

Michael Feinberg

Final Paper

5/25/2015

Project Based Learning in Sixth Grade: What are the effects?

Question:

What happens when students are given choice in the ways that they learn?

Sub Questions:

1. What will happen to their self-image?
2. With choice, what will happen to the classroom community?
3. What happens to student performance in reading scores?
4. What do I learn as a teacher in using this method of pedagogy?

Rationale:

I am a sixth through eighth grade social science teacher in an urban school. I want to focus my action research on my sixth grade homeroom. Many of the students in this particular class do not read on grade level, and in my opinion do not have a very good view on school because of their deficiencies. I do believe that they like school in general, but what they do not like is how school can make them feel about themselves because of their lack of reading abilities.

I believe that many of the issues I've had with this group so far are because I am trying to teach them the content of my class in one way. As a veteran teacher, I can almost instantly recognize when a lesson or concept has gone awry, and it is my job to make sure that I fix it so that learning can take place. With students who are low readers and a content area that requires large amounts of text to be read, finding a balance to allow my students to learn can be a tough task. While I have worked hard within my own realm of knowledge to modify things, and with the special education teacher for students in this class that have IEP's, I need to go more in depth with the ways that I plan for this group. This is where my action research will help me.

I plan to engage in an action research project that will allow my students choices in what they do during class time to achieve the ultimate goal of learning a concept and hopefully to raise their reading assessment scores as well. By tapping into the theories of multiple intelligences, I hope to show how asking a class to learn a concept with multiple ways of being assessed can improve their skill sets, classroom community, and a student's own self image as a learner.

This action research project will also allow my "bag of tricks" as an educator to become larger. I want to be the best teacher possible, and sometimes reflecting on one's own practice is the best way to do this. Pushing myself to leave my own comfort zone by allowing students more autonomy over their learning should hopefully provide huge dividends to me as a teacher because it will force me to think on a more complex level as to how I'm meeting the needs of my sixth grade students. In class, these particular students really struggle with reading. Their fluency is generally fine, but comprehension is a huge issue for them. I'm hoping that by giving them flexibility in the types of assignments they can hand it, the more they will be able to understand the material. Hopefully, by giving them a choice of a high interest project, it will almost force them to comprehend the material better, and in turn make them practice some of the reading skills in which they have deficits.

School Context

The school where I teach is located in the historical Bronzeville neighborhood of Chicago. Situated about 7 miles from downtown Chicago, we currently serve about 350 students in grades Pre K through eighth. Our school is a neighborhood school, and about four years ago was designated as a turnaround school by the Office of School Improvement for the Chicago Public Schools. This school year is my third year teaching sixth through eighth grade Social Science, and I am the lead Social Science teacher in the building.

This school is almost entirely Black, at 97.4%, with 2.3% being Hispanic. The remainder of the school population is listed as White or Other. While the racial population of our school isn't very diverse, the students themselves are. Just over 16% of our students are Special Education, 1.4% speak limited English, and 96.8% of them come from low income families.

Being in the Bronzeville neighborhood has provided many challenges for our students. Violence, gang activity, drugs, and poverty surround our school. While the neighborhood has certainly begun to gentrify, our students are no strangers to the harsh realities of the world around them. As their teacher, this is scary and from time to time, gives me great amounts of anxiety worrying about their safety and well-being.

During the course of the day, I teach four academic periods to middle school students. The total number of students that I see during the day is about one hundred. The first group is a split sixth and seventh grade homeroom, though this class is mainly seventh graders as there are only six sixth graders in it. Second period, I see a full seventh grade class. Third period is a group of sixth grade students, and the group that I focused my research on for the purposes of this paper. From third period, middle school students go to their lunch/recess period, and after that they head to a specials, or fine arts, class, which depending on the day could be art, music, etc. After their fine arts class is over, I pick up my eighth graders, who also happen to be my homeroom and have been since they were in sixth grade.

After the last period of the day, the middle school students come back to their homerooms and participate in something called Citizen Schools, which is an organization that our school partnered with at the beginning of last school year. This organization provides extra support in the classroom through "teaching fellows". The "teaching fellows" then stay with the students from the end of the school day until 5:15 p.m., where they conduct two afternoons a week of academic work and two of apprenticeships. In these apprenticeships, the students get to partner with companies such as Google

and Groupon to give them real world experience that directly connects to academics and academic performance.

When I entered my school three years ago, the academic performance of this school was very poor. The school was listed as a Level 3 school on probation status, and had been that way for quite some time. Over the last two school years though, our students have improved their scores and attendance greatly. In fact, at the beginning of this school year Woodson was promoted to a level 2 school. While we have not had the probation title removed yet, the numbers show over the last two years that this will happen soon. The culture and climate of the school has changed dramatically over the last two years as well. Our suspension rates have dropped dramatically, and as the math teacher on my middle school team puts it, we have “worked really hard to make nerdy cool”. The students are very excited to come to school now that they feel successful and have made improvements in their abilities.

