

# **“I L-O-V-E Research”**

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### Teaching Context

The following is a brief profile of my first grade classroom. I have included this in hopes of giving you a picture of the heterogenous group of students I worked with for this inquiry project. I do wish to state that I am hesitant to place my students in a profile due to their young age. First graders are rarely categorized with academic or social difficulties at this stage. This is my general depiction of what I have observed in my classroom thus far, and how I presume some students may eventually need support.

In my first grade classroom, there are 19 students; eleven are male, and eight are female. The following is a social and academic breakdown of our classroom:

**Reading:** *We have three students who are highly gifted in reading; two girls and one boy. They are above grade level expectancy for this time in the year, and are considered academic role models. Six students make up our lowest reading level group; four males and two females. These students have already made tremendous progress. The majority of the class is on target for grade level expectancy in reading.*

**Mathematics:** *Numerous children in my first grade classroom are natural mathematicians. Mathematics comes easily to these six students. Five students struggle to grasp mathematics concepts. Small group instruction has been a step taken to give these students the repetition necessary to grasp the concepts needed to move forward in math.*

**Behavior problems:** *There are no behavior problems for which the class is negatively affected.*

**Socially:** *Socially, five students stand out as being social leaders. They are always quick to give other students directions, help others out and organize games at recess. Three children in my classroom, two boys and one girl, stand out as being shy. They are both hesitant to answer questions and become very anxious when asked questions in large group settings.*

**Potential Special Needs:** *One female student in my classroom may be characterized as having an auditory processing disability or ADD/ADHD. She has a short attention span, and rarely remembers directions immediately after being given them. It is obvious that she is often daydreaming, especially during large group instruction. She has recently been recommended for Instructional Support Team. Another student, a male, has received emotional support from the school counselor. He has shown evidence of passive aggressive behavior, and has made offensive gestures towards the teachers as well as his classmates.*

**High Achiever:** *In my classroom, we have one student in particular who is a high achiever. She works very hard, and takes her studies very seriously. She gets very frustrated with students who do not take their work quite as seriously as she does.*

### **What Led Me to My Inquiry**

Many months back, one of my students said “Ms. Meyers, I L-O-V-E Research” This student’s enthusiasm was what jumpstarted my interest in incorporating student research into my first grade classroom. Even prior to this student’s comment, I started to reflect on what I loved about school as a student. It was important to me that my inquiry project revolved around something that I enjoyed about school in hopes that my students would be able to gain as a personal interest and bring it with them into their future academic careers. As I started reflecting on what I enjoyed, I kept coming back to research. As a student I always had questions about things around me, and I loved to research answers to those questions. It was so fulfilling to learn new information and share all I had soaked up with those around me. I was constantly encouraged to “look it up” by my parents and teachers. Learning this as a young student has given me a heart for being a lifelong learner. This is a characteristic that I have been able to carry into adulthood, and is a trait I hope to instill within all young students.

Early in the school year, my mentor and I decided to allow our higher level readers to spend some of their time on the computer researching various topics. As our *Life Under the Sea* Unit began, our three higher level students were given brief instruction and were sent to explore specified websites. The students loved this idea!

Before long they were researching exotic fish, many ocean habitats, sharks and much more. During our language arts stations each morning, the students would spend twenty minutes researching and taking notes, then come to the writing station. At the writing station they would share with me what they learned and turn it into a journal entry. These three students eventually started presenting their researched journal entries with their classmates. I was so impressed with their ability to locate information online, comprehend it and put it in note form. Shortly thereafter, the entire class began generating wonderful questions about water pollution and its effects on the environment. This led these three students to researching their peer's specific questions. I started to notice that the entire class was excited to have their classmates search for their questions. Each day these three students would research and share their work with me. Every time they came across the answer to their classmates' questions, they would present it to the class. Their excitement and enthusiasm solidified my belief in encouraging higher level student questioning while also incorporating research into the curriculum for all of my students.

### **My Wonderings**

As I began my inquiry project, my wondering revolved around the following question:

**How can student questioning be used to enhance curriculum within my heterogeneous classroom?**

As I started to dive into merging my inquiry wondering into my classroom's curriculum, I began to ponder the following sub-questions:

- Will student questioning increase across the entire curriculum?
- As a teacher, does my questioning affect student questioning?
- Will a multigenre research project encourage independent enrichment in my higher level students?
- Will my higher level students help advance the conceptual understanding of related concepts within the entire class?

