THE CASE FOR INTEGRATED TEACHING

STRATEGIES: DOES IT STAND UP TO THE TEST?

By

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THE CASE FOR INTEGRATED TEACHING

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CHAPTER I

INTRODUCTION

Purpose

The purpose of this research project was to determine whether implementing an integrated curriculum in a secondary social studies classroom improved student content knowledge. In an increasingly test-oriented educational system, it is important for educators to understand the link between their daily lesson plans and how instruction affects students’ scores on the state-mandated tests. Many teachers feel compelled to follow the curriculum provided to them by the state competencies. This oftentimes means that the textbook becomes the primary source for the classroom curriculum and drives the daily lessons. Teachers often feel pressured to do this because of the increased importance placed on the state test results. What this research attempted to understand is whether educators can create meaningful lessons that engage, motivate and provide deeper meaning to students without jeopardizing students’ performance on the state-mandated standardized tests. More importantly, this research sought to explore the idea that an integrated curriculum unit could improve student content knowledge in the secondary social studies classroom. Is it possible that a United States history curriculum unit that included mathematics, science, language arts and the arts be more effective in improving student content knowledge than a traditional U.S. history curriculum unit?
This study may provide secondary social studies educators evidence that implementing an integrated curriculum unit with their students can be exciting for students and actively engage them in the learning process.

**Research Questions**

The researcher attempted to answer several questions through this study. Therefore, the research questions guiding this study were:

1. What are the similarities and differences in understanding content knowledge of U.S. history students on end-of-unit tests between integrated social studies classroom instruction and non-integrated classroom instruction?
2. What are the similarities and differences in attitudes of U.S. history students when it comes to being taught an integrated social studies curriculum and non-integrated curriculum?

The analysis of the data collected in this study might help future teachers in the implementation of a sound integrated curriculum that supports student success in an academic environment that promotes enhanced test taking performance. The researcher was curious to see what impact a non-integrated curriculum will have on student content knowledge versus an integrated one. Ultimately these questions led to the overriding question that guided the research. Does implementing an integrated curriculum unit in the secondary social studies classroom help improve student’s content knowledge in U.S. history?
CHAPTER II

REVIEW OF LITERATURE

Purpose of the Literature Review

The primary goal of this review is to determine whether there is evidence that teachers can improve student’s content knowledge by integrating the fine arts, language arts, mathematics, and science into the social studies curriculum. Only Romero (1996) answered this specific question. All of the journals and papers reviewed were focused more on the impact an integrated curriculum had on motivation, and meaning-making, and as a tool to more fully engage students within the social studies curriculum. Similar studies (Epstein, 1994; Romero, 1996) involved elementary age students and thus did not provide enough evidence for this secondary social studies curriculum study. Although little research has been done on this particular topic, similar studies have shown that an integrated curriculum allows students to communicate the life-like experiences of historical people and events in a much more exciting way than traditional teaching methods (Epstein, 1994). By communicating these experiences with students in an exciting manner, students may display improvements on their content knowledge. The National Standards for History recommends, “True historical understanding requires students to engage in historical thinking…to go beyond the facts presented in their textbooks and examine the historical record for themselves; to consult documents,
journals, diaries, artifacts, historic sites, works of art, quantitative data, and other evidence from the past, and to do so imaginatively-” (Piro, 2005, p.493). These recommendations describe the type of curriculum that is much more than textbook materials, quizzes and tests. This integrated curriculum utilizes all of the humanities to help students understand their past and how that past shapes their future.

**Limited Research**

Only two studies have been reported that demonstrate a relationship between an integrated curriculum and enhanced student content knowledge. As a result, the current study hopes to provide information linking the implementation of an integrated curriculum and success in improving student content knowledge. An integrated curriculum unit is an infusion of knowledge from many different disciplines, an approach to teaching that includes a variety of teaching strategies, world-views, and taps into real-life situations (Simanu-Klutz, 1997). Many studies have found that an integrated curriculum enhances student motivation, engagement, and meaning-making. However, few studies found that student content knowledge increased because of exposure to an integrated curriculum. By studying the possible effects an integrated curriculum unit has on student end of unit tests scores and thus an increase in student content knowledge, educators will have one more instructional tool to help them facilitate a quality instructional program that benefits the students and supports the educational system overseeing student achievement.