The rest of the staff outside of my middle school team is an accomplished and veteran group too. Most of the staff in grades Pre K – 5 have at least four or five years of experience, and are young and vibrant and full of fresh ideas. There are a few teachers that have at least 10 years of experience, and they are wonderful mentors to our teachers that are just starting their careers. The teachers that have 10 or more years of experience, while there are only a handful of them, are the ones that elected to return after the turnaround process began when the entire staff was terminated and given the option of reapplying for their jobs.

Parental involvement is something that our school struggles with. While there is a core group of parents who are involved in many activities within the school, many of our parents elect to not be involved in the school community. For example, the committee that I chair hosted a Social Science parent night last year, and not a single parent showed up to view their projects that the children had

created. We have an active Local School Council (LSC), but it is made up of many of the same parents that are already involved in other items throughout the school.

What does the literature say about project based learning?

Combining Social Studies and reading skills can be difficult if the students who a teacher works with do not have the skill set necessary to be a good reader. A student's inability to read can severely stunt their success in a Social Studies classroom, as many of these classes are very text heavy. One of the ways to improve student performance in Social Studies and reading skills is to use inquiry and project based learning. This literature review will take a look at research that has been conducted along the lines of fundamental reading skills, and how inquiry and project based learning can help to improve those skills. I'll also take a look at one other teaching strategy, known as questioning. Questioning relates directly to inquiry and project based learning because with this type of learning style, the teacher must set up the student's learning with a question to guide that student through the content. Later on in this review, I'll also speak to differentiation in instruction, which is something I plan to use in my ARLI project. I am choosing to integrate giving student choice in projects, which will hopefully lead to higher reading skills and scores along with a higher level of student enjoyment in my class.

One way that I found in my research to improve reading comprehension is through the use of teacher questioning. The National Institute for Literacy lists teacher questioning as a type of formative assessment (2007). Using this type of formative assessment, teachers can track the development of students' literacy skills. Teacher questioning is also the most common form of formative assessment, and is generally used to check comprehension after a student has read a passage or chapter (National Institute for Literacy, 2007).

For the purposes of my project, I would like to take this teaching technique a step further. If I provide my students with a question before they read a passage, chapter, or section of a book, then

they can use their inquiry skills to find the answer. Inquiry-based teaching can be defined as “constructing understanding while an individual explores a question about the world” (Wang, Wang, Tai, and Chen, 2009, p.802). In an inquiry based setting in my room, I would have students take the question that I give them about a specific topic, and they would be tasked with finding the answer to that question. For example, if I’m teaching about the decade of the 1920’s, I may give the question “Why were the 1920’s a time of ‘boom’, or called the ‘Roaring 20’s’?” Then, I would provide students with different aspects of the 1920’s to conduct research on, such as media, government or politics, sports, and famous people. Students would then read about those various aspects of 1920’s society and culture, and report on their findings.

Wang, Wang, Tai, and Chen found that inquiry based learning was a positive way of teaching students who “have more prior knowledge and higher reading ability” (2009, p.813). One way to tackle the issue of prior knowledge is to provide students some background knowledge on the topic, in this case the 1920’s. This could be done through some basic activities, such as taking notes on the topic. While we will continue to work on the reading ability part, if I can fast track the prior knowledge aspect of this, it will greatly improve the ability of my students to perform well on this style of learning task.

Project based learning also allows the “opportunity for students to engage in authentic, intellectual work” (Spires, Hervey, Morris, and Stelpflug, 2012, p.485). By giving students the chance to have some autonomy over what they do in my classroom, my hope is that they will be more motivated to learn. In an article written for ERIC, the educational resources information center that is sponsored by the U.S. Department of Education, Anderman and Midgley wrote about autonomy and middle school students.

In their article, a theory known as Self Determination Theory is discussed, and this theory is broken down into three categories of needs: needing a sense of competence, of relatedness, and of

autonomy (Anderman and Midgley, 1998, p.4). Most of the research in this theory comes from the third need, and that is the one that I will focus on for the purposes of this literature review. The need for autonomy in learning is quite high with middle school students. This article directly relates to my research question in that Anderman and Midgely state that for “young, adolescent students, with their increased cognitive abilities and developing sense of identity, a sense of autonomy may be particularly important” (1998, p.4). By providing students with choices in the types of projects that they can create in response to a question that they researched, I will give my students some choice in the things that they can do in my classroom, instead of assigning the same project to everyone. The researchers go on to state, “students at this stage say that they want to be included in decision making and to have some sense of control over their activities (1998, p.4). I was elated to find this piece of literature, as it directly relates to the type of research and ways that I want to conduct my classroom. I look forward to comparing my results to the results of Anderman and Midgely.

Besides allowing my middle school students to feel like they have some control over what goes on in my classroom, I also want them to become better readers, and to challenge themselves to improve their scores in reading. By providing students with a question to help guide their learning, I can provide “explicit instruction in how to strategically search for information” (Spires, Hervey, Morris, and Stelpflug, 2012, p.487) to my students. With this question in hand, I can guide my students through the steps of researching their question with appropriate grade and reading level texts and other resources.

