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STUDENT ENGAGEMENT DURING INTEGRATED THEMATIC INSTRUCTION
IN A SECOND GRADE CLASSROOM

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ABSTRACT

The integration of subjects is not a new concept in the field of education, but it has also not yet been prominently implemented in U.S. public schools (Hinde, 2009). As an intern in the Professional Development School at ¹the Grand State University, I had the privilege of working with a second grade teacher who integrated subjects frequently. In our classroom, students participated in integrated, thematic units that combined science, social studies, reading, writing, and art. Through recorded observations, student surveys and interviews, samples of student work, and parent surveys, I analyze student engagement during integrated, thematic instruction. More specifically, I identify which elements of the integrated lessons were most and least engaging for students and describe the student learning that resulted from them.

¹ The Grand State University is a pseudonym that will be used throughout the duration of this paper.

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Chapter 1

Why Integrated, Thematic Instruction?

Rationale

As a new and curious first year intern in Grand State's Professional Development School, I had many wonderings about teaching. However, one thing, in particular, caught my attention at the beginning of the school year. My mentor teacher, ²Veronica, informed me that we were going to be creating an insect museum with our students. She said that she had done a similar thematic, teaching approach with birds at a summer reading camp that she led. This was the first time that she was trying it in the classroom though. Because there was a much lower teacher to student ratio, I was curious to see how practical it would be to carry out under these conditions.

In addition to the insect museum that was unique to our classroom, I was also surprised to learn about the way science and social studies were taught in all of the primary grades. Instead of teaching the subjects separately through textbooks like my elementary school teachers did, the ³Rose Area School District teachers taught these subjects through integrated, thematic units. When I learned how the curriculum was set

² Veronica is a pseudonym for my mentor teacher that will be used throughout the duration of this paper.

³ Rose Area School District is a pseudonym for the school district that this study took place in. It will be used throughout the duration of this paper.

up, it made me wonder if students are more engaged when subjects are integrated and taught in units with overarching themes. I also wondered whether their level of engagement reflected the amount or quality of information they learned and retained.

Based on the results I obtain from this study, I could alter lessons for the remainder of the school year to include components that are most engaging to my students. In my future classrooms, I could also attempt to increase student engagement and learning by implementing some of those techniques. However, depending on the sociocultural background of my students, they may not be as engaged in the same things as these second graders were. In that case, I will have to conduct additional research to determine engagement levels of my future students.

Wonderings

After exploring my curiosities, I narrowed down my wonderings and formulated them into a main research question and sub-questions. My main research question was *What aspects of integrated, thematic teaching foster student engagement?* To help answer this question and extend this idea, I attempted to answer the following sub-questions when conducting my research:

During what activities are students most engaged?

During what activities are students least engaged?

Do students learn or retain more information from lessons that they are more engaged in?

How can future lessons be adapted to better foster student engagement and enhance student learning?

Theoretical Framework

To investigate these questions, I first looked to related literature in the field of education. Because the terms *integration* and *engagement* are so complex and multifaceted, I obtained researchers' and educators' definitions of the terms and combined them to create my own working definitions that I will use throughout this paper.

Thus, in this paper integrated curriculum will refer to the integration of three or more academic subjects using a common theme (i.e. insects). When talking about student engagement, I will refer to the combination of student behavior, emotion, and cognition in the learning process (Sharon & Tan, 2008). The behavioral aspect of engagement will include things like participation and on-task behavior. Emotional engagement will be measured by students' attitudes and interests in a lesson or task. Student engagement regarding cognition will refer to motivational goals and self-regulated learning (Sharon & Tan, 2008).

Though an integrated curriculum and student engagement are complex concepts to study, they can be looked at through a common lens—that of sociocultural theory. Two elements that are usually present in integrated, thematic instruction are the learning community and environment, both of which are essential components of sociocultural theory. The theory states that learning occurs through social engagements and interactions with one's environment. Sociocultural theory also embodies the idea that knowledge is constructed and active participation is an important component of that construction process. Therefore, when looking at the elements of integrated, thematic

instruction, student engagement levels will be analyzed utilizing a framework of sociocultural theory.

Chapter 2

Review of Relevant Literature

In an era dominated by standardized tests, reading, writing, and mathematics seem to dominate the curriculum. Social studies and even science are being marginalized in schools (VanFossen, 2005; Max & Harris, 2006). As VanFossen (2005) states, “Social studies cannot be marginalized—or ‘bumped’—out of the curriculum, because the potential consequences for future generations of citizens, and for our nation, are too great.” Thus, to combat this problem, some researchers and educators are beginning to see that an integrated curriculum can enable all subjects to be taught while saving precious time.

Despite potential benefits, few claims have been able to be made regarding the effects of curriculum integration. Curriculum integration is a broad term, which makes research on the topic difficult. There are many types of categories of integration and subtypes within them, and in many studies the meaning of integration is not clearly defined. Moreover, the studies that do exist seem to focus on high school levels and higher education.

Generally speaking, curriculum integration is when two or more subjects are combined in some form. One mode of curricular integration highlighted in the literature is multidisciplinary integration. This type of integration unifies different disciplines with a common theme (Drake & Burns, 2004).