**Definition of Integrated Curriculum**
Curriculum integration is far from being a new idea. Ignatz (2005) defines integrated curriculum as the organization of disciplines around a major unifying theme that pulls together the essential understandings that students are expected to learn. The roots of integrated curriculum come from John Dewey’s progressive movement of the early 20th century and have been expanded upon ever since. Dewey wanted to educate children through real-life problem solving experiences (Ornstein, 2004). Authentic, meaningful experiences were at the heart of how Dewey wanted schools to educate children (Brendtro, 2007). Dewey wanted students to appreciate and value learning, and develop a desire to apply that knowledge and to extract meaning for future experiences (Hinde, 2005). According to Hinde, curriculum integration provides students the ability to extract meaning among different disciplines and use these tools gained from these experiences in their future lives. Howard Gardner’s study of Multiple Intelligences has had a major impact on how educators understand student learning. Gardner (1993) asserts that there are eight intelligences and that most people incorporate several of these intelligences when they learn. As a teacher, it is important to teach students using multiple ways of learning so as to facilitate the different learning styles of the students. Curriculum integration is one way in which to facilitate multiple intelligences. Gardner states, “An MI setting can be undone if the curriculum is too rigid or if there is but a single form of assessment” (Gardner, 1993). Integrating curriculum can be a means of broadening the curriculum and applying Gardner’s theory of Multiple Intelligences within the classroom.
Curriculum integration can be a pedagogical tool to help instill meaning and purpose into the secondary social studies curriculum. Elementary education has been more open to the use of an integrated approach to teach students and this practice is facilitated by the fact that many elementary students have the same teacher for most of the school day. Elementary curriculum often relies on themes that incorporate the basic disciplines of reading, writing, mathematics, science, and social studies. However, by the time children reach middle school these connections stop and most disciplines are taught in isolation from each other. Creating connections between the disciplines in secondary education is important because it can help students to grasp relationships, see more of the big picture, and learn to make sense of the world (Ignatz, 2005). When implementing an integrated curriculum in a school, an essential factor must be present: the instructor must recognize the importance of a holistic approach to teaching. In an atmosphere of standardized testing this is a difficult task for most teachers to undertake. Most teachers feel pressured to teach only those topics that will appear on the state-mandated tests. For an integrated curriculum to work properly, instructors must understand that creating connections for students, and providing them with ‘the big picture’ gives students the knowledge and skills they will need in the future.

Social studies itself is an integrated discipline that includes geography, economics, history, government and, to a broader extent, a focus on reading and writing skills. However, a fully integrated social studies curriculum should also include science, mathematics, the fine arts, and language arts. Because social studies is the study of
human society it is logical to pepper the social studies curriculum with influences from all of the major disciplines. William Malloy concluded, “curriculum is a potent tool for reform when it integrates and interrelates subjects and disciplines in a manner that makes learning experiences meaningful” (Simanu-Klutz, 1997, p. 2). In this study an integrated social studies curriculum unit is much broader than just incorporating geography, economics and history into the social studies classroom. This integrated curriculum unit also included subject areas such as mathematics, science, language arts, and the fine arts.

Throughout the reading of the literature, a common thread was found: by providing students with multiple ways of learning they are better able to make meaning out of history, and to understand more fully the complexities of the past and the present. By integrating a social studies curriculum, student test scores would improve and thus demonstrate a rise in student content knowledge. The most effective way for this study to measure improved content knowledge was to test students based upon the curriculum they encountered. The researcher does not advocate that testing is the only means of measuring student performance or knowledge. On the contrary, the researcher is a firm believer in more authentic assessments based on student needs. However, in a climate of increased state-mandated standardized testing, there is a need to provide evidence for the relationship between quality teaching practices and increased student test scores. Eventually it is hoped that policy makers and educators alike will realize that vibrant and creative lessons encourage students to perform well on state-mandated standardized tests. This literature review and research project attempted to do just that.
Historical thinking, at its highest level, allows students to exhibit a level of complex thinking that analyzes many documents to come up with a synthesized conclusion (Epstein, 1994). This type of thinking can be achieved in a more realistic manner in the classroom with the incorporation of multiple disciplines into the curriculum. Reading about historical events may not provide students with the in-depth knowledge or empathy towards the people that lived through those events. Eisner points out that the social and physical world is “not primarily a world of text” (as reported in McKean, 2002, p. 188). Educators need to provide students with multiple sources of information to allow students to understand and accurately depict the historical record.