Once my students have conducted and gathered their research, I will be providing them with various choices of the types of projects that they can turn in to me to show what they have learned. Differentiated learning can be difficult in schools like mine that tend to struggle with reading and reading scores because “often, these schools tend to focus on bringing as many students as possible up to a minimum standard, rather than on enriching the experience of students” (Little, McCoach, and Reis,

2014, p.385). Part of what drives me as a Social Studies teacher is to connect my students to historical events and their current lives in the world around them. Enriching their learning experience by providing them with choice in the types of projects that will assess their learning is going to be a great way for me to do this. Renzulli and Reis state “learning is more meaningful and enjoyable when content and process are learned within the context of a real and present problem and attention should be given to opportunities to personalize student choice in problem selection”. This quote relates back to my idea of giving students an inquiry question to research to learn more about a specific topic. Based on the research of Renzulli and Reis my research question should connect giving students choice in my classroom with a better and more engaging learning experience.

In my research thus far, I have come across a few industry books geared towards Social Science teachers. One, from Teachers’ Curriculum Institute, or TCI, uses lots of educational theories in their curriculum, and I use their textbooks and teacher resource guides in my classroom currently. I have chosen to use these books because of the use of Gardner’s theories of multiple intelligences that TCI uses throughout their curriculum.

TCI makes the claim that “a crucial goal of Social Science education is to prepare students for effective participation in a pluralistic society” (TCI, 2010, p.11). I couldn’t agree more. Part of my job as a Social Science educator is to engage my students in content that will allow them to become great citizens. But, the other part of my job is to help them learn content, and this can be done using Gardner’s theory of multiple intelligences. For my classroom specifically, I have chosen to focus on visual-spatial (2010, p.13), body-kinesthetic (2010, p.13), linguistic (2010, p.12), and musical-rhythmic (2010, p.14) with the projects that I’ll conduct with my students. By designing projects that fit well with their specific learning needs, I feel that I’ll be able to improve their content knowledge, but more importantly work towards the main focus of my research goal, which is improvement in reading skills. If

I can give students an enriching experience in my classroom that allows students to improve on their reading skills, learn historical events, increase their sense of self-worth in a classroom, and generally make them feel good about coming to school, I feel that I've done my job well.

To conclude, I am excited about the prospects of conducting this research with my students. Albergo, Brown, Eliason, and Wind (1997) claim that students will show a significant increase in reading comprehension through the use of multiple intelligences teaching strategies. The authors state that students became more self-aware, had higher levels of motivation and positive behavior, and were able to develop higher level thinking skills. As far as I am concerned, that is the best definitive proof that the yearlong journey I'm about to embark on will be a successful one for me, but most importantly for my students.

Analyzing My Data

Cycle of Research

I began this research earlier in the school year by giving my class of sixth grade students a learning modality survey. Secondly, students have completed three rounds of projects in class. Each time, they were given a rubric to follow with a self-assessment tool on one side, and the other side was for me to fill out regarding the final product. After each round of projects, I would journal my thoughts on how the students did. During the course of each round of projects, I took a look at student NWEA scores along with Achievement Network scores. This cycle would be repeated for each round of projects.

Summary of Data Collection Methods

1. Teacher journals

I have used my teacher journal entries as a place for true reflection on the learning process with this particular class. Most of my journals are a very accurate representation of exactly how I was feeling at the time that they were written. The journals capture what was going on in my

classroom with the sixth graders, but also in all of middle school (and in some cases, the entire school). While many of the journals could be construed as me simply venting my frustrations, I do feel that they were helpful in that they kept a running record of failures and success that I've had with the sixth grade class.

2. Student surveys

During the course of the year so far, I've conducted two very important surveys. The first one was a student learning modality survey. This survey told me the types of learners that I have in this classroom, and those types fell into the categories of auditory, kinesthetic, and visual. The second survey was just completed very recently, and it was a survey that asked the students to update me on how they felt they were doing. A vast majority of the students claimed that they really liked doing the projects as I was the only teacher who did this type of learning with them.

3. Student work samples

I've collected quite a few student work samples. Most of the samples are the individual projects that the students have completed, while some are the assessments from the end of the chapters that we've covered.

4. Student project rubrics

The rubrics for the projects have proved to be an invaluable resource for myself and the students. Rubrics are given to the students before they start a project so that they know what is expected of them, and then I provide feedback on the rubrics once the projects have been completed.

5. NWEA and Achievement Network data

These two pieces of data are reflections of the growth in reading that this group of students makes during the year. NWEA is a MAP, or Measures of Academic Progress test. Students are evaluated on how much growth they make from the spring test of one academic year to the spring test of the next year. As a school, we also administer the test in the fall and winter as an interim assessment to keep tabs on how the students are progressing. Achievement Network is

an interim test that the students take every eight weeks to alert us to any particular data strands that need to be improved upon.

Analysis of Data Collected

My thought processes in my teacher journals

During the school year, I created journal entries of my experiences with this particular group of sixth graders. I wanted to keep a running log of how I was feeling, successes, failures, and everything in between that was happening at school. After re-reading many of the journal entries, I noticed that I could split them into four categories in regards to my thoughts and feelings towards this class.