1.1 The Multidisciplinary Approach

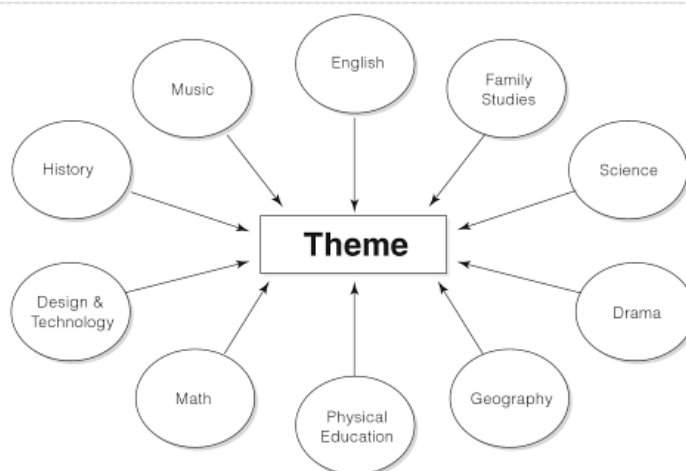


Figure 1 (Drake & Burns, 2004)

Within this approach, there are also many subcategories. Some are better integrated than others. Hinde (2009) proposes that integration might be executed in one of two ways: healthily or stealthily. Healthy integration is when subjects are taught with equal importance. In contrast, stealthy integration portrays one subject as superior and another as inferior, only skimming the surface of a concept in that subject (Hinde, 2009).

One form of multidisciplinary integration is a theme-based unit. In a theme-based unit, three or more subjects are integrated into one common theme (Drake & Burns, 2004). The unit usually lasts several weeks and ends with a culminating activity. This is the type of integration that this study will focus on.

According to Bolak (2005), one middle school that implemented integrated, thematic units with art components found that teacher and student engagement increased as well as student learning. Student and teacher engagement were determined through observations and parent testimonies while student learning was measured by standardized test scores and other summative and formative assessments. The new curriculum

approach was first employed in only a few classrooms as a pilot run, but because of the program's success, it was then implemented school wide (Bolak, 2005).

Similarly, a second grade classroom found student engagement levels increased when curriculum was integrated (Eakle & Dalesio, 2008). The teacher implemented a curriculum unit that had an over-arching theme of creating a classroom museum, but students were free to choose their topics from a wide range of subjects. Thus, the unit combined science, social studies, reading, writing, and art and was comprised of multiple forms of literacies such as reading print and digital texts, writing letters and informative texts, drawing, creating maps and brochures, and building exhibits (Eakle & Dalesio, 2008).

As the studies above portray, a common theme in the existing literature on integrated, thematic units is the incorporation of art and multi-literacies to attempt to heighten student engagement. Likewise, my research analyzes the effectiveness of art components and various forms of literacy in terms of student engagement. However, it also offers some novel insights. Rather than solely focusing on the outcomes of one newly implemented integrated, thematic unit, I include data on a unit that had been taught for the first time as well as a unit that had been a part of the district curriculum for several years.

Another unique aspect of my study lies in my data collection methods. Most of the existing data regarding integrated, thematic units is based on qualitative observations, student assessments, and student work. While I used these methods in my research as well, I also incorporated student interviews and student surveys to gauge their

engagement levels during different components of the integrated, thematic units.

Chapter 3

Methods

Background

Before describing my research methods, I illustrate the context of the classroom and school in which my research took place. I also provide a description of the two integrated, thematic units that this study focused on—the Insect Museum unit and the Going Green in the Neighborhood unit.

Teaching Context

All of the research was conducted in a second grade classroom at ⁴Howard Elementary School in the Rose Area School District over the 2013-2014 school year. The median household income in the Rose Area School District is \$48,490. Out of the eight elementary schools in the district, Howard Elementary is the closest one to The Grand State University. Therefore, the school has a very diverse population of learners. The breakdown of students' ethnicity at the time of the study was approximately 70% Caucasian, 16% Asian/Pacific Islander, and the remaining 14% were African American, Hispanic, American Indian, or of two or more races. As of 2011, there were 378 students

⁴ Howard Elementary School is a pseudonym for the school that this study took place in. It will be used throughout the duration of this paper.

enrolled at Howard Elementary. The ratio of female to male students was 46:54. There were approximately 40 students who had an active Individualized Education Plan (IEP). In terms of testing, Howard Elementary students as a whole scored above the state average on the Pennsylvania System of School Assessment (PSSA). Thirty percent of the student population was eligible for free or reduced lunch.

The second grade classroom that this study was conducted in was comprised of 22 students, fourteen males and eight females, ranging in ages from seven to eight years old. At most times, there were three adults in the classroom (all female): my mentor teacher (Veronica), a paraprofessional ⁵(Brenda), and myself. My mentor teacher was a fifth year teacher and a former Professional Development School intern in the Rose Area School District.

Because of Howard Elementary School's close proximity to The Grand State University, there was a diverse culture in the classroom. Four students were English Language Learners and three other students were from foreign countries. One student had autism and had an aide with him most of the day. He also received additional response to intervention (RTI) support outside the general education classroom in language, speech, and math. Another student received response to intervention (RTI) support in math and speech. This same student also participated in a friendship group led by the guidance counselor because of his inadequate social skills. Four students received Title I services for reading an hour per day, and one student received it for a half hour per day for

⁵ Brenda is a pseudonym that will be used for the paraprofessional throughout the duration of this paper.

fluency. Over the course of the school year, eight students alternated attending learning enrichment mini-courses that lasted for six weeks.