The Bill and Melinda Gates Foundation recently funded the Asia Society project which creates secondary schools that have a focus on international issues (Jackson, 2004). The teachers participating in this project used an integrative approach to teaching that facilitates student understanding through state standards within an international context. By learning through an integrated curriculum that centers on international topics, students will be more prepared to work effectively in the 21st century. The Gates foundation’s mission is to prepare every student for a post secondary education and for working and living successfully in a global society (Jackson, 2004). Project coordinators found a lack of correspondence between the high school curriculum and the skills students needed to succeed in the new global economy.
The success of the Asia Project reflects the importance of a holistic approach to education. An integrated curriculum, when properly implemented, is a holistic approach to teaching that encourages students to investigate and search for understanding in a more natural way. Students cannot make connections unless they are presented with multiple sources of knowledge and provided opportunities to learn to think critically (Dentith & McCreary, 2003). By depicting historical events through poetry, paintings, stories, or songs, students can “communicate the life-like qualities of human experience” to greater effect (Epstein, 1994, p. 136). Reacting to a painting or music composed during a certain time period can evoke emotions and empathy toward people far removed from our students’ experiences over time and place (Morris & Obenchain, 2001). These experiences can be very difficult to present within the confines of textbooks and traditional teaching methods.

**Meaning Making**

Teaching social studies effectively requires that educators connect students with the content they are learning in a meaningful way. Social studies presented as a series of facts to be learned by rote memorization will only accomplish a low-level of learning. However, if content and concepts are presented as open-ended questions and as a series of problems that humans have dealt with over our history, then the curriculum can be infused with meaning (Selwyn, 1995). Infusing the content with meaningful experiences includes incorporating visual, musical, and physical representations of the past within the lesson contexts. Including these types of meaning-making into the curriculum creates a more human dimension to otherwise abstract forms.
As reported by McKeans (1994), Singer Gabella studied the differences in meaning that students constructed when photographs and narratives were added as sources along with the regular textbook approach. She found that students were more likely to challenge and question historical fact when presented with diverse forms of representations. As a result students will “more readily enter into a dialogue with their human creators” (McKean, 2002, p. 189). By integrating the visual arts into the historical record students were able to gain empathy for the experiences of people in the past. In this learning environment, students were able to interpret a deeper meaning of the curriculum than they might otherwise have received through a more traditional mode of learning. By analyzing a painting or poem students can interpret its mood or tone into the artists’ real-life experiences of the event they are depicting (Epstein, 1994). The rich environment of an integrated unit forces the students to ask questions about the motivations and point of view the artists may have had while creating their art.

In a middle school in Boston, teachers created a unit over ancient Greece. As the unit progressed students developed and applied a number of skills including measuring, researching, and constructive writing. As a result of this process students were able to recreate life during this period in history (Beane, 1993). This process encourages and enhances students’ ability to analyze and to think critically.

Bruner, Eisner, Dewey and Gardner posit that meaning-making does not occur only in or through words, but also through spatial, musical, rhetorical or narrative representations (Epstein, 1994). If students can make meaning more readily through participation in an integrated curriculum then it is the researcher’s belief that these experiences may translate into higher test scores. Not all students are good test takers, but
by cultivating critical skills through an integrated curriculum students may perform better on tests.