- Will multigenre presentations raise my students' interest in research?
- Will multigenre presentations spark interest and confidence in future research projects and presentations?

### **Consulting Experts**

When I started to generate ideas about how I would encourage my students to ask higher level questions and to research the answers, I thought back to what I have learned and what enjoyed in school. I knew I would need to provide a self-fulfilling motivator to spike their interest in research. I also knew that once I was able to spark their interest in a topic, my students would run with the idea and never look back. During my education courses at The Pennsylvania State University, I learned about and composed a multigenre research paper. A multigenre research paper is a non-traditional way for students to research, compile and present information about any topic while taking ownership in how they present it. In her book, The Multigenre Research Paper, Camille A. Allen writes (2001, pg 1),

I've seen multigenre research papers change students' negative perceptions of research, writing and oral presentation. When given the chance to select their own topics to research, decide which genres to write in, and determine how they want to present their findings to an audience, students change. They become empowered. They assume ownership of their learning and display pride in showing off their accomplishments. They grow.

As a student who compiled and presented a multigenre research paper, I saw the empowerment my peers and I gained after the completion of this project. I believed that this would be a wonderful way to give my students a motivator for research. I also hoped that as the projects progressed and students learned more, their hunger for information about their topic would increase. This would hopefully lead them to asking higher level questions about their topics and across the curriculum.

Although I knew that a multigenre research project in first grade would need to be adapted and somewhat guided, I had hopes that this project could possibly help students gain an interest and confidence in asking solid, thoughtful questions about things they

were interested in. I was particularly excited after reading the following quote from Camille A. Allen, (2001, pg 8):

Although each student who participates in the process has different experiences and learns different things, consistently multigenre projects have helped our students build skills, have extended our curriculum in meaningful ways, and have helped our students value themselves and one another.

Shortly after I read this wonderful quote that supported all of my hopes for what this project would invest in the students, I read a list Ms. Allen wrote about the ways in which multigenre projects helped her students (2001, pg 8-11):

- Helping students build skills
- Students learn to conduct research
- Students read often
- Students write often
- Students speak in small and large group setting
- Students learn to listen
- Students learn to self-evaluate
- Students learn to use technology
- Students develop thinking and problem-solving skills
- Students learn to think creatively and imaginatively
- Students learn organizational skills
- Students learn to collaborate

After reading this list of ways in which students can benefit from this project, I was extremely excited to get started.

I really wanted to focus on helping my students to develop good questioning skills. One important aspect I wanted to focus on was developing a welcoming environment in which students feel comfortable asking questions. A great online teacher source, Thinking Skills Guide-Questioning Strategically, stated the following (2005, pg 4):

Helping students to question requires acceptance and reinforcement from the teacher. It also is important to help some students learn how to present their questions in a positive and polite manner and to draw questions out of others. The only “dumb” question is the one that wasn’t asked.

It was not until after I started researching ideas to encourage students to question that I realized how much I played a role in their questioning as their teacher. [Youthlearn.org](http://Youthlearn.org) gives suggestions to teachers like the following, “Certainly for an inquiry based learning program there’s no more important talent [questioning], and by understanding the art of the question you’ll not only get children more actively involved, you’ll help them learn this important skill themselves”(Youthlearn, 2005, pg 1) I now understood that the success of my students ability to increase their higher-level questioning determined what types of questions I asked and how I modeled that for them. According to the experts, I had a lot of work ahead of me, but I was excited to see it all come together!

### **My Inquiry Plan**

I believed that multigenre projects were the tool I wanted to use in attempts to enhance the curriculum, inspire higher-level questions and spark interest in research. I found that the projects would need to be adapted for my first graders. I also knew that it was a challenge to accommodate all of the academic levels within my classroom. It was important to me prior to starting this class wide project that all students in the class would benefit from it. My hopes were that all students would be challenged in areas they needed attention. Students with academic struggles could benefit from the academic aspect, while students with social troubles could benefit from the social interactions. To be successful I would need to tailor this project to the needs of my students individually, yet allow for them to be the guide in which direction their research would lead them.