The first category is “I’m worried that my students won’t progress like I want them to”. The quotes here go in order of when the entries were made, and I feel that they really show my levels of concern for how this group of students progressed this year. The first quote, pulled from entry on 11/9/2014 states, “Also, as I noted in my last entry, I’m still very concerned about my 6th grade class”. This thought was a common theme for me and the other members of my team this year as we worked with this group. The next two quotes come from an entry on 1/9/2015. My continued empathy for this group is displayed quite strongly when I say “I so desperately want to help this group of students perform better and improve their skills, but to be honest I feel really lost with them.” Using the word “lost” is a very accurate description in my interactions with this group, as many days I felt I would make progress only to have regression the next day. Also, I incorporate data into my entries when I say “I’m pleased with the data I’ve been able to collect, though the results of the most recent Achievement Network interim tests weren’t great for my 6th graders.” What I came to realize throughout this process is that because this group of students is so low is that I may never see the data that I want to, but that progress can still be made.

The second category of journal entries is “I doubt myself sometimes as an educator”. I start by incorporating some background data for the reader to know when I say “Last year was probably the most trying, arduous, horrible year in my educational career. It was a year that made me wonder if

being in the classroom was something I even wanted to continue with.” That quote, along with this one “The only thing that I’m really struggling with is my sixth grade class” both came from the beginning of the school year, on 10/1/2014. As the school year moved along, I took a brief moment to pause and reflect when I said this on 12/8/2014, “I feel like the days are flying by, and all of the interventions and great things I’ve thought about doing may not happen!” I remember being very nervous that I was going to run out of time to introduce and try everything I had planned for this research project. Before I knew it, winter vacation had come and gone, and I was deep into collecting data on this group of sixth graders. Two quotes that really stood out to me that related back to me sometimes doubting myself as a teacher are “Every day feels like a new challenge with them, and when we have a great few days in a row, it seems like the following week is equally as bad.” I remember exactly how I felt on 2/26/15 when I wrote that sentence. I had just had a great week or so with this group, and then the next day when they came to class and it was as if nothing positive had taken place at all, and they reverted back to how they were at the very beginning of the year. I was so frustrated when I wrote this on the same day: “I am beginning to wonder if what I’ve planned to do for this research project isn’t working.”

The next two categories of quotes are more uplifting. My third category is “I stay positive when I feel something small working well”. Many of these quotes started to come as the school year began to move towards spring time. For example on 2/26/15 I wrote “The work that I’m doing through this fellowship is what keeps me going, as it is a great way to stay organized and thoughtful for planning my lessons.” Even on the days when I felt particularly challenged by these students, I always knew that having a good action plan would hopefully deliver the results that I wanted to see. This was especially true when I wrote “The students are relatively engaged given their massive learning deficits, so that makes me feel good” on the same day as the other quote. Just a week later I wrote another journal entry that highlighted a bit of an epiphany that I had. I stated “I’m realizing more and more that I may need to provide my students with a blank template for the projects”. While it took until 3/1/15 for this

first big epiphany to happen, I was ecstatic that it did. I've used this idea of giving my students a template since that date and it has been such a boost to their self-confidence and willingness to want to do well in class.

The fourth and final category of journal entries are "I'm completely thrilled when something really big with this project goes really well". While re-reading these two quotes, I completely remember how happy and overjoyed I felt to see some small rate of success with this group. Even though the above listed quote from 2/26/15 was not an particularly happy one, I did say this on the same day: "I've completed two rounds of projects that will count towards what I'm researching, and I am happy to report that the students really do seem to enjoy the projects that they are given the choice to do." While I still wasn't seeing everything that I wanted to, while grading student projects I could see small improvements in their scores, which told me that something I was doing with them was working. This thought came to fruition on 3/6/15 when I wrote "Well, almost every single student got a perfect score! I couldn't be happier!"

Student surveys

For the first survey on student learning modalities, the breakdown of the class went as follows:

Learning Styles of 21 students (Number of students)

Visual	Auditory	Kinesthetic	Tied for more than one
43% (9)	5% (1)	38% (8)	14% (3)

Of the 21 students that were surveyed at the beginning of the school year, 3 students returned their surveys with two modalities that were tied. Those two modalities were auditory and kinesthetic. This survey absolutely let me know that I would have to incorporate lots of different ways of learning into the projects that I'd be conducting with this group of students. Knowing that there were at least three students in the class who had multiple learning modalities that needed to be met simultaneously surely would present its challenges, but my hope was that the projects I've designed for the students to complete would be able to meet those challenges. Incorporating poster projects and other similar

projects would surely help my students who fall into the visual modality. PowerPoint projects and group work helped with the visual and kinesthetic students in that the computers kept the students quite calm and engaged with their work. When the students worked in groups, they really had to listen to other people's thoughts and ideas to make the project successful. While I want to make sure that all of my students are comfortable in class, knowing that only one of them marked his highest modality as auditory is something to keep in the back of my mind. There have been a few times this year where we've listened to directions or a story via audio playback. While there were visuals on the screen, I knew that giving audio playback would allow this student to feel even more comfortable.