**Content Knowledge**

An educator’s ultimate goal is for students to retain the content knowledge learned in the classroom and to be able to apply that knowledge in real-life circumstances. Content knowledge can be assessed in many different ways, either through traditional tests or through non-traditional modes of assessment. Non-traditional assessments include journal writing, culminating projects at the end of a unit, and artistic representations of the content learned. All of these assessments have been shown to be helpful for teachers to assess student knowledge of the content learned. For instance, in Beaufort County school district in South Carolina, teachers implemented an arts-based curriculum in their middle school. By integrating arts throughout the curriculum, teachers found new ways to assess student gains and losses in content knowledge (Sternberg, 2006). For example, teachers may assess students over a unit about Shakespeare based on the evidence the students presented when they created their arts activities displayed on the wall of the classroom (Sternberg, 2006). Alternative assessments are a creative and effective way to monitor student knowledge. However, the most recognized assessment is still the traditional test.

Using a traditional test to assess content knowledge is still the most widely used method of assessment in secondary schools. As a result teachers strive to make sure that students are given the best tools possible to assist them in passing these traditional assessments. Barbara Stern (2005) believes that an integrated approach to teaching social studies will be the most successful way to improve students’ content knowledge when
implemented within the classroom. Although traditional testing is not the only way to
gauge student content knowledge, it is the most widely recognized. Not only do educators
want students to retain the content they learned in the classroom, but they also want
students to be able to apply that knowledge in the context of real-life situations.

In a study funded by the Arizona Arts Education Research Institute and the
Tucson Pima Arts Council, four elementary teachers were chosen to participate using
integrated arts concepts in their curriculum (Betts, Fisher & Hicks, 1995). The main
learning objectives for the curriculum were found in mathematics, social studies, history,
science and language arts. Students participating in the research were given pre- and
post-tests on the content they were learning along with survey questionnaires.
Additionally, data was collected that included teacher observations, teacher interviews,
and journals that described the teachers’ perceived effects of the program. Once the study
was concluded, the results from the students in the research group were compared with a
similar group of elementary students in another, non-participating class. Students’ scores
on the content tests went up universally after the integrated lessons. For example,
students’ correct answers on the energy lesson went up by 36% overall (Betts, Fisher &
Hicks, 1995). Students were able to assimilate the information through the arts
integration program in the short term and improve their scores on the content tests.
Although this study was conducted with elementary-age children, it is a good example of
how effective using an integrated approach to teaching students and improving their
content knowledge seems to be.

Research
Julie Romero (1996) studied seventy-five fifth graders in an ethnically diverse school district in Southern California. She focused on two questions: 1) can visual arts be an effective way for students to express what they have learned in social studies; and 2) can creative activity improve motivation, participation, attitude, and enhance learning in social studies? Her data came from two sources, which included a teacher’s log and student work. Romero centered her research on the topic of explorers of the world. She found that interest levels in the unit were high, but took “a giant leap forward” when students had to create a painting on the explorer of their choice (Romero, 1996). Students who found testing difficult were able to express themselves in detail when they did it through the arts. Not only did using art help students of different learning abilities, but also the process improved comprehension, motivation, attitudes and enthusiasm of the students. By using multiple teaching methods, the arts in particular, Romero was able to excite students about social studies and promote their desire to know more. A limitation of Romero’s research may be the lack of quantitative data. Perhaps a comparative study with both previous work of students and work based on the integrated unit included in the data analysis would make a stronger argument.

A study done by Levstik and Barton in 1997 found that the use of historical photographs helped improve students’ understanding of chronology (McKean, 2002). By depicting historical events through pictures students were able to make distinctions in historical time more easily. Enhancing understanding through visual images provides students with another way to comprehend difficult historical periods.

Terrie Epstein (1994) conducted a study with an eleventh grade U.S. history teacher over the course of the 1990-91 academic year. She presented five two-week, arts-
based units that required students to interpret oral histories, paintings, poems, cartoons, songs, and stories. In one unit, the students were asked to create a story, poem, painting, collage, or song that depicted the late nineteenth century immigrant experience in America. After spending two weeks analyzing photographs, oral histories and cartoons about the immigrant experience students began their project. Seven of the students either did not complete the assignment or did a poor job on it. Another seven did an adequate job in displaying the historical themes presented in the unit. Six students created wonderful examples of historical artwork. Epstein found that the artistic representations students created from the historical period displayed a complexity of thought not normally seen in student tests or essays.