To best accommodate my students’ needs and my personal interest in challenging them, I placed my students in three academically heterogeneous groups. While forming the groups students were specifically placed to balance each other out. Fluent readers were matched with readers still at the frustration level. Students who struggled in social areas were matched with peers who would challenge them to step out of their comfort zone. The three students who had research experience were placed in the three separate groups as an unstated leader. Each student was strategically placed in their group to enhance the group’s overall diversity, challenging their strengths and weaknesses.

For four weeks, students were given the opportunity to research their topics. At the start of our research we had just begun our *Land of Make Believe* unit. The students

were extremely motivated to learn about fairytales, and I knew their research should also enhance the current curriculum. Because of their age, I decided to assign the topic rather than allow for them to choose. I chose to have all of the groups research medieval castles. By researching medieval castles, students would build a foundation for future units in grades to come as well as enhance the current curriculum.

For seven nonconsecutive days throughout the four weeks, students would rotate through what we called “castle stations”. These stations took the place of our literacy stations for the day. At these stations, students would spend time researching and learning about things they had questions about. The very first set of castle stations students had introductory lessons. At one station students were read a read aloud about castles and used a graphic organizer to write out what they learned. The second station was exploration time for each student. They were provided stacks of books, and were given time to explore these books. At the third station the students learned about searching the internet, and how to use previously bookmarked sites. The teachers at each station concentrated on writing down things that the students showed interest in, and this would determine our next lessons for castle stations.

I was amazed at the response from the students after only the first set of stations. My mentor, our classroom paraprofessional and myself all had lists of questions the students had asked. These questions helped me to plan the next set of station lesson plans (See Appendix A for examples of castle station lesson plans). For example; students asked questions about medieval clothing and how it was made. The following day, our classroom paraprofessional brought in her spinning wheel and wool to demonstrate to students how people in the medieval times made their clothing.



We also had another station focused on clothing and social status. At this station we studied different people who lived in the castle and what their role was.



The students studied the castle rooms very closely. They all had a huge fascination with the great hall, the dungeon and the castle kitchen. Because of their interest in these areas, we spent time learning about each of these rooms. We were even able to clear up some misconceptions about alligators being in moats and skulls overflowing the dungeons of castles.

As students became more and more interested in their research they started to generate more thoughtful questions. Because of the large amount of questions being asked, the adults in the room were not able to always write them down. To solve this issue, I introduced a question board where students could write their questions down. The students loved this idea, and would write all different types of questions down relating to all different areas of the curriculum. As questions about castles began to pour in, a station became dedicated to researching these specific questions. Each question would be written on a note card (See Appendix B for examples). Students would work in pairs to search through the castle books for the answer. When an answer was found, they would write the name of the book, the page number the answer was found on, and a few notes. Each morning we would take some time to read the answers to questions that students had discovered.

After four weeks of intensive castle stations, the students had compiled a wonderful collection of work they were eager to present. Once students were prepared and ready to share what they had learned and created, we had a castle celebration. At the castle celebration each group presented to their peers what they learned.



Groups shared the following; their group's coat of arms and family name, their large castle map, their co-authored research papers, beautifully acted out plays and various information they wanted to share about what they had learned. Each group did a marvelous job presenting and sharing all that they learned! After the presentations, we ate some very delicious castle cake and celebrated the accomplishments of each student!



## Data Collection

Data was collected in many ways for this inquiry. Below is a list and brief explanation about each data source used:

- **Student quotes:** Many students within my class are very verbal about their feelings. I knew that their interest or disinterest would show through their verbal comments. I always kept a notepad handy and jotted down student quotes. Numerous times throughout the research I did brief interview with students to find out what they enjoyed and did not enjoy about their projects.
- **Question tally:** In the beginning it was my goal to tally which student asked questions and whether they were higher level questions or not. This started out okay, but as time progressed we found that it was difficult to tally the questions

- within each small group and still write down their wonderful questions. I decided it was more beneficial for the student's growth if their questions were recorded rather than continue to tally the type of question and how many they were asking.
- **Student work:** Through student work I was able to collect data of growth in my students. For example in the beginning of the castle stations I had students sketch a detailed castle based on what they knew. Towards the end of the presentations, students did a group map of a castle. Each child drew a room or an area of their castle. I can see growth in each child's understanding of what a medieval castle was like. Misconceptions disappeared and evidence of new knowledge appeared.
  - **Post-assessment:** After the completion of the castle presentations, I interviewed specific students to see what they knew about medieval castles. I interviewed two of my higher-level students who tend to soak up everything discussed in the classroom as well as two of my lower-level students who consistently had difficulties retaining information taught within the classroom. (See Appendix C for examples of two student post-assessments).
  - **Observations:** A lot of my data was collected through observation. My mentor, our paraprofessional and myself all collected observational notes. This was all recorded on paper throughout the entire four week process.