The second student survey was given rather recently, and it gave me the first inclinations that the students are really enjoying the projects as a way of integrating the material from my class. The questions on the survey were fairly open ended. I left the questions open-ended because I really wanted my sixth graders to be honest with me and provide accurate feedback.

One of the questions asked on the survey is "Do you like the projects that we've been doing? Why or why not?" Of the nineteen students that were surveyed, seventeen of them recorded a positive response to this question. A few sample responses from this question are:

- "Yes, because they are fun and all our classes don't do projects like your class."
- "Yes, because we like working together."
- "I like the projects because I can relate to them."
- "Yes, because they (the projects) teach me a lot and it helps me with other work."
- "Yes, because they help me gather information."
- "Yes, because we get to customize our posters and give out facts."

Two of the nineteen students surveyed however did not give a completely positive response.

These students responded in the following ways:

- "Sometimes, because they (the projects) get boring and all we do is write!"
- "Sometimes I like the projects."

From this information, I was able to curtail the ways in which I assigned the projects. By adding a technology aspect to the choices of projects, I hoped to alleviate the stresses of writing to the student who gave the feedback about having to write too much. Allowing students to create a PowerPoint or

other similar project gives students another way to display the information they've learned while still maintaining the all-important comfort factor and feeling of autonomy in class that I discussed in the literature review section of this paper.

A second question asked is "Do you feel like you are becoming more successful in class? Why/why not?" Of the nineteen students that were surveyed, sixteen of them recorded a positive response to this question. Here are some of their responses:

- "I'm able to focus more on my work."
- "Yes, because the projects are really fun and they help me remember."
- "Yes, because my grades are getting better!"
- "Yes, because I feel more smarter about history and stuff I didn't know."
- "I do feel more successful because you made me believe in me even more."
- Yes, because I stay out of trouble."

Three of the nineteen students surveyed answered this question in a not completely favorable response. Here are their responses:

- "Sometimes, because I do good and sometimes I don't."
- "Yeah, sometimes. If I am by myself."
- "A little."

These non-favorable responses really stood out to me. So, I went back and looked at the scores for the students who gave the responses. As it turns out, these students were ones who didn't do particularly well. I needed to think of a way (or multiple ways if necessary) for these students to feel successful in my class. I had individual conversations with the students, and from what I could gather the students simply needed more explanations on how to complete the projects successfully. So, what I did was give my whole class set of instructions, and then once the students started working on the projects individually, I would sit down and give more personalized attention to the students who gave the non-favorable response to the question. This intervention was somewhat successful. I only use the phrase "somewhat" because for one of the students, he continued (and still does) to receive mediocre scores on his work. In conversations I've had with his mother, he is going through some extreme personal duress, and it seems to be manifesting itself in school. This will have to be a situation that I monitor as the school year closes out.

Student Project Rubrics (See Appendix A)

As this paper continues, the reader should note that five students and their scores were chosen to be shown. These students were chosen at random. Between the five students, they have an incredibly wide range of academic abilities, work habits, and motivational levels. It was interesting to see the trends that arose as I began to analyze the data that I took on them. More of this analysis will come as this paper continues.

For each round of projects, students are given a rubric. They're asked to fill out the rubric when they've completed their projects. Each side of the rubric is exactly the same, and it essentially states how the students will be assessed on the particular project. One side is for the students to fill out for how they think they did, and the other side of the paper is for me to put their actual score.

Round one of student projects

Average student self-assessment score	Average teacher assessment score
12.8/16 points	8.06/16 points
Student Name/Self-assessment Score	Individual Student score
Kahari 14/16	7/16
Arionna 15/16	0/16 (no final project turned in)
Datwan 12/16	10/16
Damonte 14/16	4/16
Isaiah 15/16	4/16

In the first round of projects, the students did not do very well at all. Many of them were incredibly displeased to see that their scores were so low. In fact, I had eight students who did not even turn in a project, but filled out the self-assessment rubric. Some of the students even stated to me "But I did my work....why is my grade like this?" We had a class discussion about what "doing work" versus what "doing quality work" should look like. I told them that I expected their scores to rise the next time we did a project.

Round two of student projects

Average student self-assessment score	Average teacher assessment score
10.45/16 points	8.5/16 points
Student Name/Self-assessment Score	Individual Student score
Kahari 12/16	8/16
Arionna 13/16	8/16

Datwan 10/16	12/16
Damonte (no self-assessment given)	6/16
Isaiah (12/16)	7/16

The second round of projects was a comparison projects detailing the similarities and differences between Athens and Sparta. Students were given directions to follow a rubric ahead of time so that the students would know how they would be graded. In the second round of projects, the total points possible on the student rubric were sixteen points. Not one student earned a perfect score. In fact, the scores ranged from a low score of four to a high score of 12 (See Appendix B for table)

In the second round of projects, the students improved, but not by much. However, their self-assessment scores did go down about two points. What this tells me is that they were more critical of themselves and how hard they were working. While a teacher never wants to see students feel badly for themselves, having a lower score on the self-assessment part of this I felt was a good thing. To me, it showed that students were really thinking long and hard about the work that they were doing, instead of just throwing something together and expecting a decent grade.

