life. The variety of pupils and settings in these studies was quite helpful and thought-provoking to challenge me to discover ways to engage my students! Although the studies were all helpful in reaffirming my belief that engagement is a necessity for student success, I was still left with the question of how is this accomplished? Of course I want my students to be engaged, and all of the research that I read shows that this is a legitimate concern. Specific attention was given by the researchers to teacher behaviors and motives, student behaviors and self-perceptions, and the intended outcomes for engaged students. Although the factors that affect student engagement levels were studied in-depth, and resulted in research on the ideal conditions to raise student engagement, none of the researchers discussed how to make this radical transformation in one's own classroom. This lack of information on going from the actual levels of engagement that I see in my classroom to the ideal levels of engagement that I know are best for my students was why I decided to study how to accomplish such a lofty goal in my classroom, and I developed the engagement rubrics.

Purpose Statement/Research Questions

The purpose of this study was to discover how to increase student engagement levels in my fifth grade mathematics class. More specifically, the goal was to identify variables in the classroom which were prohibiting students from being fully engaged, attempt to reverse those variables, and help students to succeed in meeting the district objectives. Data collection occurred during the spring semester, 2006, in the researcher's classroom. The study attempted to answer the following research questions:

- How do students' physical demeanors affect their thoughts and focus during the class?

- Are students able to accurately assess their own level of engagement in class?

- How does having students self-assess their level of engagement daily actually affect their engagement in class?

Method

For each research question, I used a variety of data collection methods to provide evidence for the question. The foundational pieces of evidence for data collection in this project were the student engagement rubrics that I created and that students completed on a daily basis (Appendix A). These rubrics served as self-evaluation forms where students were given specific criteria, along with pictures to demonstrate each criterion, to rate themselves by for each of the following categories: posture, thoughts, responsibility, participation, and test readiness. In addition to the rubrics completed by the students, I had originally also planned on conducting pre- and post-project interviews with students, keeping a weekly journal of my observations, recording my own ratings on engagement rubrics for a select group of students on a daily basis, having my co-teacher record ratings for the select group of students, and using engagement rubrics completed by Dr. Heaton

for the same students on the days that she observed our class. One struggle that I encountered as a teacher/researcher was the realization that I did not have the time to complete all of these data collection methods. Throughout the project, I continued to feel that the research would have been greatly enhanced had I been able to collect data in all of the ways that I intended. Although this might be true, such a project would have been out of the range of completion for me considering that I was also teaching full time!

One initial obstacle that strained my data collection was the delay in IRB approval for the project. The day that I finally received the approval, I began the project. However, this did not allow any time for me to collect permission slips. Having the students complete the engagement rubrics was immersed into my lesson planning as a natural piece of the lesson, as I thought that it enhanced the lessons. Therefore, no IRB approval was needed for students to complete the rubrics. However, my completion of rubrics on only a small, select group of students was solely for the purpose of the research. Thus, I had to wait until several days after the project had begun and students had returned their permission slips before I could begin completing rubrics that would be used as a source of comparison to students' own self- evaluations. While I waited for permission slips to be returned, I attempted to collect information on all of the students for all of the sections of the rubric, so that I could use the data for the students that I would choose as my select group, and disregard the information for other students who did not return their permission slips (Appendix C). This idea seemed reasonable when I thought of it, but after one day of attempting to collect data on all of the students, I realized how difficult this method was. I was attempting to rate 20 students on all five aspects on the engagement rubric, resulting in trying to give 100 different ratings at the

end of the day. Not only was this an inefficient use of my time, but also the ratings that I

gave were a vague guess on my part, at best. It was difficult to remember what each

student had exhibited in each area every day, especially since many times I did not get to

fill out the ratings until that evening or the next day. Although I attempted to continue

this process for two weeks, until the permission slips had been returned, I ultimately

decided that my ratings of the whole class were not high-quality sources of evidence for

engagement, and I disregarded the data and did not use it to make my final

interpretations.

Time is always of the essence and seems to always be an issue for teachers. It

doesn't matter if you are trying to get through a unit in a certain matter of weeks, finish a

day's lesson within the hour, or find time to call parents, time always seems to run short.

Serving as the teacher/researcher in this project the test of time, or lack thereof, also

impacted my efforts in this research. As I previously mentioned, late IRB approval

delayed beginning the project, and further delayed collecting data by all of the means that

I intended. The late start of this project also impeded on the timeframe for data

collection. Originally, I had intended to start the project on March 1, 2006, but was

deferred until March 28 as I waited for the necessary approval. This deferral not only cut

out nearly a month of data collection, but it also delayed the date that I would end the

project. As a result of the postponement of completion for the project, many of the days

that were now in the timeframe for data collection were not actually days on which data

could be collected. Reasons such as fire alarms, assemblies, class pictures, field trips,

days when substitute teachers taught, and weeklong blocks of standardized testing all

interfered with our normal math schedule and as a result impeded on collecting data for this research.