The integration of language arts into the social studies curriculum is one of the most seamless ways to integrate curriculum. A small, rural school of seventh- and eighth-graders participated in a study that looked at the effectiveness of an integrated curriculum (Lott & Wasta, 1999). Lott and Wasta created a unit over the civil war and infused letters and books of fiction into the curriculum. The researchers sought to give a voice to the people who participated in the war and bring life to these past experiences. Students were asked to read several first-hand accounts of young men who fought in the conflict and to read fictional books about the civil war. Students were then asked to reflect their thoughts in journals, engage in group discussions, and to research a selected topic and become experts in that topic. The researchers found that students projected deeper meaning in the events of the civil war by connecting with real people who experienced the conflict (Lott & Wasta 1999). The connections made during this unit improved comprehension of a difficult subject, allowed the content to come alive, and enabled students to think more
critically and reflect on the facts of the war. Logically, it seems that lessons which can facilitate a deeper understanding of the social studies curriculum must affect content knowledge as well.

**Conclusion**

The purpose of this review was to determine whether an integrated approach in the social studies curriculum has been shown to increase student content knowledge within the secondary social studies classroom. Since few related studies exist, this review focused on similar studies that found a link between curriculum integration and increased student motivation, meaning-making, comprehension and content knowledge. Throughout all of the research a common thread was found that suggests by integrating other content areas and approaches in the social studies curriculum, students are better equipped to comprehend the complexities of our past and relate it to the present. With this understanding, this researcher wanted to know whether an integrated curriculum would also increase student content knowledge. Throughout this research project it was found the standard assessment of content knowledge is through traditional testing. This research project applied similar techniques found in these studies as a means to answer the research questions. The findings from this study when coupled with the results of the studies just reviewed will make a strong case for curriculum integration in the secondary social studies classroom.
CHAPTER III

METHODOLOGY

Introduction

The methodology used during this research study helped to determine whether an integrated curriculum could improve student content knowledge in the U.S. history classroom. The researcher implemented this methodology to answer the three questions guiding the research. The questions guiding the methodology are:

1. What are the similarities and differences in understanding content knowledge of U.S. history on end-of-unit tests between integrated social studies classroom instruction and non-integrated classroom instruction?

2. What are the similarities and differences in attitudes of U.S. history students when it comes to being taught an integrated social studies curriculum and non-integrated curriculum?

The overarching question remained: Does implementing an integrated curriculum unit in the secondary social studies classroom help improve student’s content knowledge in U.S. history?

This research project represented a mixed methods approach which took place during January and February of 2009. This study utilized both quantitative data taken from the two post tests and qualitative data from the open-ended portion of the questionnaire. The subjects were eighth grade students enrolled in a U.S history classroom in a large urban city. The research project compared two units of study: one a non-integrated unit (Unit 1) relying heavily on the district approved textbook, and the
second a fully integrated unit (Unit 2) that utilized not only the textbook but lesson materials and activities that incorporated mathematics, science, language arts, and the fine arts into the curriculum. The researcher chose these two units of study because they were of equal length and difficulty, and they were of comparative interest to the students. This research projects’ purpose was to determine whether an integrated curriculum could help increase student content knowledge in the United States history classroom. During the course of this study, participating students experiences many different types of teaching methods and completed two end-of-unit tests, and two questionnaires. A teacher/researcher reflective journal was kept by the primary investigator. This research project has been approved by the Oklahoma State University Institutional Review Board (see Appendix A).

**Explanation of Research**

**Population**

The subjects in the research study reflected a diverse group of students and were representative of the students in the school as a whole. The classroom consists of 50% Caucasian, 40% African-American, and 10% Hispanic. In comparison to surrounding districts, it is a very diverse population. The students who participated in this research project reflect this diversity. Out of the twenty-one students who participated 14 were classified as Caucasian, 5 were African-American, and 2 were Hispanic. There were 10 females and 11 males participating in this study. All are eighth grade students at the middle school and are in the researchers Block 2 classroom. They volunteered to participate and signed a student consent form (see Appendix B) accompanied by their signed parent consent form (see Appendix C).
The study took place at an urban middle school in a large city. The school is considered an average size middle school with a student population of 534 students. This school is unique in the district as it is designated as a magnet school. However, this designation is deceiving since students are not chosen based on their ability. The school takes applications from parents all over the district. Each child is assigned a number and randomly selected to attend the school. Students are chosen during their fifth grade year and attend beginning in their sixth grade year. Since they are chosen by a lottery it is a very diverse population that represents a wide demographic area from around the city. As a result, it is one of the most diverse middle schools in the district.