After grading the second round of projects, I knew that I had to do something drastic to change the way in which my sixth graders were performing in class. I wanted them to be able to feel successful, but without my simply “giving” it to them. Seeing that nine of the students in class earned below a 50% on the project was terribly upsetting and frustrating to me, especially because we had done a really nice job of obtaining and researching the information that would be necessary to do the project. The one thought that I kept having was that I didn’t do a good enough job explaining what a quality, finished product should look like and include. Going into the third round of projects, I knew that something needed to change dramatically if I were to get the results that I was searching for.

The next piece for me was to find out what the missing part was to get their teacher assessment scores to go up. I wanted my students to start to feel successful in class, and if they kept on receiving bad grades, then I wouldn’t be successful in obtaining the answer to one of my sub-questions regarding

student self-worth. This moment is when I decided to incorporate the templates into the projects for the students to use.

Round three of student projects

Average student self-assessment score	Average teacher assessment score
14.5/18 points	17.88/18 points
Student name/Self-assessment score	Individual Student score
Kahari 18/18	18/18
Arionna 15/18	18/18
Datwan 18/18	18/18
Damonte 16/18	18/18
Isaiah 16/18	18/18

This third round of projects is one of a few successes that I've seen lately with this group of students. Not only did their self-assessment go up (as I predicted it would using the templates), but more importantly their teacher assessment went up considerably. I was incredibly proud of them, and was sure to let them know this over and over again. Two things worked really well here. First, using the templates was a huge success as the students could focus on the creativity of the projects and also (and more importantly) the content. Students had been receiving lower scores previously because of formatting, and now that was something that they didn't need to worry about. Secondly, the students' self-confidence was sky high because they finally were beginning to develop the skills necessary to perform well in my class. We had a discussion about this in class and the students were very proud of themselves.

The third round of projects that I completed with the students showed a drastic improvement in the quality of work from the first two projects. I ascertained this result because I had an epiphany as I was journaling between the second and third round of projects. I noticed that student scores were low because the students were having difficulty formatting their projects. While journaling, I stated that I would give students a template to complete their projects for the next one that we would do. Well, as it turns out this idea worked really well.

On the third round of projects, I was able to obtain a score for seventeen of nineteen students in this class. For the two students who were not scored, one of them was absent that day and at the time of grade entry had not yet made up the assignment, and the other student had just transferred out of Woodson because she moved from Chicago. The project was worth 18 points and was largely based around vocabulary. I was ecstatic to see that of the seventeen students who earned a grade for this project, all seventeen of them earned a perfect score. This was a drastic turnaround from the second round of projects, and in a wonderfully positive way!

NWEA and Achievement Network data

NWEA data

Spring 2014 mean RIT score (EOY of 5 th grade)	Winter 2015 mean RIT score (MOY of 6 th grade)	Spring 2015 mean RIT score (EOY of 6 th grade)
196.7	195.8	206.6

To be clear though, the numbers shown in the above table represent an average score for the class, so there are most certainly students that are above that number and reading closer to grade level, and there are students who are well below that number who most likely need emergency interventions in place immediately to help them with their reading skills.

This first two numbers in this data point are incredibly frustrating to me as their teacher for a few reasons. First of all, the norm grade level mean score is 212.3, so my sixth graders are underperforming the average sixth grader who takes this test by about fifteen points. Secondly, the score of 195.8 shows that my students have regressed since the end of the previous school year. This score also places them on a reading level somewhere between second and third grade. I can partially attribute this regression to a lack of a reading teacher for a portion of this school year. The reading teacher on my team had been out on maternity leave for quite a while, and missed some time at work before she went on leave. Thirdly, this is frustrating to me because the students had shown such tremendous improvement in their in-class work that I thought it would translate to their standardized test scores, and as of the winter 2015 test that had not happened. Furthermore, looking deeper into the

data, I have seventeen students that are currently reading below the 35th percentile. What this means is that in my class of twenty-two students, approximately 77% of the students in the class are still reading well below grade level. Students are considered to be on grade level if they are at the 50th percentile or higher. In fact, thirteen of the twenty-two students are below the 21st percentile, with seven of them falling in the 5th percentile or below.

What I love seeing from the data point is the EOY, or end of year, score. This class went up about eleven points. The average score for the class places them around a fourth grade reading level. While it is still concerning that they are still two full years behind, they did grow approximately one to one and a half grade levels (and some students even more) in one school year. This is great to know because for next year, we can continue with everything that we have been doing as a middle school team to continue this phenomenal growth.