### **Data Analysis**

When I took all of my data and compiled it, I was surprised at the quantity and quality of it. Most of all, I had a lot of student quotes. I decided to compile my data based on the type of data it was. I kept my quotes all together. I made one big list of student questions rather than numerous lists. I collected the student's work from in class and from their out of school research. I also compiled the notes from my mentor and paraprofessional. The four student post-assessments were also analyzed separately.

A lot of time was spent comparing student work, dates of when questions were asked, and student interview responses. I specifically looked for students who stepped out of their "normal" academic performances. Because there is much room for interpretation of the data, I trust that with my knowledge of my students combined with my colleague's observations, the data would be considered solid diagnostic observations.

## Claims & Evidence

**Claim 1:** Multigenre projects benefit the wide range of needs within a heterogeneous class.

**Claim 2:** Multigenre projects enhance curriculum.

**Claim 3:** The teacher's questioning determines the quality of student questions.

**Claim 4:** Students become more passionate about their research when they have ownership of it.

### **Claim 1: Multigenre projects benefit the wide range of needs within a heterogeneous class.**

One of my concerns going in to this project was that not all of my students would benefit from this experience. I wondered if my lower-level students would have difficulty reading the resources or if my higher level students would be bored because of their previous experience with research. I assumed that my average students would most likely benefit quite nicely throughout their projects. By specifically grouping the students in heterogeneous groups, my hope was that they would all help and learn from each other.

From the very first set of castle stations, I could tell that all of my students would benefit from this experience. During normal literacy stations, students are separated into ability groups. Because of this separation, students rarely get to read with classmates in other reading groups. Castle stations were a wonderful way of getting students to mingle with each other across the academic groups. One of the best readers in our class, Ben\*, reads at an unbelievable level for his age. He has read all of the Harry Potter books, and can comprehend basically any piece of literature you place before him. Although his academic skills are extremely exceptional, his social skills lag behind. In the beginning of the year Ben had difficulties with peers. He has a tendency to talk in "adult terms" to his friends, and this would be difficult for them to understand. At recess he would always want to stay in and read rather than go out and play. Because of Ben's academic success, our goals for him were mostly targeted at his social interactions with his peers. I had

high hopes that Ben would benefit from the group work and would be able to use his knowledge and ability to comprehend reading material to help those around him.

At the very first station I observed Ben at, I saw a little hesitancy to jump in and work with his peers, but I saw potential for a change. By the third castle station, I witnessed Ben working with one of the lowest readers in our classroom. They were researching on the computer together. I specifically paired them together for this castle station, and I wanted to observe their interactions. Shortly after they had started, I made a simple reminder to the children that they are to work as a team. A few minutes after I made this comment, Ben's partner asked him for some help reading something. Ben was standing beside him at the computer. Ben read him the sentence on the computer about medieval clothing, and stepped back. After he stepped back he said, "I am at your service Tucker\*, I will help you read it!" and he saluted his partner before giving him a big smile. They both giggled and started reading together. From this point on, I witnessed six other times that Ben went out of his way during castle stations to help Tucker. I also noticed that Tucker's interest in his reading has risen. Although I have no specific evidence to link Tucker's improvement to Ben's help, I would like to believe that they are in some way linked. Ben has become an academic role model that Tucker looks up to.

Ben and Tucker are just one pair of many in my class who I saw working closely together. Another student, Mary\*, who regularly avoids reading, immediately jumped at the idea of having a peer read to her. The first few stations I witnessed her having her partner, one of our higher level students, read to her. As Ella\* read, she just sat and listened. After I witnessed this a few times, I encouraged Ella to have Mary read to her. I did not say anything to Mary about it. I simply encouraged Ella to ask her. During the fourth castle station, I heard Ella ask if Mary would like to hear her read. Mary shook her head no. Ella asked Mary again and gave her a simple compliment about how much her reading has improved and that she thought it would be nice to hear her read. Mary agreed and began reading a rather difficult piece of writing. As Mary got to words she could not sound out, Ella would jump in and help her. It was wonderful team work, and I could tell that both girls greatly benefited from that experience. Mary and Ella have worked together many times since then. I recorded five times after that situation that Mary and

Ella voluntarily read together. Recently I also saw Ella help Mary with spelling words while doing lap work at the carpet without being asked to do so.