In any classroom, there is a wide range of abilities among students. However, our classroom reflected those individual differences by giving students choices in many areas. The reading and math instruction was delivered using a workshop model. In reading, there would be a ten-minute mini-lesson followed by an activity chosen by the student. The choices were: read to self, read to someone, listen to reading on the iPads, or work on writing. In a given day, there were between two and four “rounds” of this reading workshop, with each round lasting a half hour.

For math, students were able to choose a math game or activity to engage in after the whole-class mini-lesson. New choices were constantly added to the list of options as new material was covered. Some activities could be done independently and some required a partner or small group of students.

The science and social studies curriculum was integrated into three thematic units: “The Great Pizza Mystery”, “Going Green in the Neighborhood”, and “Community Playground”. These units were designed and written by a curriculum writing team made up of district teachers. All first and second grade classrooms taught this curriculum, and then they taught three different units the following year. This cycle repeated every two years.

In a given week, “unit” was taught on four days for a half hour each day. Depending on the lesson, however, unit could be taught for as long as an hour a day. Each lesson was comprised of different components, but the following were some

examples: read alouds, whole class discussions, DVDs, writing activities, drawing, partner work, constructing things, and field trips.

In addition to the three prescribed units, my mentor teacher added an additional unit in the beginning of the year: the Insect Museum unit. This unit primarily consisted of research and writing about insects while incorporating art to create a museum display for parents and other guests.

The Insect Unit

During the summer, before school started, my mentor teacher, Veronica, mailed home a newsletter to every student. In the letter, she told the students about a “mysterious” insect skin that she had been seeing around her house. She included a picture of it and posed some wonderings that she had such as: “What kind of insect leaves this skin on trees?”, “Why do they leave it?”, and “I wonder, what does the live insect look like?” She encouraged the students to think about these questions and take a closer look at other insects they found near their homes.

At the start of the school year in August, we revisited the mystery of the insect skin. We talked about what insect it might belong to and made predictions. After reading aloud books about the insect, the students were able to determine that the skin belonged to a cicada. However, there were still some questions left to answer. My mentor teacher was still curious about this insect, and so were the students. They asked questions like, “Why is the cicada that color?”, “Where do cicadas live?”, “How come they only come out sometimes?”, “What do they do when they are underground?”, and “What do they

eat?”. To answer the eager students’ many questions, she told them that they would have to do more research on cicadas. She recorded their questions on a KWL chart and also recorded what they already knew about a cicada.

After reading more non-fiction books together about insects and learning the answers to the questions about the cicada, my mentor teacher suggested that it would be fun if they could make an insect museum in the classroom to share the interesting information they learned. The students enthusiastically agreed. However, to create a whole museum on insects, we had to provide information on other insects besides just the cicada. So, Veronica checked out three large bags of books about insects from the library and gave students time to look through them. While they were browsing the books, we asked students to write down the name of three insects that really interested them. To make sure that no two students were researching the same insect, Veronica and I then went through the papers and chose an insect from their preference list. The next day, we told the students what insect they would be responsible for researching.

Over the course of the unit, students worked on many different pieces of work to prepare for the insect museum. Most times, it was hard to differentiate between reader’s workshop and writer’s workshop because reading and writing seemed to naturally go hand in hand. Students were constantly reading about their insects in books or on websites to learn new information that they could share via their writing. Veronica required students to engage in many different writing components for the making of the insect museum. For example, students were required to write cinquain poems about their insects, “I wonder” poems, comics imitating the format of Doreen Cronin’s *Diary of a Fly* book, captions for pictures of themselves working on the project, and informational

text about their insects. They also made diagrams of their insects by labeling the parts of their bodies.

In addition to reading and writing while learning science concepts, students also were able to incorporate art and music skills. They created watercolor paintings of their insects, molded their insects out of Crayola model magic clay and then painted them, and tissue papered a cardboard tri-fold display to represent their insects' habitat. Students also learned the lyrics to a song titled *Black Widow Spider* and practiced singing it in the classroom and in music class. When the students demonstrated proficiency in their singing, we recorded them singing it and played their performance at the insect museum.

To familiarize students with the set-up of a museum, we took a field trip at the beginning of the unit to the Earth and Mineral Science Museum on Grand State University's campus. Afterwards, students were able to brainstorm a list of some important things that should be included in our insect museum and how it should be set up in our classroom.

Throughout the unit, a few parents emailed to ask if it would be okay for their child to bring in live or dead insects to school in a container. We happily welcomed the insects into our classroom, as we saw students' outside involvement as a sign of enthusiasm and dedication to the project. Two different students brought in live wheel bugs, one brought in a live woolly caterpillar, one brought in a dead bee, and one brought in a dead fly. Other students brought in insect books from home to add to our collection, and one student brought in a DVD about insects. We even received an anonymous gift of a monarch caterpillar and an insect book. Someone delivered them to the school office

with a note saying that they heard our class was studying insects and thought we could use them.

The Going Green in the Neighborhood Unit

Upon culmination of the insect museum, students engaged in another integrated, thematic unit entitled, “Going Green in the Neighborhood”. Like the Insect unit, this unit integrated reading, writing, science, and art, but it also heavily integrated social studies.

The unit began by introducing map concepts through read alouds and then explored features of neighborhoods and communities through additional books and educational DVDs (See Appendix A). Students filled out personalized booklets about where they live (their name and the name of their street, neighborhood, town, state, country, and planet) and illustrated pictures to go along with each element.