Finally, the general nature of teaching, where one must be flexible on a daily basis, impacted my original intentions for the research. Originally, I co-taught a class of 27 students, many of whom struggled with extreme negative and off-task behaviors. The engagement rubric was not only my research, it was my attempt at giving these students a life saver to help them salvage their learning for the rest of the year, and hopefully help them to enjoy the mathematics. As I was still waiting for approval for the project, my team and administration decided to split the large math class into two classes, one composed of the seven students who struggled with appropriate behavior, and the other composed of 20 students who were generally able to be on task. I was a part of this decision, and although I felt that it was the best thing for all of the students, it was definitely not the best thing for my research. I had been looking forward to seeing the implications that the engagement rubric would have on this group of students who would no longer be a part of my class. Also, the original plan was that my co-teacher and I would switch, by chapters, teaching the two groups of students. This would strain my research, however, as I would really be conducting the project with two different classes, and only collecting data from each class every other chapter. By the time IRB approval came, the plan had been modified and I was teaching the larger group all of the time. This meant that I would not get to investigate how the engagement research would impact the small group of students who desperately needed it, nor would I have the rubrics completed by my co-teacher as a source of data. I would, however, be able to work with

the same group of students during the duration of the research. Flexibility is a necessary

trait for any teacher, but I found it hard to be flexible as a researcher.

When the project finally began, I was content to collect data on the students I was

teaching in any means that were available to me! Many of the data collection methods

that I utilized overlapped. For the question "How do students' physical demeanors affect

their thoughts and focus during class?" I looked at the correlation and progression

throughout the project of the students' own self-assessment on the engagement rubrics.

Specifically, I analyzed the sections of the rubric that focused explicitly on students'

posture and thoughts. Interviews that were conducted with two different groups of

students were also used as data for this question (Appendix B). After the conclusion of

my research gathering, however, I re-examined my interview questions and regretted not

asking a more specific question to the students about the relationship between their

posture and thoughts. I also used my own informal observations to address this question.

To determine whether students were able to accurately assess their own level of

engagement in class, I chose a focus group of three students, who all had completed the

necessary IRB approval forms, and compared their self-assessments to a rubric that I had

completed on select days rating their engagement. Although there were a total of 16 days

that I collected data from the students for this project, only 14 of those were days when

all three of my selected students were in class. Furthermore, only six of those 14 days

were days when I completed engagement rubrics for each student. Dr. Heaton also

observed in my classroom on several occasions (February 8, February 14, February 23,

April 3, April 4, April 12, April 19, April 27, and May 3, 2006) and specifically watched

for the engagement of these three students. Her observations served as another means of

data comparison. On the days when she observed I was able to compare student rubrics with her field notes, and at times I also had completed rubrics that could be used as a third source of comparison. I also used the student interviews conducted at the end of the project to collect data for this question.

The emphasis of this project was to discover how to increase student engagement, and thus answer the question "How does having students self-assess their level of engagement daily actually affect their engagement in class?" To answer this question, I once again compared engagement rubrics completed by students and by me, as well as Dr. Heaton's field notes. My own informal observations, as well as the student interviews, were also used as sources of data to answer this question. I felt that this question could have been a research project in and of itself. If I had not been constrained by time and organizational variables that were out of my control, I would have also liked to utilize students' think times, office referrals, homework quizzes, and chapter test scores as data for this question.

Data Analysis

Based on my observations of students during class, I would assert that a student's physical demeanor: their posture, the position of their legs, the placement of their arms and hands, the focus of their eyes and ears, and so on, directly correlates with their thoughts and focus during class. Specifically, I would assert that a negative physical demeanor yields negative consequences on their mental disposition, just as a positive physical demeanor yields positive consequences on their mental disposition. To look for evidence to support this assertion, I concentrated on the first two sections that students assessed themselves on in the engagement rubric, posture and thoughts (Appendix A).

Table 1

Posture/Thought correlation			
Average student ratings:			
Day	Posture	Thoughts	Difference
1	3.8	3.4	0.4
2	3	2.9	0.1
3	3.2	3	0.2
4	3.4	3.3	0.1
5	3.6	3.5	0.1
6	3.4	3.2	0.2
7	3.7	3.3	0.4
8	3.6	3.5	0.1
9	3.6	3.6	0
10	3.2	3.2	0
11	3.3	3.5	-0.2
12	3.4	3.5	-0.1
13	3.6	3.5	0.1
14	3.6	3.4	0.2
15	3.5	3.5	0
16	3.6	3.8	-0.2