The two aforementioned pieces of evidence I have given are amongst a whole list. I have recorded observing two different level students working together voluntarily 21 different times throughout our castle stations. This includes, helping each other to read, coloring together and/or talking out a confusing topic they had just read about. There were also many other times that I specifically paired students and had them work together. I honestly saw progress in many areas for a majority of my students throughout this project. Above all areas however; I would have to say that the community within our classroom became a lot closer. The students had a new respect for each other, and a new team experience to add to their list of experiences!

**Claim 2: Multigenre projects enhance curriculum.**

The *Land of Make Believe* unit that we were following during the inquiry projects is a wonderful unit (See Appendix D for the rationale of the *Land of Make Believe* unit). In this unit students explore many fairytales from all over the world, characters, character traits and compare versions of fairytales. The science unit along with the Land of Make Believe unit is the *Magnet* unit (See Appendix E for the list of concepts and outcomes of the Magnet unit); which is a very hands-on inquiry based unit. The students in my classroom loved these units!

I believe that one of the most important aspects of this project was making sure that it enhanced the students' current curriculum. I could not stand to have it take away from the wonderful curriculum that is already in place. I wanted to make sure that students were learning skills and information relevant to what they need to know at the end of first grade. I constantly referred to their reading and writing standards in the State College Area School District Language Arts Continuum (LAC). Some important aspects I took from the state standards to incorporate in to their projects were; graphic organizers, retelling stories, articulating comprehension of material, map skills, writing informational pieces, contributing ideas and begin to organize information. I also made sure that the students were incorporating drama and art into their projects as well. I knew that by forming the castle station plans around what the students needed to know for the end-of-

the year benchmark for 1<sup>st</sup> grade, the students would be well on their way to meeting those benchmarks and possibly surpassing many of them (See Appendix F for examples of end of 1<sup>st</sup> grade benchmark skills).

Below I have included a chart that shows what each student completed during their multigenre projects. In the chart you will also see which Pennsylvania State Standard each part of their project has met.

<b>Name of project piece:</b>	<b>Pa State Standard Met:</b>	<b>Description:</b>
Group code of arms	2.3.6 D Contributes ideas and begins to organize information about a topic.  Art	The code of arms was a group project where students worked together to come up with a family name and a code of arms to represent them.
Individual code of arms	Art	Students used their own knowledge to come up with their own code of arms to represent themselves. (See appendix G for example)
Graphic organizer about read aloud book	2.3.4 C Begins to respond in writing via graphic organizers, letters, poems, descriptions and/or journals.	Students listened to a read aloud and created a graphic organizer to demonstrate what they learned. (See Appendix H for example)
Group written research report, guided by teacher	2.3.7C Adapts writing style/for to focus on topic, purpose and/or audience.  2.3.3 C Writes informational pieces with teacher guidance.	Students all contributed ideas to form a research paper about what they learned. They focused on their audience and what someone would need to know about Medieval castles. (See Appendix I for example)
Skit	2.3.5 C Demonstrated comprehension through participation in guided literacy discussions about various genres (fiction, non-fiction, poetry and <b>drama</b> ).	Each group was given a beginning of a story to which they needed to act out and collectively create an ending to their skit.
Presentation of information	2.3.7C Adapts writing style/for to focus on topic, <b>purpose and/or audience</b> .	Various students presented information to the class. They shared what they learned about the castle kitchen, the great hall and how to become a knight.
Group discussions	2.3.5 C Demonstrated comprehension through participation in guided literacy discussions about various genres	At each station groups would discuss and debate ideas about what they had researched and what they think certain

	(fiction, non-fiction, poetry and drama).	things were like during the medieval times.
Organize information, take notes, write down questions	2.3.6 D Contributes ideas and begins to organize information about a topic.	Students wrote down their questions and organized information they found in to notes to share with their peers.
Journal entry: "What I learned about medieval castles"	2.3.7C Adapts writing style/for to focus on topic, purpose and/or audience.	Students wrote a concluding journal entry about what they learned about castles.