After students learned about their own neighborhoods and community, they worked in pairs to design their ideal neighborhood. Veronica and I thought it would be more engaging for students to work in teams and more purposeful for them to compete for the best design. Students responded enthusiastically to our proposal and were excited to show off their maps and to explain their reasoning for choosing a particular lay out. After viewing everyone’s designs, the class voted on the one they thought was the most practical. Surprisingly students did not just vote for their own drawings. Rather, they took our discussion into consideration and voted honestly.

That night, my mentor teacher and I replicated the winning drawing on a bulletin board in the room using butcher paper and other materials. We also included eleven lots

of land (one lot per student group). In subsequent lessons, students worked in their pairs to design and build a house for their lot out of cardboard boxes and construction paper and to create fictional paper doll family members and biographies about them.

Later on in the unit, students learned about the garbage collection process and created trashcans out of Dixie cups to add to the neighborhood frieze. They also monitored what types of trash they threw away at home and at school over the course of two days. After collecting data, they analyzed it and created and implemented plans for how they were going to reduce waste, reuse materials, and recycle trash in school.

Data Collection Methods

To answer my research questions, I used a variety of methods, incorporating both qualitative and quantitative data collection methods. Throughout the unit, I collected student work samples and took digital photographs of them. Written qualitative observations were also taken during most lessons either by the classroom teacher, the paraprofessional, my student teaching supervisor, or myself. At the end of the Insect unit, I interviewed five students of various abilities about their feelings throughout the unit and the learning outcome. Towards the end of the second unit, I gave students and parents a survey to fill out regarding both units. I also interviewed five more students about their feelings throughout the Going Green in the Neighborhood unit and asked them to talk about what they learned.

Observations

During the Insect unit, my mentor teacher, the paraprofessional, and I took anecdotal notes cumulatively on student engagement every day for three weeks. We wrote down student behaviors or quotes that reflected evidence of either engagement or disengagement. These notes were written by hand and then typed into one document.

Throughout the Going Green in the Neighborhood unit, multiple people collected qualitative observations as well. When my mentor teacher was teaching a unit lesson, I took anecdotal notes on student engagement. Likewise, when I was leading a lesson from the unit, my mentor teacher would observe and take notes regarding student engagement. Sometimes, if my Professional Development Associate, (PDA, or student-teacher supervisor) ⁶Bob, was in the room while I was teaching one of these lessons, he would also type up observations. (See Appendix B for format example)

Student Work Samples

Every significant piece of work that students produced throughout both of the units was used for data. I took digital photographs of their work using my iPhone before giving it back to them to take home. This way, I was able to look back on the pieces of work throughout the unit and better analyze them. When analyzing the samples, I looked for completion, accuracy, and detail. Having work completed led me to believe that

⁶ Bob is a pseudonym for my student-teacher supervisor that will be used throughout the duration of this paper.

students were mostly on task and therefore, somewhat engaged. The greater detail present in a student's work signified a greater level of interest in the assignment, and thus a greater level of engagement. The accuracy of student work represented cognitive engagement.

Student Interviews

At the end of the Insect unit, I interviewed five students individually in a quiet space in the school library. Each interview lasted between 10 and 15 minutes. During the interview, students had access to all of their finished products from the unit. They were able to use the artifacts to spark their memory and aid them in explaining their engagement levels, thinking, and learning throughout the unit. (See Appendix D for interview questions).

In the Going Green in the Neighborhood unit, I interviewed students throughout the progression of the unit. Upon the completion of this study, the unit had not yet ended. Thus, I was only able to collect and analyze data for the first three quarters of the unit. During the latter half of that time period, I interviewed two students a week for three weeks, totaling six students in all. Like the other interviews, I interviewed students individually in a quiet place, usually at a table in the hallway. (See Appendix B for interview questions).

All student interviews were videotaped using the photo booth application on my personal Macbook. This way, facial expressions and intonation could be considered when coding and analyzing interviews. Students were chosen randomly from a class roster.

Parent/Guardian Survey

Towards the end of the Going Green in the Neighborhood unit, I sent a survey home with all students to have their parents fill out. The survey had three questions on it that required a parent/guardian to circle an answer. One question asked for further clarification if a parent/guardian circled yes. The survey was kept anonymous. The purpose of this study was to ascertain parents' perceptions of their children's engagement during unit (See Appendix C for survey questions).

Student Survey

Towards the end of the Going Green in the Neighborhood unit, around the time I sent the parent survey home, I also gave all the students a survey to fill out in the morning. I did not have them put their names on it, so this survey was also anonymous. I felt this was a small effort to reduce the likelihood that they may report positively. The survey had four questions on it that required them to circle an answer. One question asked them for a short explanation. The purpose of this study was to ascertain students' opinions on their engagement levels during two different units and the sources of their engagement. (See Appendix C for survey questions).

The Analysis Process

After collecting data, I used an inductive thematic approach to analyze it. I first looked at each data set, and took notes on things I noticed from the data. Then, I viewed

the data sets again individually and looked for common themes among my notes. After finding themes in each set, I looked at my data as a whole and noted the similarities between each set. When I discovered similarities, I grouped them into overarching themes. These themes, in turn, became the claims of my research.