Student Name	Spring 2014 individual RIT score (EOY 5th grade) (% ranking)	Winter 2015 individual RIT score (MOY of 6th grade)	Spring 2015 individual RIT score (EOY of 6th grade)(% ranking)
Kahari	201 (22%)	203	211 (37%)
Arionna	197 (9%)	198	n/a
Datwan	184 (1%)	191	199 (12%)
Damonte	206 (25%)	188	197 (9%)
Isaiah	200 (14%)	199	205 (23%)

What is interesting to me is that of the five students whose data I chose to display in this paper, three of them have improved by mid-year for their NWEA reading scores. A two point gain by the winter, or middle of the year (MOY) test for example could be significant for a reader who has always struggled. Students tend to struggle on the winter test, as they take it fairly soon after returning from their winter vacations. Many of our students do not do much academically over that two week time period, so to see a bit of a slide is something that I have come to expect. While I do not like the scheduling of the test for winter, it is still a piece of data that we can use to plan our instruction around. Generally, by the end of the year you want your students to grow at least six points, if not more. So, for

a reader who typically does poorly on these tests, looking at a two point gain by the MOY test is a big deal. As a teacher, you would then need to dive deeper into this students score, and see what specific elements of reading are improving, staying stagnant, or perhaps even reducing in score.

If a student score dropped by the MOY test, this is alarming, even if it is only by one point. As a teacher, you never want to see your student’s scores drop, especially as you are progressing half way through the year. So, when our middle school team noticed that Damonte’s score dropped from a 206 to a 188, to say that we were concerned is an understatement. Generally, if a student score drops that much, we know that there are probably two main reasons why. The first is quite simple in that the child did not take the assessment seriously and merely clicked through the answers to the test in an effort to be done with it quickly. The second reason is that there was some sort of dramatic drop off in a student skill set. Unfortunately, as we spoke amongst our team and to Damonte, it appeared that the former was the most likely reason why his score fell so severely.

For our EOY scores, as a middle school team we are pleased with the results that have come in so far. Almost all of the students on the table increased their scores and percentile rankings pretty dramatically. This is a great sign, as it means that all of the strategies and interventions that we have used this year seemed to have worked. Arionna has no score as she has not taken her test due to the fact that she has missed the last few weeks of school recovering from appendicitis surgery. Hopefully we will be granted an extension on being able to test her, and we will see the same positive results that a great deal of her peers were able to achieve.

Achievement Network data: Whole class

ANet cycle 1 test – October 2014	ANet cycle 2 test – December 2014	ANet cycle 3 test – March 2015
38% proficiency	26% proficiency	24% proficiency

After looking at the data for the three Achievement Network cycles, as an educator I’m completely ashamed. We simply aren’t reaching these students like we should be. While I’m happy that the data strand of information text (the strand that most affects what happens in my classroom) has

stayed consistently the highest with this group of students as opposed to literature, having this group at only 24% proficient is tough to see. The data set that comes with the results of these tests provides my team with the data strands that we should focus on. For example, in cycle two, we noticed that vocabulary acquisition and use was the lowest of the three strands tested. So, I said to myself that I would make a more concerted effort to focus on vocabulary. I've most certainly done that in Social Studies, and I have seen an improvement in this area of projects when students do them in class. So, to not see that show up in a test result is frustrating to me. I do know that for students who are already classified as low readers, especially students like the ones in this sixth grade class, these tests do now show the full results of what has taken place in my classroom. I know that my students are improving, but it probably isn't going to show up in a standardized test result.

More importantly, I completely question the validity of this particular test. It is impossible to measure growth with it because the sample size of the questions asked is so small. In fact, many times only two or three questions are the ones looked at to assess a particular data strand, such as vocabulary skills or informational text. How can we say that a student is improving, or not improving, if we are only looking at two or three questions? Even more importantly, how can we truly analyze this data if those questions that are looked at change from one cycle of testing to another? In my opinion, we should be looking at the same types of questions from one testing cycle to another in order to develop some sort of longitudinal study on the student. Having that longitudinal data would be supremely helpful in developing a quality way of not only assessing students, but moreover as a way to provide quality instruction to the student as well. As a teacher, I do not value the data from Achievement Network at all, and personally feel that my school (and network) should do away with this assessment. The data gleaned from it simply is not helpful, and is erroneous to the educator. This erroneous information can be seen in the table below that highlights the same five students that have been discussed earlier in this paper:

Achievement Network data: Individual students

Student Name	ANet Cycle 1 October 2014 (% proficiency)	ANet Cycle 2 December 2014 (% proficiency)	ANet Cycle March 2015 (% proficiency)
Kahari	56	32	23
Arionna	No score	21	27
Datwan	44	32	41
Damonte	6	21	5
Isaiah	56	26	36

As you can plainly see, the student scores are all over the place. Kahari for example is a student who I would categorize as a “good” student. What I mean is that he works hard, puts effort into his studies, and is willing to do what is necessary to improve. While his scores generally are not on grade level, they are generally consistent. The Achievement Network assessment does not show that. To go from 56% to 23% in approximately four months doesn’t show who he is as a student. While there could be factors such as him not taking the December test seriously due to a lack of instruction, the drop off is still too dramatic for me to obtain any sort of real data. This is especially true considering the sample size of questions as I noted earlier on in this section of the paper.