Below I have also included a chart to demonstrate the speaking and listening standards that the students used in their multigenre presentations:

Standard	Description of Standard:
2.6.1 A	Listen to Others: <ul style="list-style-type: none"> <li>▪ Ask questions as an aid to understanding</li> </ul>
2.6.3 A	Speak using skills appropriate to formal speech situations <ul style="list-style-type: none"> <li>▪ Appropriate volume</li> <li>▪ Pronounce most words accurately</li> </ul>
2.6.4 A	Contribute to discussions <ul style="list-style-type: none"> <li>▪ Ask relevant questions</li> <li>▪ Respond with appropriate information or opinions to questions asked</li> <li>▪ Listen to and acknowledge the contributions of others</li> <li>▪ Display appropriate turn taking behaviors</li> </ul>
2.6.5 A	Participate in small and large group discussions and presentations <ul style="list-style-type: none"> <li>▪ Participate in everyday conversation</li> <li>▪ Present oral readings</li> <li>▪ Deliver short reports</li> </ul>

The following chart also demonstrates how the students worked above their grade level standards. By conducting research they were covering many of the standards that they will not need to complete until the intermediate grades (3<sup>rd</sup> and 4<sup>th</sup> grades).

Standard:	Description of Standard:
2.8.2 A	Locate information using appropriate sources and strategies <ul style="list-style-type: none"> <li>▪ Locate resources for a particular task</li> <li>▪ Select sources</li> <li>▪ Use table of contents, key words and guide words</li> <li>▪ Use traditional and electronic search tools</li> </ul>

Standard:	Description of Standard:
2.8.3 A	Organize and present the main ideas from the research <ul style="list-style-type: none"> <li>▪ Take notes from sources using a structured format</li> <li>▪ Summarize, orally or in writing, the main ideas</li> </ul>

As you can see in the above charts, multigenre projects are very in enhancing the curriculum. Although students guided the direction their projects would take, my role as the teacher was to guide them towards meeting the appropriate standards. It was very convenient that students generally chose to head towards something the standards stated they should be able to do. Their multigenre projects enhanced what the students wanted to learn, what they are required to learn and the *Land of Make Believe* unit all at once.

**Claim 3: The teacher’s questioning determines the quality of student questions.**

As a new teacher, I have found that my questioning is extremely important. In the beginning of the year, I struggled to ask questions first graders understood. At that time I did not even realize that my questioning went hand in hand with their questioning. It was not until the start of my inquiry research that I started to find out that my questioning determined their interest level and therefore their questioning. As I started to research I learned about the various types of questions a teacher can ask, and how that affects his/her students:

The effective use of questions may result in more students learning than any other single technique used by educators. Because so much of the classroom communication is in the form or questions, it’s important for us to learn to use questions correctly (Questioning Techniques, 2005, pg 1)

Through my research I learned strategies to apply that would create a safe environment for students to open up and share their thoughts and ideas. Below is a chart that shows some of the different types of questions I tried, and an example of each. I have also included some information of how my students reacted to these types of questions.

Question Type:	Example:	Definition:	Student Responses:
Factual Questions:	“What type of stone are Medieval castles made out of?”	Questions that have only one correct answer.	Generally students were very excited to answer this question if they knew the answer, or were confident that they knew the answer. Students who were shy were less likely to share their thoughts if they had no idea.
Interpretive Questions:	“Why do you think castles had moats?”	Questions that have more than one answer, but they still must be supported with evidence.	Students were much more excited to share in their ideas when asked interpretive questions. These are not as threatening to them, and they knew unless the answer was completely unrelated, it was correct.
Evaluative Questions:	“How do you think you would feel to eat dinner in a great hall of a Medieval castle?”	Questions that ask an opinion, belief or point of view.	Students love to share their feelings, experiences and beliefs. Above all questions, I would say that students were most anxious to answer evaluative questions.