Chapter 4

Data Analysis

After analyzing my data, I found four prominent themes that appeared in multiple data sources. I discovered that, overall, students were more engaged in the Insect Museum unit than the Going Green in the Neighborhood unit. They were also more engaged when working with a partner, creating artifacts, and listening to shorter read alouds. Many of these findings encompassed common, underlying principles of sociocultural learning theory. In particular, when social engagements or active participation were present, engagement levels seemed to be higher.

Claim 1

Claim:

Students were more engaged when working with a partner.

Evidence:

One aspect of student engagement is their behavior. During most unit lessons when students were working with a partner, I noticed that students exhibited more on-task behaviors than off-task behaviors. They stayed in their work areas and were talking about the subject. For example, this on task behavior was seen when students were examining tree cookies, making paper doll families and cardboard neighborhood houses, and creating recycling posters during the Going Green in the Neighborhood unit. To

support this observation, when given an anonymous survey question asking, “Do you prefer to work alone or in partners during unit?” most students said that they preferred to work in partners (See figure 2 below).

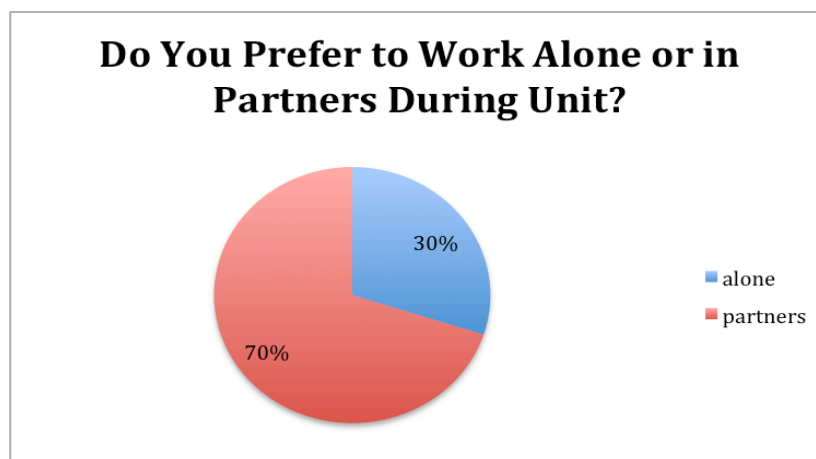


Figure 2 Student Survey Question 1

In multiple interviews, students also said that they enjoyed working with a partner. Their reasoning was that working with a partner was more fun and more helpful. One student commented, “Like if I get stuck or make a mistake, a classmate can help me out.” My observations supported this statement. During partner work, I witnessed many students correcting each other or clarifying ideas.

Despite their enthusiasm for working with assigned partners, multiple students, noted that they would rather pick their partners. One parent also commented on the survey, “My daughter enjoys working with partners, but she wishes she could pick who she works with.” Other parents also supported the belief that students were more engaged in partner activities. When asked what aspects of a unit they felt their child was most

engaged in, three parents circled “other”, and wrote in *working with a partner*. Another parent said, “My daughter talked a lot about working with a partner to make the family and house and she really enjoyed that.”

Claim 2

Claim:

Students were more engaged in the Insect Museum Unit than they were in the Going Green in the Neighborhood unit.

Evidence:

Another aspect of student engagement is the emotional component. When asked which unit they enjoyed more, most students said that they enjoyed the Insect Museum Unit more than the Going Green in the Neighborhood Unit (See Figure 3 below). They most enjoyed putting on a display for parents and other guests and the art and music components of the unit (See figure 4 below). Likewise, most parents surveyed felt like their child was more engaged in the Insect Museum Unit for these reasons also (See figure 5 below).