Table 2
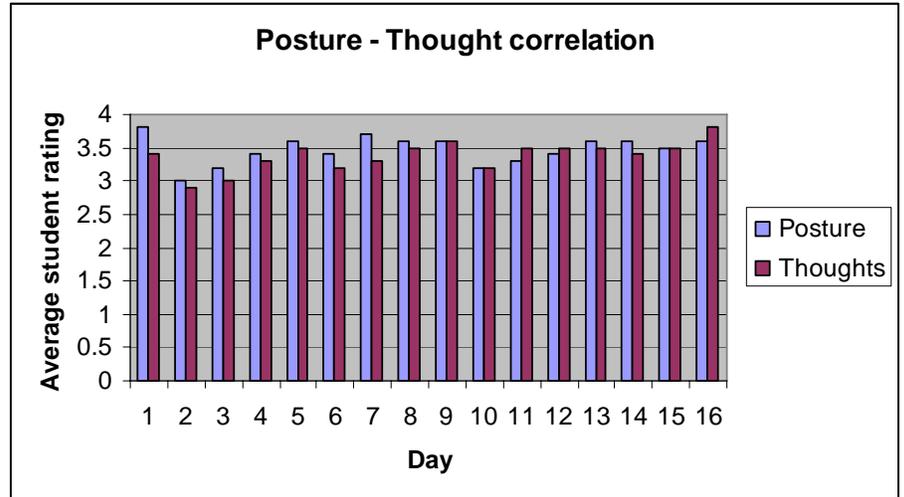
As shown in Tables one and two, students consistently recognized a correlation between their posture in class and their thoughts during class. Based on students' own self-ratings, I found the average posture rating and the average thought rating for each day of the data collection. The mean difference between the two ratings was only .15. There were only two outlying days that the scores did not have a difference of .1 or .2. On days one and seven, the differences of the averages of the scores were both .4. On days nine, 10, and 15, average posture and the average thought scores were exactly the same.

Students also showed evidence of believing that the two aspects of engagement were closely related by their comments during the interviews (May 26, 2006). When asked what it looks and sounds like when students are engaged, answers all strongly reflected features of posture and showed more subtle reference to thoughts. (Students'

identities have been protected by the use of pseudonyms to replace their real names.)

"The teacher knows when you are participating, your eyes are on her, and she knows that

you are doing your work (Tiara) . . . You are sitting up straight, looking at the speaker . . .

the engagement rubric would help us sit up straight and not think about things like what

we were doing tomorrow and what we did yesterday . . . (Brooke) . . . The student is

paying attention, sitting up straight, and answering questions (Matthew)" were all

explanations of evidence that students gave to describe when a student is paying

attention. When asked if the engagement rubric changed his participation, Matthew

responded by saying that "it helped us sit better and learn better . . . it helped us sit up

straight and you had to listen and do your homework and that affects your grade."

Brooke further elaborated by explaining "I know what I'm supposed to do and if my

thoughts aren't straight I can just tell you that my thoughts weren't straight . . . if we

don't sit up straight and think straight . . .when it comes to tests we might fail." The

explicit nature of evaluating posture makes this facet of engagement easier for students to

evaluate, but their answers always included underlying indications of their thought

activity.   Kevin added depth to the conversation when he acknowledged "the teacher

can't see your thoughts, but she can see the outside, and don't think that she won't know .

. . ." He went on to add that "if you are having a bad day, she can see it in your eyes, and

she will ask you what is wrong." It was interesting to me that the correlation between

posture and thoughts registered to students even beyond the facet of a teacher checking

for on task behavior. Kevin was able to connect this correlation to his own struggles that,

at times, had nothing to do with math.

It is interesting to note some of the relationships between the posture and thought ratings. On day one, the average posture rating was 3.8, the highest average that the class had for posture during the entire study. Since students only had the option of rating themselves 1, 2, 3, or 4, this means that nearly every student gave themselves a rating of 4. It is also worthy of noting that from days one through eight, the posture rating was always higher than the thought rating, on days nine and ten, the two ratings were equal, and half of the remaining days yielded a higher thought rating than posture rating. I believe that the evolution of these scores is directly correlated with the growth in students' understanding of how to honestly rate themselves, as well as the growth in their engagement over this time period.

One variable that also would address the trend in the scores is a clarification of the rubrics that I gave the students on day nine of the project. During the first eight days of data collection, I started to notice major disparities between my observations of students in class and the ratings that they were giving themselves on the rubric. As a result of these differences, on day nine I asked the students to be more specific on their engagement rubrics when they evaluated themselves. Not only did I want them to write the number rating that they would give themselves, but I now also wanted them to write why they rated themselves the way that they did. This clarification held the students to an even higher level of accountability, and required them to give specific evidence of their behavior to support their rating. This also helped me to look for evidence to support this question. As students began to be this in-depth about why they gave themselves the grades that they did, I started to notice a closer correlation between their evaluations for posture and thoughts and my own classroom observations. On several rubrics throughout

the course of this time, students would give themselves a 1 or 2 for posture, specifically

tell how they were leaning in their chair or lying on their desk, and then also have a lower

thought grade on their rubric. Also, my own observations show me that students who are

lying on their desk are not as attentive to the lesson as students who are sitting up

straight. When Matthew lies on his arm, he cannot clearly hear my questions, and does

not have an answer. When Van starts to slouch and lie on this desk, he falls asleep and is

clearly disengaged in the lesson. When Brooke does not make herself sit up straight with

her chair pushed in all of the way, she quickly finds herself distracted by something in

her desk, and disengaged from the lesson.

The last piece of evidence for this assertion comes from my observations of the

diminishing trail of Think Times, the discipline system used to refocus off task students

at my school (Carr & Nelson, 1999). As I previously mentioned in the methods section,

there is no hard evidence to show the exact number of Think Times given each day in the

project period. However, an examination of Dr. Heaton's field notes (April 3 and April

4, 2006) shows fewer disruptive behaviors over time, and my own observations confirm

this diminish in negative behavior. When Lamar is crawling under, over, or around his

desk, and is not sitting in it properly, he gets a Think Time. This takes him away from the

lesson and disengages him from the learning. It was a success to see such displays of off-

task behaviors decline. I would conclude that, as Loisa stated, "If you are thinking about

math, it will show!"