Through experimenting with my questioning, I began to see that students were most anxious to share when an evaluative question was asked. They loved to share their opinions, beliefs and experiences. Knowing this, I started to ask my questions in specific orders. For example; I would often start with an evaluative question. Once there were a few volunteers and students remained attentive, I would throw in an interpretive and/or factual question. I found that I could continue asking interpretive and/or factual questions for a while and still get volunteers. When the hands started to dwindle I knew I needed to throw in another evaluative question. When the students saw that I cared and wanted to know more about them, they felt more comfortable sharing what they thought was factual and what they interpreted in a given situation.

As I became more comfortable putting my questions into “first-grade terms” and I began to understand how to engage the students, the classroom became a questioning environment. Students started to ask extremely good questions frequently. They were asking questions about various topics. Below I have made a list of some of the wonderful higher-level questions my students began to raise during our discussions:

**Castle related questions generated by students:**

- How many castles are there?
- What are castles made out of?
- Are there crocodiles in moats?
- Where do they keep their clothes?
- How old are castles?
- Do they make castles out of metal?
- Are medieval helmets really as heavy as a five year old?
- Does the father choose who the princess will marry?
- Why didn't kids learn to read and write unless you were lucky?
- Why did people fight?
- What do they put in moats?
- Did kings and queens have carriages and horses like the Amish?
- If people get sick, who helped them to get better?
- Did they have electricity?
- Are there more than 1, 000 castles?
- Are castles more then 100 feet tall?
- How do they get the tower's roof on when it's so high?
- How did they get water into the moat?
- What are the pointy things at the gate of the drawbridge?
- How do they make material and blankets?
- Why did they burn each other's castles?
- How do they mix soup if they don't use spoons?
- Did they speak American Sign Language back then?
- Did they have pencils?
- I wonder if their legs got tired walking all the way to the top of the towers?

- How did they take baths?
- Did they eat spaghetti with their hands?

**Miscellaneous questions generated by students:**

- How do magnets attract things?
- How do bats hold on to the roof if we can't hold on to stuff while we are asleep?
- Do they eat tarantulas in China?
- Were there smart people in the old days?
- What is Titanium Ore?
- What are chains made out of?
- Will a temporary magnet destroy our stereo like a regular magnet would?
- How do we make metal?
- Why are things spelled silly sometimes?

The above list of questions is just a portion of the questions the students asked and put on the question board. I was very impressed with their questions about castles and the Middle Ages. They had very thoughtful questions that relate to their interests, curiosities and own experiences. As time went on, their questioning started to carry over in to other subject areas as well. I started to notice, specifically in science, that students would ask thoughtful questions. They especially loved when I did not know the answers and we had to look it up together. Sometimes they would begin thinking about what questions they had after I showed them that I was stumped as well. I began to see that they respected my honesty and they enjoyed that we were learning together.

One day I even had a student tell me about something he had learned on the Discovery Channel. After I showed amazement and excitement that he had such wonderful information to share another student raised their hand. With a big smile on his face he said, "I love when we teach the teacher, it's so fun!" The rest of the class giggled at his wonderful comment. After that I started to notice more and more that they truly

like to see that I was student too, and that I was a life-long learner. From this point on, my mentor and I noticed their comfort level for asking questions increased tremendously.

**Claim 4: Students become more passionate about their research when they have ownership of it.**

In the beginning of their multigenre projects, students had very guided stations. I believed that students needed to be introduced to the material in order to spark their interest. After the first set of castle stations, I saw that they had already generated wonderful questions. Some of their questions went right along with what I had hoped they would wonder, while others were in a completely different direction. I decided immediately, that I wanted the students to guide which direction their research would take. I decided to “throw out” the plans that I had in my head, and allow for them to lead the way. The result of doing this was amazing!.

During the first station, my mentor recorded a question from a student asking about how people in the Middle Ages made their clothes. That afternoon I was sharing some of their questions with our classroom paraprofessional. She stated that she has a spinning wheel and would love to demonstrate for the student show medieval clothes were made. The following day, the students had a 45 minute lesson by Mrs. James about spinning clothes.



The students in our class were in awe of what Mrs. James was teaching them. They stared at her the entire time with excitement. When they realized that they were able to learn about spinning wool because of a question one of their classmates had asked, they became very excited. The students started to catch on that they were the ones in control of the things we were going to learn. After this, students started asking questions that

they truly had curiosities about. Most students were not afraid to hold back their questions. They knew that they and/or we would find answers if they verbalized what questions were going around in their mind.