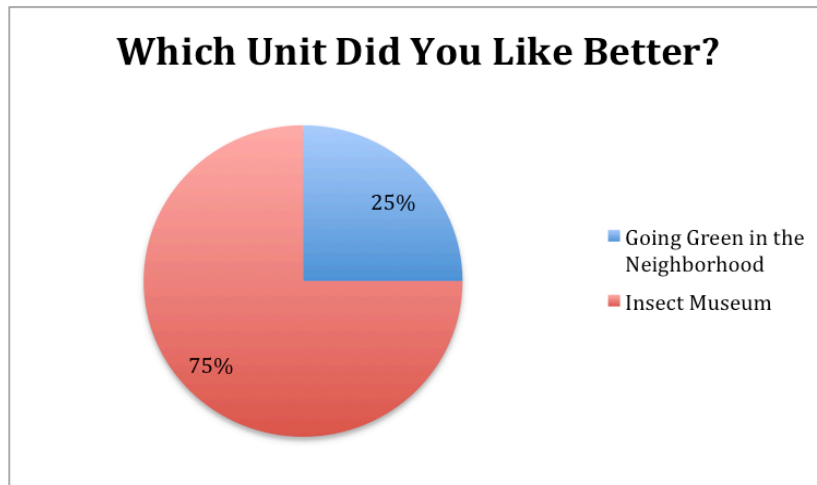


Figure 3 Student Survey Question 2

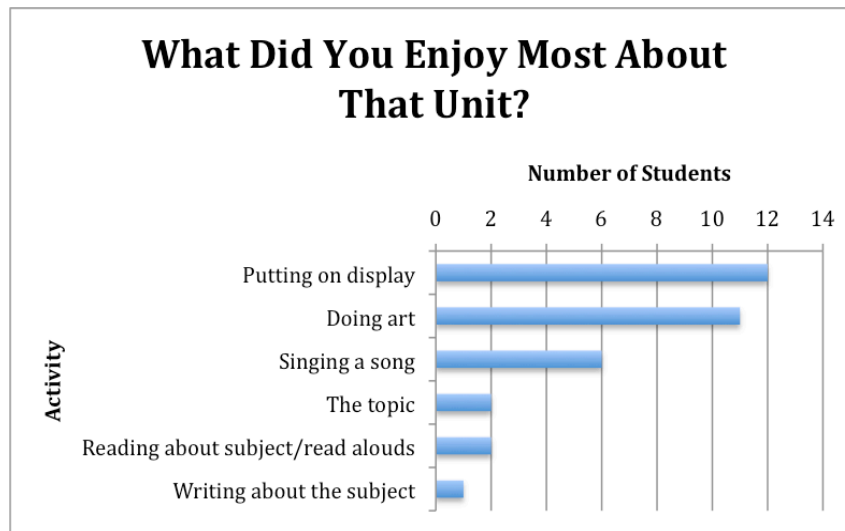


Figure 4 Student Survey Question 3

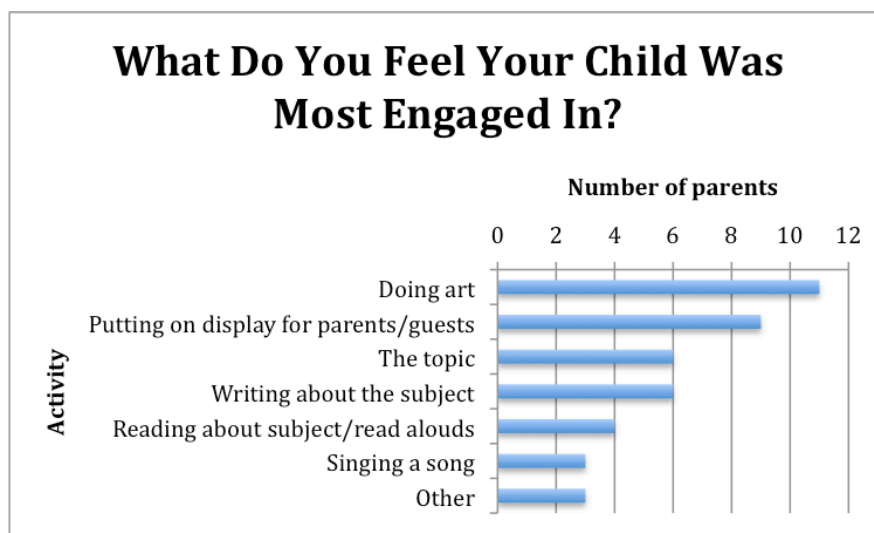


Figure 5 Parent Survey Question 1

They said that they talked about this unit more at home than the Going Green unit, although some parents did say that they noticed a difference in their son or daughter's conscientiousness of waste and recycling. In addition to talking about the unit at home, the paraprofessional noticed the students talking about it more in the lunchroom. Students were excited to draw insects during their free time after they finished eating, and they were extremely disappointed when she did not bring the art supplies for them to do so. Students also brought outside resources into the classroom to enhance their learning of insects. They brought in things like DVDs, books, and live and dead insects to study, which showed their enthusiasm and extreme interest in the unit material.

In addition to the emotional aspects of student engagement in this unit, cognitive engagement was also seen. In a survey, students reported that they felt they learned more from that unit than the Going Green unit. Although, it was difficult to measure, based on

their responses to interview questions, it seemed as though students learned or retained more information about the Insect unit than they did for the Going Green unit.

Overall, based on my observations, students reacted more positively to the Insect Museum unit than they did to the Going Green in the Neighborhood unit. The paraprofessional summed it up when she noted in her observation from the beginning of the Insect unit, “There is a true spirit of community occurring so quickly in the room. We are sharing info and saving or marking a page we think someone else might like to see. We are interested in insects and want to share all we are learning. We are finding common ground and really turning this class into a family!” That passion and engagement in the material and activities continued to be seen throughout the unit.

Claim 3

Claim:

Students were less engaged in longer read alouds.

Evidence:

When asked what activities students enjoyed the most during unit, very few students said that they enjoyed read alouds (See figure 4 above). Likewise, only a couple parents said that they thought their child was most engaged in read alouds (See figure 5 above). One parent commented in reference to the Going Green in the Neighborhood unit, “My daughter enjoys reading about the subject, but feels the read alouds are too long.”

My observations of student behavior and attitude during read alouds also support the data above. When books took long to read, I noticed students exhibiting more off task behaviors. Students seemed to get bored and become disengaged after a while. They would do things such as look around the room, play with objects, or talk to a classmate. I also noticed that during longer read alouds, there wasn't as much student participation, and participation would decline as the book went on.

In read alouds that were shorter, students' engagement levels were higher, as evident by their on task behavior and body language. In many of the shorter books, I witnessed students leaning in to see the book or moving closer, indicating a high level of interest. I also noticed another pattern with shorter read alouds--there was greater and more consistent participation throughout the book.

Claim 4

Claim:

Students were more engaged when they were making or building artifacts.