The question of whether students are accurately able to assess their own

engagement levels is one that I still wrestle with. There are definitely outlying students

who are consistently assessing themselves at a much higher or lower level than what is

actually true. However, I would assert that most students were not able to accurately assess themselves when they began to do so, but with time, practice, and continuous clarification of how to accurately do so, students' abilities to be honest and precise on their self-assessments greatly increased.

When re-examining tables one and two to look for evidence for this question, one notices very quickly that, miraculously, all of the students have extremely high ratings of posture and thoughts all of the time! If my own observations would have supported the students' ratings, I would have surely chosen a different course of study for this project!

At the beginning of the project, most students were very kind to themselves. They did not often downgrade themselves. Most of the rubrics completed by students, as can be noted from Tables one and two, were filled with 3s and 4s on the rubric. The actual behavior that I observed in class was not at such a high level. If I just focus on the two areas of posture and thoughts, at the beginning of the project more students were displaying a range of behavior from ratings of a one to a three, many think times were given each day for these distractive behaviors. My observations and Dr. Heaton's field notes (February 8, February 14 and February 23, 2006) show that the average behaviors in the class were not displays of three or four behaviors. One specific student who jumps out at me is Simon. Simon thought that he knew all of the material before he even came to class. He was convinced that he didn't need to pay attention during the lesson, and that it was ok for him to work ahead of the class. Yet, when he received a 1 or a 2 back on his test, he was quite defensive. His engagement rubrics that he completed about himself were always very favorable, and unrepresentative of what I observed his engagement levels to be. I think that he knew that he didn't always exhibit 3 or 4

behavior in class, but when he filled out his engagement rubric, he seemed to think that

he was "above the law" so he still should receive a higher grade.

Simon was unique in his perception of being outside of the realm of the classroom

expectations, but his tendency to rate himself in such an advantageous way was normal

for many of the students at the start of the project. When I started requiring students to

tell me why they were giving themselves each grade, it became a bit more difficult for

Simon and other students to quickly give themselves all 3s and 4s. Over time, even

Simon began to take more time for honest reflections of his engagement behaviors, and

his rubrics were more closely matched to my perspectives of his behavior, as well as

supported by his evidence for each grade that he had given himself. This was a trend

with most of the students in my class. When I first began requiring students to write why

they gave each grade to themselves, all of the grades immediately lowered. However,

within a few days, many grades were improving and were honest assessments of the

students' behavior that were supported by evidence that the student gave.

For the three students who were in the group that I selected to rate on the last six

days of the project, there were many differences in my perceptions of their behavior and

their own self-assessments. The charts for each student in Appendix D show the ratings

that each student gave themself, along with the comparison of my ratings, printed in red,

for the last six days of the project. The discrepancies of ratings are highlighted in yellow.

On average, for each student, there were 16.33 differences in the students' ratings of their

engagement and my ratings for each student. This means that out of the 30 ratings that

the students and I both gave over these six days, we disagreed 54% of the time. In the

majority of the discrepancies (78%) students gave themselves a higher rating than what I

perceived their engagement to be. In only 22% of the differences did I rate the students higher than what they rated themselves. In light of these results, I still feel that students were able to grow in their ability to assess themselves, and that by the end of the project most students were able to give an accurate rating of their engagement in class.

Notice that the comparisons between my ratings and the students' ratings occurred during the last six days of the project, after students had become comfortable with the engagement rubrics, and after they had been asked to provide evidence for each rating. My informal observations, as well as Dr. Heaton's field notes, give substantial evidence that engagement levels for the majority of the students had significantly increased. Also, I do not contend that my ratings for each student were the right ratings; they were merely my observations of the students that I took note of throughout the class. If my only purpose during these classes would have been to focus on the engagement levels of these three students, I would feel a bit more inclined to question the high number of differences. However, since I was also teaching 17 other students during this time, it is quite possible that I did not always have accurate representations of the students' engagement levels on my own ratings.

Perhaps the best source of judging whether students were able to accurately assess their own engagement levels is to listen to what the students had to say about their ability to do this task. In the interviews that were conducted at the end of the project, students specifically commented on the grades that they gave themselves. When all three students from the focus group were asked, in general, what grade they would give themselves for an overall participation grade, students' answers were either a 2.5 or a 3 (even though ratings were supposed to be in whole numbers). No one felt like they deserved a 4 in this

area, and they all gave substantial evidence for their grade. This honest, reflective,

assessment is not how they graded themselves at the beginning of the project. Yet, even

in the midst of grading themselves as average or a bit below average in this area, all

students said that by doing so they were more motivated to do better in future classes now

that they were aware of the deficiencies in their own level of engagement. These answers

from students were quite intriguing to me, so I probed them further to find out how they

felt about not giving themselves the best grades. I asked students how they felt when

they gave themselves a rating of 2.5, and how that rating affected them. Dana explained

that she was disappointed with herself when she gave herself this rating, and Brooke

quickly pointed out that there are benefits to such a rating, "it helps me do better because

I know that if I get a two and a half or a two, then I need to work harder. . . and if I write

a two on posture, then the next day I know that I need to get higher than a two because I

need to set a goal." Matthew further elaborated on this sense of motivation for

"redemption" that inspired him after he gave himself a lower grade ". . . it helps. I don't

always get a two and a half."