After seeing how wonderful the lesson were as a result of letting the students lead the way, I decided this was definitely the route I wanted to start taking in a lot of my teaching. One day a student posed a very interesting question during science. She asked “Will a temporary magnet destroy our stereo like a regular magnet would?” After a brief discussion about this wondering we veered back to our current lesson. I could not get her question out of my mind, and I decided to take the chance and let my students design an experiment to test this idea. Earlier in the unit I demonstrated to students that magnets would destroy electronic equipment by running a magnet over an audio tape. When we put the audio tape back into the stereo, the tape was ruined. I knew that this would be a great way to do a similar test for a temporary magnet, but I did not want to hand that experiment idea to the students. I truly wanted my students to come up with the experiment themselves. From the moment I told them that they were in control of testing their classmates’ question, and they started to share their ideas. They had such great ideas. They offered to bring in their old computers and stereos from home to use. One student thought that it would be okay test the temporary magnet on the electronic pencil sharpener because we had a manual sharpener left incase it broke. Another said to test it on one of the clocks in the room because we had a lot of them. Their ideas were insightful and considerate, but I knew the best way for them to make the connection was to lead them towards doing an experiment very similar to what we had done before. After a little guided questioning the idea to use an audio tape was introduced by a student. They were all extremely excited about their new ideas and wanted to test it immediately. So that is what we did! I learned a lot about student guided teaching during this lesson. I saw more then ever before that their passion and interest in topics increases ten fold when they are the ones in control. Even if the teacher herds the students in one direction through questions, the students believe they hold the pencil and that they are writing the lesson as we go along.

About midway through the multigenre research projects, my students started to show a new level of interest in their research. One day, Wynn\*, a very cheerful student came in and handed me a little slip of paper. On this paper in adult handwriting it said, “Walls-82 ft thick. Walls 29.5 ft high. English king built a castle 295 ft high above a river to make it safe.” After reading this I asked Wynn what it was. She continued to tell me that this was the answer to a question that her peer had asked the day before in castle stations. She and her uncle went to the public library to find the answer that very night. I was in shock! This student was not one to go out of her way to do her school work. She rarely read at home, and it was not often that we saw her homework. That morning during our morning meeting, Wynn shared her research and told the students all about what she had learned with her uncle. That day, Wynn set an example for her peers. For the next few weeks I had many students come in with research they had done at home (See appendix J for examples of student independent research). Not only was it research about medieval castles, but also answers to random questions they had and wanted to share. I was amazed at how involved in their learning students become when they know they hold the key to learn whatever they want!

### **New Wonderings**

After the completion of this inquiry project I still have the following wonderings:

- Could students create individual multigenre research projects in first grade?
- Could multigenre research projects become a permanent part of the curriculum in every grade and still spark the same amount of interest?
- Will students continue to be passionate about research in future years because of this experience?
- Will students continue to harvest solid higher-level questions in future classrooms now that they have the confidence, or will this disappear depending on their environment?

### **Future Teaching Implications & Conclusion**

At the end of our castle celebration, two of my students summed up this entire inquiry for me. They were enjoying their juice when one student turned to another,

raised his cup and said, “A toast to research!” I believe this says it all! Research is something to be celebrated. Students should not be afraid to generate questions and search out the answers. I have found that by creating a welcoming environment in which students feel comfortable stating their wonderings, students will flourish. As a teacher, it is my job to model the things I expect and hope my students will practice. I believe that strength in character is created when one is able to admit their curiosities and seek to find the answers. I hope to always model this for my students. I plan on incorporating multigenre research projects into my classrooms curriculum. The passion, excitement and growth that developed in my students throughout this process is something I hope every student will experience!

\*Student names have been changed to protect their identity.

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## **Appendix A:**

### Examples of Castle Station Lesson Plans

## **Appendix B:**

### Examples of Question Cards

## **Appendix C:**

### Examples Student Post-Assessment Interviews

**Appendix D:**

*Land of Make Believe* Unit Rationale

**Appendix E:**

*Magnet* Unit Outcomes and Concepts

## **Appendix F:**

Examples of End of 1<sup>st</sup> Grade Benchmark Forms

## **Appendix G:**

### Examples of Individual Code of Arms

## **Appendix H:**

### Examples of Graphic Organizers

## **Appendix I:**

### Examples of Group Research Reports

## **Appendix J:**

### Examples of Independent Research