Evidence:

When asked what aspect of a unit they most enjoyed, more than half of students said that they enjoyed doing art and putting on a display for parents and other guests (See figure 4 above). Most parents felt their child was more engaged in art and putting on a display for parents and other guests as well (See figure 5 above). One parent said, "My son was extremely eager for his family to come see what he and the class had been working on (in reference to the insect museum)." Another parent noted, "My daughter

talked a lot about the art component and working with clay.” As you can see in the picture below, the museum display for visitors was comprised of many pieces of artwork.



Figure 6 Students, parents, and other guests at our Insect Museum

All students that I interviewed also said that they most enjoyed some form of art or putting on a display for parents. When asked what they did in either unit that they were most proud of, all students responded with something that they made or built. Some popular examples from the Going Green in the Neighborhood unit were building the houses, making the families, drawing maps, and creating posters about recycling. For the Insect Museum unit, common responses included building the insect out of clay and making a habitat background for the insect.

In my observations, I noticed a significantly higher level of student engagement when students were making or building something. Rather than wandering the room, visiting friends, fooling around, sharpening pencils, and asking to go to the bathroom

frequently, students remained in their work areas and worked for the most part. The noise level in the room was slightly higher, but students were still on task. Instead of talking about off topic subjects to friends, they were sharing their ideas and information and saying things like, “Hey, did you know that ladybugs have wings like honeybees?” or “Did you know the Giant Weta can ONLY be found on an island in the Pacific Ocean and it is so big that it CANNOT jump?”

Key Findings

The four claims detailed above have led me to discover further themes among them. When students worked with a partner or interacted with others in the case of the Insect Museum, they demonstrated higher levels of engagement. This leads me to believe that the social aspect of learning is important. Additionally, students were more engaged when the lesson involved creating something. The very nature of the Insect Museum was centered on building an exhibit, and students were more engaged in that unit than they were in the Going Green in the Neighborhood unit. Thus, the creation of artifacts may also be a source of higher student engagement.

Chapter 5

Conclusion

Discussion

It is important to note that because the human mind and social learning settings are so complex and influenced by many factors, I cannot say that an integrated curriculum was the cause of student engagement. The curriculum itself had many different components and students responded differently to each of those components, each other, their teachers, and a myriad of other factors. My claims are also not applicable to all students; they are specific to the 22 second-graders in my classroom at the time of the study, but they do offer considerations for educators.

Based on the data I collected, I can see how some elements of an integrated, thematic approach to teaching can be more engaging than others. As suggested by sociocultural theory, active participation and interaction with peers and adults when exploring concepts seemed to be most engaging to students (Kozulin, 2003). As a whole, students enjoyed working with partners and having visitors come talk to them about their work. Having concrete manipulatives or creating artifacts seemed to be most engaging to students and also aided in their construction of knowledge on the topic, as evident in my interviews with them.

While both units had a showcase component to them, the Insect Museum was the only unit in which parents and other visitors from the school and community came in to

the classroom to see students' work. The Insect Museum unit also had more art components to it and fewer read alouds than the Going Green in the Neighborhood unit. Therefore, it makes me believe that students might have been more engaged, overall, in the Insect Museum unit for these reasons. Although this cannot be proven for certain, the idea that the integration of art in the curriculum increases student engagement is supported by the findings of Bolak (2005) and Eakle and Dalesio (2008). In both studies, student engagement levels were reported to be higher after the implementation of integrated, thematic units that focused heavily on art.

Implications for Future Practice

Implications for My Own Classroom

If I were to perform additional research on this topic in the future, I would better assess and document student learning after each activity to see if there were any patterns between learning and engagement. With the data I collected, I wasn't able to make any strong claims about the relationship between student engagement and learning. One reason I have to support a possible association is that most students said that they learned the most from the unit that they reported being most engaged in. In addition, students were better able to explain what they learned during an interview about the Insect Museum unit than they were about the Going Green in the Neighborhood unit, but that could be because of multiple factors.

Nevertheless, with my findings, I hope to better tailor the remaining curriculum to the preferences of my students. In the next integrated unit, I will allow them to work in partners more often. Instead of assigning partners each time, though, I will let them choose their partner for some assignments. In a survey, one parent suggested this by noting, “My daughter liked working with a partner, but she wishes she could have chosen her partner.” I will see if giving students a choice with whom they work with has an impact on their engagement.

In addition to working with peers, students expressed their interest in parent and visitor involvement. Thus, I will invite parents and other guests in more often throughout the unit and at the culmination of the unit to showcase their work.

To keep students more engaged in read alouds, I will see if there are shorter books than the ones listed in the unit curriculum that portray the same message. If there are not shorter book equivalents, I will break up the reading into two or three chunks, rather than reading it all at once.

Along with these modifications, I will try to include more hands-on experiences in the curriculum. Students indicated a higher level of interest in activities that involved manipulatives or creating an artifact. Parents also believed their children to be more engaged with unit components that involved constructing something. Thus, I will try to incorporate more art and building elements in the upcoming unit.

Implications For Educators and the Field of Education

Overall, my recommendation for teachers is to try to integrate academic subjects in a healthy way and to collect data during different types of lessons to see which activities students are most and least engaged in. If done properly, students can construct deeper and more meaningful knowledge (Hinde, 2009) than they can with a traditional, segregated curriculum. In today's culture of testing accountability, it is tempting to teach academic subjects separately to ensure that students are learning each specified concept needed to perform well on tests. However, with this teaching approach, students often only gain a basic understanding of the concept. Comparatively, the healthy integration of subjects encourages higher cognitive thinking, as students are required to apply, analyze, and synthesize their learning across subjects.