Another theme that emerged in the discussion of portraying one's grades honestly

was accountability from parents. I thought that this idea was very interesting because,

after what I perceived as several failed attempts to get the parents of some of these

specific students more involved in their child's education, students still felt that they

needed to be successful in order to satisfy their parents' expectations. Although I never

showed a completed engagement rubric to any parent, and students knew that, Matthew

still commented that "people don't want to get in trouble by their parents and if they

wrote all ones you could show it to their parents and then they'll probably get in trouble

but they don't want to get in trouble so they'll just be good . ." Other students also mentioned the positive implications that their high ratings would have on their relationship with their parents, as Kevin shared "I used to not care about tests unless I got a prize, I would just mark down answers . . . now I want to do good and get a three or a four. I know that if I do that I can make my parents proud." After Kevin's mention of intrinsic motivation, of course the focus of the conversation among the rest of the group immediately focused back on extrinsic rewards. Regardless of however short-lived it might have been, there was evidence that students do care about their grades, and that they know if they are honestly doing well or not. Loisa added "when you go from high to low (on your ratings on the engagement rubric) it's a big step there, and my parents like it when I take big steps because they're not just little, going from one thing to the next, and when I can do something big they are happy." When students were asked at the end of the interview for their suggestions on how to improve the engagement rubric for next year, Brooke actually suggested that the rubric be sent home each day with students so that they could share it with their parents, and then returned to school the next day with their parents' signature on it. This wasn't a suggested scare tactic; Brooke and the other two students in her interview group expressed this idea so that students could share their success with their parents, and so that, as Matthew stated "if you get all fours your parents will be happy!" It was refreshing to see this desire for parental approval still so apparent in my students.

Finally, I would assert that having students self-assess their engagement raises students' awareness of their own behavior, helps remind them to stay on task, allows them to take control of and be aware of their grades, and gives me exact criteria to refer

to when I am redirecting students. All of these factors contributed to an increased level

of engagement and learning in our classroom.

For example, when students were off task, for any reason, I had a specific way to

refocus them. Instead of just saying "Pay attention," I could say "Are you showing me 4

thinking?" It was amazing! Students were interested and invested in their rubrics, and

they took pride in grading themselves each day. As Matthew expressed, "It was fun

because we got to grade ourselves and we got to realize what we did wrong so that in the

future we can work better . . . it's fun because you know what you are going to get, and

kids don't like surprises." Another comment in the other interview group came from

Tiara, who responded to the question, "Do you think that the engagement rubric connects

to your grade?" by stating "Oh yeah! It's kind of like a teacher holding the report card

(every day), but instead of the report card you have this engagement rubric. If you add

them all up together it becomes one big grade." Students wanted to do well on their

rubric, and when I refocused them with a specific reference to the engagement rubric,

they usually reciprocated by immediately exhibiting the behavior that I asked for along

with a smile, grin, or "I'm sorry."

Also, as I previously mentioned, the number of think times given in my room

since I had started the engagement rubric dropped dramatically. By the end of the

research period, I rarely had to give think times, because students would respond very

well to the specific, refocusing direction that I gave them. Students seemed to enjoy the

rubric. At first I received a lot of questions like "Are we the only class doing this? Why

aren't other classes doing this? What are you going to do with the rubrics?" When I

explained to students that they GET to participate in university research, and that we are

doing this so that other teachers can learn about fifth graders, and that our class rocked, and was so special, so that's why I choose to do my master's project on them . . . they got interested! They took pride in our class, they saw themselves as participating in something cutting edge and cool, and they wanted to do well. All of these factors attributed to the increased level of engagement over the course of the research period.

Interpretation

One of the biggest things that I have learned from this study and from the students (they said it themselves in interviews) is that they want to know exactly what they need to do to succeed, and if they know this, they will rise to the occasion. Students from one group explained to me that, although fifth graders don't always act like it, they do really want to succeed in school. What I heard from students about the engagement rubric is that it really helped them to know exactly what I wanted from them and what they needed to do to get a good grade. The immediate clarity of my expectations gave a lot of students a sense of relief, where they felt that they finally understood exactly what it was that I wanted them to do.

The pictures were an invaluable tool for accomplishing this clarification with students. Lamar shared his opinion of how the pictures helped him. "The reason that I like the pictures is because if we didn't see the pictures, we didn't know what it would look like and we wouldn't know what we would have to do. Do we have to, you know, do it by yourself and she might say that we have it wrong or something, so that's why I like the pictures better." Kevin added ". . . sometimes we might be sitting up straight, but then we lean over a little bit, but we really didn't know what it would look like and she gives us a think time, but we say 'I am not doing anything' but once we got the

engagement rubric we saw what we were supposed to be doing and it helped us with the pictures." My original intent for using the pictures was to ensure that the rubrics provided an equitable opportunity for all students, including students who were not able to read at a fifth grade level and students for whom English was not their first language. The pictures proved to be a powerful tool for all of my students, regardless of their reading or language abilities.