The middle school is called a demonstration academy for several reasons. The researcher’s school was set up as an example to the rest of the district and provides students, parents and teachers with a wide variety of teaching methods, programs, and activities. Such programs include Tribes; which is a program designed to create a strong community within the school. Another program that has proved successful is the Microsociety. This curriculum is designed around the students to provide them with real-life experiences. In the beginning of the year, students interview with various businesses and are hired to work for the entire year. Students are responsible to run the businesses, facilitated by teachers, and must pay taxes, do payroll, and create inventory of their product or services. The Microsociety is a successful program that instills a sense of personal responsibility, real-world experiences, and financial skills missing in many middle school curriculums. All teachers at the school are encouraged to use a wide variety of teaching methods, strategies and all core classes are integrated. Science and mathematics are taught together by one teacher and language arts and social studies are
taught together. The researchers’ classroom is an integrated language arts and social studies classroom and the researcher is certified to teach not only social studies but also middle level English. Most lessons taught during the year in the classroom are fully integrated, with language arts and social studies taught together.

**Time Frame**

This research project was conducted over the course of a month in the researcher’s eighth grade, Block 2 classroom. The study began on January 12th and ended on February 10th, 2009. The same 21 (n=21) students in Block 2 participated in each unit. Block 2 is scheduled every day and runs from 12:50 to 2:20 pm. The subjects were seen for exactly 90 minutes a day by the teacher/researcher, five days a week. Traditionally this is not considered Block scheduling, however, in this school it is because the researcher teaches two subjects at a time. Typically the curriculum is integrated, however, during this research project the researcher focused on U.S. history exclusively. The only language arts curriculum the students encountered during the two units studied was during the integrated unit. Students not participating in the research project received the same curriculum as those who were. The only difference is that those students who did participate were given a questionnaire at the end of each unit test and their test scores were used as data. A teacher/researcher journal was also kept, recording participating student’s reactions and comments during the study.

**Non-Integrated Unit One (A New Nation)**

The first unit taught during the research study was the non-integrated unit (Unit 1) and acted as the ‘control’ unit (see outline Appendix D). Unit 1 was titled *A New Nation* and covered material from the Alien and Sedition Acts to the War of 1812 and utilized
the state’s *Priority Assessment Student Skills* (PASS) standards (for further information see daily lesson plans in Appendixes E, F, G, H). The non-integrated unit took 6 days to complete from January 12th to January 21st, 2009. This unit and all of its activities relied solely on the textbook provided by the school district; Prentice Hall’s *America: History of Our Nation, Beginnings Through 1877* (2007). No other outside materials were used during the teaching of this unit other than the post-test which was generated by the researcher.

Unit 1 was uniform in that every day was conducted the same. Each day the students would come into the classroom and there would be bell work on the board. The bell work would consist of vocabulary for the day. Students were instructed to use their United States history binders to create a vocabulary list for the unit. Every day they came into class and were instructed to copy the vocabulary into their list and define each term. Students typically took between 10 to 15 minutes to complete this task. The researcher would then lead them in a quick discussion over the meaning of these terms and how they related to the topic of the day. After this activity was over they would read from a section of the book. Sometimes students read aloud in class and discussed as they went along, while other times they would read at their tables. The teacher/researcher would lead a classroom discussion after everyone finished the readings. After completing the readings, the researcher would ask students to turn to their notes page in their United States history binders and they would participate in the Notetaking Guide provided in the supplementary materials provided with the textbook. Once students completed the Notetaking Guide they would then begin work on the Check Your Progress review for the
topic discussed that day. This would usually be assigned as homework due the following day.