In addition to implementing an integrated curriculum, I would also encourage teachers to promote parent involvement in the classroom and at home by sending frequent emails or newsletters. When surveyed, multiple parents expressed their preference for more regular communication. They said that they felt their child was more engaged when there was better communication about the units from the teacher. One parent commented, "Our whole family became more involved with thinking about the insect theme. The emails from the teacher fostered a lot of this. We began watching for insects, collecting them, and talking about them." She also noted, "Not as much correspondence about the Going Green unit came home, so we talked less about it. Interaction with parents about topics really fosters potential for home conversations

because then it doesn't rely on a second grader to initiate. Notes, newsletters, and activities at home are all helpful in this way."

While parent involvement in a child's learning is ideal, I acknowledge that it is not always plausible. The most teachers can do is initiate communication. However, as seen in my research, inviting other guests into the classroom also had a positive impact on student engagement. Thus, if parent volunteers are lacking, I advise teachers to turn to members of their school (i.e administrators, faculty, and other students) and community.

My recommendation for the field of education is to conduct further research on student engagement during different types of curricular integration and to be specific in the type of integration that is being studied. There should also be more studies done in elementary classrooms. To be able to perform such research, however, integration needs to become more prominent in educational settings. Colleges of education across the nation can help promote this by instructing pre-service teachers on how to develop and implement an integrated curriculum in a healthy manner, while still holding students and teachers accountable in a testing culture.

With my unique perspective of data collection on student engagement during two very different units, I hope I have provided the field with some helpful insights regarding an integrated curriculum at the elementary level. As my findings and sociocultural learning theory suggest, active participation and social engagements seem to be two critical components of student learning. Through further research, educators can expand upon this idea and hopefully formulate additional claims about different aspects of

curriculum integration.

Appendix A

Read Aloud Books

1. Be A Friend to Trees by: Patricia Lauber
2. Be My Neighbor by: Maya Ajmera & John d. Ivanko
3. A Day in the Life of the Garbage Collector by: Nate LeBoutillier
4. The House That Max Built by: Maxwell Newhouse
5. How A House is Built by: Gail Gibbons
6. Just A Dream by: Chris Van Allsburg
7. Mapping Penny's World by: Loreen Leedy
8. Me on the Map by: Joan Sweeney
9. Neighborhood Walk: Small Town by: Peggy Pancella
10. One Hundred Is a Family by: Pam Munoz Ryan
11. The Three R's: Reuse, Reduce, Recycle by: Nuria Roca
12. The Tree Farmer by: Chuck Leavell and Nicholas Cravotta
13. Where Does the Garbage Go? by: Paul Showers

DVDs

1. *All About Garbage and Recycling and Trucks* (GT Media)
2. *Community Rules and Laws* (schoolvideos.com)

3. *My Community: What Is a Community?* (Schlessinger Media)
4. *Neighborhoods: Understanding Where We Live* (schoolvideos.com)

Appendix B

Observations

Date	Lesson	Setting	Observations

Appendix C
Parent/Guardian Survey

Parent/Guardian Survey

If you are willing to participate in the research study on integrated, thematic units in your child's classroom, please complete this survey.

1. Were you able to attend the insect museum?
 - yes
 - no

2. Which of the following projects do you feel your child was more engaged in?
 - The Insect Museum
 - The Going Green in the Neighborhood unit
 - I don't know

3. Did your child ever talk about an aspect of either of these units at home?
 - Yes
 - No

*If yes, please elaborate:

4. Which of the following components do you feel was the most engaging for your child throughout that unit? (circle all that apply)

- Putting on a display for parents and other guests
- Engaging in art
- Engaging in music
- Reading about the subject
- Writing about the subject
- The topic of study (i.e. insects or neighborhoods/recycling)
- Other _____

Student Survey

1. Do you prefer to work alone or in partners during unit?

Alone

partners

2. Which unit did you like better?

Insect Museum

Going Green in the Neighborhood

Why did you like that one better?

3. What did you enjoy most about that unit? (circle one or two)

- Putting on a display for parents and other guests
- Doing art (drawing, painting, building)
- Singing a song (the Black Widow Spider song)
- Reading about the subject
- Writing about the subject
- The topic (insects or neighborhoods/recycling)
- Other

4. Which unit do you feel you learned the most from?

Insect Museum

Going Green in the Neighborhood

Appendix D

Student Interview Questions

Insect Museum Unit

1. Did you enjoy making the insect museum? Why or why not? What did you enjoy about it?
2. What things did you make for the museum?
3. How did you do that?
4. What piece/or what did you do that you are most proud of? Why?
5. Can you tell me about yourself as a reader? Writer?
6. Do you think you've gotten better at reading or writing? What do you think helped you?
7. What types of writing did you do to prepare for the insect museum?
8. What did you learn about insects?

9. Was there anything that was difficult or that you didn't enjoy? Why?

Going Green in the Neighborhood Unit

1. Are you enjoying the Going Green in the Neighborhood unit? Why or why not?
What have you enjoyed about it?
2. Did you enjoy working with a partner? Why or why not?
3. What things did you make for it?
4. How did you do that?
5. What piece/or what did you do that you are most proud of? Why?
6. What did you learn about neighborhoods and communities?
7. What did you learn about garbage and recycling?
8. Was there anything that was difficult or that you didn't enjoy? Why?

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