Now that the expectations were clear, students were able to follow directions and be successful. I believe that this benefit in and of itself is enough reason to continue using the engagement rubric in my future classes. Also, the rubric gave me a more specific way to reference students to my expectations. For example, instead of just saying "Please do your job," I would say, "I see a lot of 2 postures, please make sure that you are at a 4 posture," or "For partner practice today, please make sure that you listen to and share ideas with your partner so that you can earn a 4 in participation," instead of just saying get along with each other! This clarification of communication between me and the students was not only extremely empowering to all of us, but it also raised the standard of behavior, academics, and community in our classroom! Forcing myself to think about, write out, and model the specific behavior that I wanted from students had a huge impact on our classroom community, and it yielded such positive results. Toward the end of the project, when I required students to support their own assessments with evidence, this change resulted in the same type of clarified, positive results for the students that I had first experienced in my own expectations. This modification definitely made the rubrics more beneficial for the students, for my teaching, and for the data that I was collecting for my research.

I will definitely make use of the engagement rubric in the future. I will continue to use it in my mathematics class, as well as expand a form of it to all other subject areas. Filling out the engagement rubric provides students with a special and unique experience where they feel empowered over their own behavior, performance, and learning. Although this is viewed as a positive and effective experience by students, I hesitate to pass out an engagement rubric in each subject area because I don't want the uniqueness of the rubric to be lost. However, even if I don't pass out an actual rubric in other classes, I will display a chart that shows the specific behavior that I expect to earn each grade. This would be more like an engagement rubric poster that would serve as a point of reference for the students and me, and would be posted in the room, but wouldn't be handed out. I could envision this being quite effective in other subject areas. For example, students often have difficulty during their personal reading time, when they are supposed to independently read and journal. During this time, I am working with a small group of students in a guided reading group. If I take time to refocus a student who is supposed to be independently reading, the group of students that I am working with usually becomes greatly distracted. If an engagement rubric poster was displayed, I could ask a student, from my seat, to change his or her behavior to the behavior on the poster that is in a three or four category. Based on my experience with students' reactions to the engagement rubric during this study, I would expect that the specific refocusing would help the student to get back on task, and would also allow me to refocus the student without leaving the group that I am directly instructing.

Using the engagement rubric for only one class also dismisses the idea of having students complete the rubric for a certain amount of time during the day, the morning, for

example. This is important to me because there are several students I teach who are on a behavioral goal plan, where they have a teacher assess their behavior in specific areas every 15 or 30 minutes. Students who experienced the engagement rubric saw no correlation between their rubric and the behavior plans. Even students who participated in both the engagement rubric and behavior plans saw a clear distinction between the purpose, method, and intended outcome of both tools. If students were to interrelate the two, I feel that the majority of the students would view the engagement rubric with a negative connotation. I definitely do not want to jeopardize the effectiveness of the engagement rubric by risking the possibility that students will begin to associate it as an alternate behavior plan sheet, which is why I feel that it is best utilized in one subject area.

When I began this research project, I knew that it would be difficult to answer all of my questions. What I did not anticipate was that, as a result of the research, I would be left with more questions than when I began my endeavor. One theme that was prevalent in both interviews with students was that of friendship. Students expressed their extreme desire for acceptance and friendship within their class. Two students even admitted to altering their positive behavior to more inappropriate behavior to receive the acceptance of their peers. I know that the majority of students want to succeed, and that the few students who are not so ambitious have a great affect on the rest of the student population. I would like to research such peer relationships, with the intent of finding a way to use the engagement rubric to promote positive peer pressure.

Although increasing test scores was not the ultimate goal for this research, I cannot help but to suspect that increased engagement and positive attitudes had a positive

effect on the scores of my students' tests. Although my informal observations of

students' evaluations would support such assertions, I would like to repeat the project

with a future group and collect hard evidence to support this claim.

As a result of serving as a teacher/researcher in this project, my awareness of my

own deficiencies as a researcher are now much more apparent to me. I found it

extremely challenging to maintain all of the sources of data that I wished to collect.

Throughout the project I was consistently thinking of more sources of data collection that

I wished that I could employ. One of the most challenging tasks for me when trying to

separate my role of researcher from my responsibility as teacher was conducting the

interview with students. As I transcribed the interview that I conducted with students, I

found myself talking to myself on the tape, saying things like "Be quiet, let the kids talk,

STOP talking!" I was amazed at how many times I interjected in my students replies, or,

even more frequently, how I praised them for an answer and shared my own opinion on

the topic being discussed. After also transcribing Dr. Heaton's interview with the

students, I definitely saw myself as a teacher during my interview, and not so much as a

researcher!

This project has transformed the way that I will teach my future classes. The

clarification that the engagement rubric empowered me and my students with will be a

constant reminder of the significance of being specific with my expectations for my

students and the importance of modeling such expectations. The students' levels of

engagement in class significantly improved when they were given explicit guidelines as

well as the opportunity to be accountable for their actions each day. I will definitely

continue such practices in my classroom!