Conclusions

Over the last year, I have learned a great deal about students and about myself as an educator. First, I need to not doubt myself so much when things do not go as I had planned or expected. I must have faith in my own abilities as a teacher to know that I will be able to counteract whatever bumps in the road that come with a tough group of students. While I’m not a hundred percent sure how I can do this all the time, I know that this needs to be an ongoing inner monologue that I’ll need to have with myself.

Secondly, when I have this particular group of students next year as seventh graders, I plan on doing a lot of the types of projects and teaching strategies that worked so positively over the course of the past school year. But, I’ll start doing a lot of this type of teaching from the beginning of the school year. I really didn’t figure out exactly how I wanted to approach this project based learning model until

about half way through the year. One can't help but wonder if I would have seen an even bigger increase in student performance if I had started at the beginning of the year. While I certainly achieved a very desirable result, I know now that I can push these students even further in the right direction now that I have a plan of action that works.

Thirdly and finally, I was elated to see that my original question and sub questions were answered in a generally affirmative way. This to me is the most exciting piece that I can take away from this whole action research project. My students enjoy coming to class, they have improved (and will continue to improve) their skills, and I learned a great deal about myself as a teacher. The following policy recommendations will help to mirror and support what I've learned and experience during this past school year.

Policy Recommendations

Based upon my research from this school year, I am pleased to make the following four policy recommendations:

1. All teachers at Woodson Elementary School should begin quarter one aiming to complete two Social Studies projects at a basic level.
2. For the second quarter, all teachers at Woodson should complete 2 Social Studies projects, but at a more in depth level, especially focusing on inquiry skills. Teachers should provide students with an inquiry question, and a rubric that details how the students will be assessed.
3. I will form a "study group" at school as needed to teach the teachers at Woodson how to conduct project and inquiry based learning. The first step as leader of the study group will be to show teachers how to create a "big question" that they want their students to research and find the answer to.

4. Administrators should provide teachers at Woodson the necessary training in project and experiential/inquiry based learning. I recommend using the TCI curriculum as a publisher, as they have many different genres and age levels of Social Science in their catalog, and the training can be done rather quickly.

Appendix A – Example of Student Project Rubric

Making A Project : 4 Governments of Ancient Greece

Teacher Name: Mr. Penning

Mr. Penning

CATEGORY	4	3	2	1
Use of Class Time	Used time well during each class period. Focused on getting the project done. Never distracted others.	Used class well during each class period. Usually focused on getting the project done and never distracted others.	Used some of the time well during each class period. There was some focus on getting the project done but occasionally distracted others.	Did not use class time to focus on the project OR often distracted others.
Required Elements	This project includes all required elements as well as additional information.	All required elements are included on the project.	All but 1 of the required elements are included on the project.	Several required elements were missing.
Attractiveness	The project is exceptionally attractive in terms of design, layout, and message.	The project is attractive in terms of design, layout and message.	The project is acceptably attractive though it may be a bit messy.	The project is noticeably messy or very poorly designed. It is not attractive.
Knowledge Gained	Student can accurately answer all questions related to facts in the poster and processes used to create the project.	Student can accurately answer eight questions related to facts in the poster and processes used to create the project.	Student can accurately answer about 70% of questions related to facts in the poster and processes used to create the project.	Student appears to have insufficient knowledge about the facts or processes used in the project.

Total: 13/16

Appendix B – Table detailing student scores from Round 2 of projects

Student score	Number of students earning this score
4/16	6
5/16	2
7/16	1
8/16	2
9/16	0
10/16	3
11/16	1
12/16	2

Works Cited

Albero, P., Brown, A., Eliason, S., & Wind, J. (1997). Improving Reading through the Use of Multiple Intelligences.

Anderman, L., & Hicks-Midgely, C. (1998). Motivation and Middle School Students. *ERIC Digest*, 1-7.

Little, C., McCoach, D., & Reis, S. (2014). Effects of Differentiated Reading Instruction on Student Achievement in Middle School. *Journal of Advanced Academics*, 25(4), 384-402

Hayes, A. (2010). *Bring learning alive!: Methods to transform middle and high school social studies instruction*. Palo Alto, CA: Teachers' Curriculum Institute.

Renzulli, J., & Reis, S. (n.d.). The Schoolwide Enrichment Model Executive Summary. Retrieved December 6, 2014, from <http://www.gifted.uconn.edu/sem/semexec.html>

Spires, H., Hervey, L., Morris, G., & Stelpflug, C. (2012). Energizing Project-Based Inquiry: Middle-Grade Students Read, Write, and Create Videos. *Journal of Adolescent & Adult Literacy*, 55(6), 483-493.

Wang, J., Wang, Y., Tai, H., & Chen, W. (2009). Investigating the Effectiveness of Inquiry-Based Instruction on Students with Different Prior Knowledge and Reading Abilities. *International Journal of Science and Mathematics Education*, 8, 801-820.

What Content Area Teachers Should Know About Adolescent Literacy. (2007). *National Institute for Literacy*.