Specifically, I will continue the engagement rubric by using a new and improved version of it (Appendix E) with my math class next year. I have made revisions to the engagement rubric that I believe will make it an even more effective tool. Students told me that the thoughts and participation pictures were confusing at first, so I revised the pictures in those two categories. Students also shared that they would like to involve their parents in their daily self-assessments, which I thought was a fabulous idea, so I added a parent signature line. Next year students will take home their engagement rubric on a daily basis and return it signed the following day. One thing that I learned was that the students' scores were much more thoughtful and thorough if I required them to give a written reason for why they gave themselves each score, so I have included the question "Why?" on the scoring column of the revised rubric.

The feature of the updated rubric that I am most excited about is that I am not the only one pictured on it! In the first engagement rubric, one of my colleagues participated in the participation pictures with me, since it would not have been very realistic if I appeared in these pictures myself. After sharing the results of my study with her, as well as her own observations of the benefits that the rubric had on my students last year, she has decided that the engagement rubric is a worthwhile and effective strategy that she would also like to implement in her own classroom. Next year at my school, there are only two sections of fifth grade. My colleague and I have been extremely intentional in our planning and preparation for the upcoming year, focusing heavily on using best practices as well as providing an equitable learning environment. I was so excited that she felt that the engagement rubric was effective and useful for our students! Her belief in the engagement rubric provides further verification that it is a valid, valuable tool that

benefits our students. Since all of the fifth graders in both of our classes will be using the
rubric, I took pictures of my colleague for the thoughts section that needed revised
photos, as well as included her again in the participation pictures. Now the engagement
rubric will be a tool that all students will be familiar with and that both teachers will be
represented by!

I believe that using the engagement rubric in the upcoming year will provide our
fifth graders with a common culture of high, specific, and achievable expectations. I also
believe that the rubric, and modified forms of it, could be very useful to other educators
in my building, district, and professional networks. One powerful element of the
engagement rubric that resonates with students is that they see their own teachers in the
pictures, and the written expectations are explicit to what is expected of them in their
classroom. This specific, detailed, modeled format of delivering expectations to students
requires a great deal of initial investment of time from the teacher. However, if teachers
are willing to put forth the initial time to think through their own expectations and
photograph themselves modeling such expectations, my research shows that students will
respond by meeting, or exceeding, teachers' expectations.

The engagement rubric proved to be the missing link between the cohesive
classroom community that I read about in my literature review and desired for my own
students and the actual classroom climate that I was currently leading, which was often
filled with disruptions and mediocre levels of learning. The rubric was a bridge for me
and my students between the real and the ideal. It transformed the actual level of average
engagement that my students were demonstrating to the desired, focused, excited learners
that I desired and that my students deeply aspired to be. I was amazed at how my

students' desires to learn, participate, and demonstrate their learning grew exponentially. I completely concur with Damico and Roth's (1994) belief that desire is a necessary component for student success. The students desired to succeed, and their desires affected their academic, behavioral, emotional, and social engagement levels. The engagement rubric also seemed to spark curiosity within my students to learn more and go deeper with their learning. I believe that Daoud, et al (2002) would be delighted to see how the student apathy in my classroom was transformed into persistent, pressing petitions from students to learn and explore more into the realm of mathematics.

Perhaps the most relevant, real-life result that occurred from students using the engagement rubric was the shift that occurred in their own self-perceptions and self-confidence levels. Students were invested, intrigued, and inspired by this tool. Students were so motivated to do well that they desired to share their success with their parents. This shift in students' self-perceptions was what Daoud, et al. prescribed as necessary for students' survival in the educational system and their success in future careers. I have no doubt that the engagement rubric had a lasting, positive affect on my students. I feel like I have experienced the "engagement training" that Ortiz believed all teachers would benefit from, and I am ready to share the benefits of this training with my future students and colleagues!

Appendix A

Engagement rubric

	4	3	2	1
Posture				

	Sit up straight, eyes on speaker, square in the Chair	My teacher had to remind me to follow expectations once	Remind teacher more than once	Not following expectations – think time for posture
Thoughts	My mind was on math the entire time!	I got distracted, but I reminded myself to think about math	I got distracted - the teacher had to remind me to think about math	I was not thinking about math during most or all of the Class
Responsibility	I had my book, portfolio, and sharpened pencil	I had two out of the three supplies that I needed	I only had one out of the three supplies that I needed	I did not have my book, my portfolio, or my pencil
Participation	I responded when the teacher called my name – I worked hard with others on table ?'s, I did not shout out in Class	The teacher had to repeat a question because I wasn't listening – I worked hard on table ?s and did not shout out in Class	I was not listening to the teacher's ?, I shouted out in Class, but I was working well with others on the table ?s	I was not listening to the teacher's questions, I did not work well with others today, and I shouted out during Class
Test ready	I feel like I will get a 4 on this objective – I 'm ready!	I feel like I will get a 3 on this objective - I need to review once more	I feel like I will get a 2 on this objective – I need a lot more help!	I feel like I will get a 1 on this objective - I have no idea what we did today

Appendix B

Student Engagement Interview Questions

1. What do you think it looks like for students to be participating in class? What does it sound like? Did your opinion of student participation change after we started the engagement rubric?
2. How does a teacher know when a student is participating in class?
3. Do you think that it is necessary for a student to participate in class in order to learn the math skill being taught that day? Why or why not?
4. On a scale of 1 – 4, with 4 being the best and 1 being the worst, how would you rate your participation in class? Why?
5. When other students in class are not participating, how does their behavior affect you as a learner?
6. Do you think that completing your homework the night before affects a student's ability to participate in class? Why or why not?
7. Do you think that the engagement rubric affected your grades in math at all? Why or why not?
8. Has your level of participation in class changed since we started the engagement rubric? If so, do you think that this change is good or bad? Also, if your participation has changed, why do you think that it has changed?
9. Take another look at the rubric. Think back to when we first started the rubric. What did you think about it when it you first saw it? What did you think of the pictures on it? Does it make sense to have the teacher's picture on it?
10. I would like your opinion on the engagement rubric for next year. What do you think I should change or add to the rubric to make it more useful for next year's students?

Appendix C

	Monday					Tuesday					Wednesday					Thursday					Friday				
Engagement Rubric ~ Week of: _____																										
	P	T	R	Pa	TR	P	T	R	Pa	TR	P	T	R	Pa	TR	P	T	R	Pa	TR	P	T	R	Pa	TR
Brooke		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Dana		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Ellen		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Farrash		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Kanne		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Kevin		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Koymre		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Lamar		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Loisa		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Logan		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Matthew		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Nina		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Norah		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Nuevana		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Olivia		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Simon		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Tiara		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Van		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Witt		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	
Yanno		T		Pa			T		Pa			T		Pa			T		Pa			T		Pa	

Appendix D

Comparisons of my evaluations of students' behavior on the engagement rubrics and their own self-evaluations. My ratings are below the students ratings for each specific day, and are printed in red. Differences in student ratings and my ratings are highlighted.

Day	Posture	Thoughts	Responsibility	Participation	Test Ready
		Brooke			
1	4	3	4	3	3
2	3	3	4	3	3
3	3	3	3	2	3
4	3	3	4	2	4
5	3	3	4	4	4
6	3	3	4	2	4
7	3	3	3	4	4
8	3	4	4	4	4
9	3	4	4	4	4
	3	4	4	4	4
10	3	3	4	4	4
	2	3	2	3	4
11	3	4	4	4	4
	2	2	3	2	4
12	2	2	4	4	4
	2	2	4	3	4
13	3	4	4	2	4
	2	2	2	1	3
14	4	4	3	4	4
	4	4	4	4	4

Dana					
Day	Posture	Thoughts	Responsibility	Participation	Test Ready
1	3	4	4	4	4
2	4	4	3	4	3
3	2	3	2	3	3
4	2	3	2	3	4
5	3	4	4	4	4
6	1	3	2	3	3
7	4	4	2	4	4
8	4	4	3	4	4
9	3	4	3	4	4
	3	4	4	4	3
10	3	3	4	4	4
	4	3	2	4	2
11	2	4	2	4	4
	3	3	3	2	3
12	4	4	4	4	4
	2	3	3	3	3
13	4	3	4	4	4
	4	4	4	4	3
14	3	4	2	4	4
	4	4	4	4	3

Matthew					
Day	Posture	Thoughts	Responsibility	Participation	Test Ready
1	4	3	4	4	3
2	3	2	4	3	3
3	2	4	2	4	3
4	4	4	4	4	4
5	3	3	2	4	3
6	4	3	4	4	3
7	3	2	2	4	3
8	4	3	2	4	3
9	3	3	2	4	3
	3	3	4	3	3
10	4	3	2	4	3
	3	3	2	2	2
11	3	3	4	3	3
	2	2	2	2	2
12	3	3	4	4	3
	3	3	4	4	4
13	4	4	4	4	4
	3	4	4	3	4
14	3	3	2	3	3
	2	3	4	3	3

Appendix E

Name: _____   Date: _____

Engagement rubric

Write your score for each section and WHY:	4	3	2	1
Posture	Sit up straight, eyes on speaker, square in the chair	My teacher had to remind me to follow expectations once	Reminded by the teacher more than once	Not following expectations – think time for posture
Thoughts	My mind was on math the entire time!	I got distracted, but I reminded myself to think about math.	I got distracted - the teacher had to remind me to think about math.	I was not thinking about math during most or all of the class.
Responsibility	I had my book, **completed** homework, and sharpened pencil.	I had my **completed** homework and only one other supply.	I only had one out of the three supplies that I needed.	I did not have my book, my homework, or my pencil.
Participation	I responded when the teacher called my name – I worked hard with others on table ?'s, I did not shout out in class.	I had to remind myself one time to participate appropriately in class and during table questions.	I had to be reminded to participate appropriately during class or during table questions.	I was off task and distracting others instead of participating appropriately! I'll make a choice to do better tomorrow!
Test ready	I feel like I will get a 4 on this objective – I'm ready!	I feel like I will get a 3 on this objective - I need to review once more!	I feel like I will get a 2 on this objective – I need a lot more help.	I feel like I will get a 1 on this objective - I have no idea what we did today.

Parent Signature: _____

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