The day before the test the researcher gave students a study guide to copy into their binders. After reviewing the material together as a class the researcher instructed the students to study for the remainder of the class period. On testing day the researcher distributed the tests which students completed. Dividers were provided for the round tables to prevent cheating and to help students focus on their tests and not on their neighbors.

**Integrated Unit Two (Industrial Revolution)**

The second unit conducted was the integrated unit (Unit 2) (see outline in Appendix I). Unit 2 took seven (7) days to complete from January 30th, 2009 to February 10th and was titled *The Industrial Revolution*. The same group of students who participated in Unit 1 participated in Unit 2. Unit 2 took eight (8) days to complete because Block 2 was interrupted by a fire drill and disaster drill on the 5th day and it took up the rest of the class period. As a result students never completed the lesson for the day and we had to complete it the following day. Unit 2 covered the early part of the Industrial Revolution in the United States and utilized the *Priority Assessment Student Skills* PASS standards (for further information see daily lesson plans in Appendixes J, K, L, M, N). This unit was organized very differently than Unit 1 had been and incorporated materials and lessons gathered over the years during the researchers teaching career. Very few of the notes, handouts, visuals, or homework was taken from the textbook. The power point presentations that were used for notes were made by the researcher, and the content they presented were gathered over the years from many different sources over the
years. Unit 2 included lessons that incorporated the fine arts by having students analyze two different images of family life before and after the Industrial Revolution. Art was incorporated when students created paper skates on day three (3) during the Factory vs. Craftsman simulation. Mathematics was also a part of the Factory vs. Craftsman simulation. After students completed the lesson, they were asked to create a bar graph in their table groups that compared the number of skates made in each simulation. Language Arts was infused throughout Unit 2 and students were asked to write almost daily through their quickwrites and a variety of assignments. After reading the primary source documents over the life of Lucy Larcom, students were asked to write a letter as Lucy to her family back home. Students were also asked to write a formal essay describing the most important invention during the Industrial Revolution. Science was also incorporated into Unit 2 through an experiment which demonstrated the science of steam power based on the power point presentation on day five (5) that displayed the inner workings of a steam engine using an interactive model that students were able to manipulate on their own. Once the lessons for Unit 2 were completed, the same procedures from Unit 1 were used for the study guide and the test.

**Data Collection**

All students who participated in the research project were given a number that correlates with their name. Their names were not be mentioned in this study and the list with their names and numbers on it was kept locked in the researcher’s desk drawer along with their consent forms and all other data collected during the research project. The data collected during this research project included two tests from the two units described
above, questionnaires from each unit given, and a teacher researcher reflective journal
written daily by the researcher.

**Unit 1 & Unit 2 Tests**

The Unit 1 test was administered on January 21\textsuperscript{st}, 2009 and the Unit 2 test was
administered on February 10\textsuperscript{th}, 2009. Procedures for the administration of both tests were
the same. Unit 1 and Unit 2 tests were given twenty minutes into the class period (see
Appendix O and P). Students were given the opportunity to study for ten minutes prior to
taking the test with their table groups. Once the ten minutes were up students put their
study guides away and set up dividers at each table. Once dividers were up the test was
distributed to the entire class. All participating students in the study took the test along
with the rest of the class. Participants in the study did not receive a test with their
designated numbers on it. However, both tests were aligned with the students
predetermined number once all grading was completed. All students were required to
write their name on the test as they normally do in the classroom. All students
participating in the study took the test exactly like all other students in the classroom.
The researcher felt that this was best because she wanted participating students to take the
test in an environment and fashion with which they were familiar. Once the tests were
completed the materials were picked up and graded after class. The researcher then input
grades into the grading program at school. The researcher graded each participating
students test with their names still written on the upper right hand corner. This was done
because the researcher felt this would not affect the way she graded the tests or the data
since the questions on the tests are not subjective, they were marked as either correct or
incorrect.
Once general grading of the class test scores were completed, the researcher sorted out those students’ scores who participated in the research project. As stated above, each student was given a number that identified them. The researcher went through each student’s test and marked out student names and labeled the test with the identifying number. The raw score on each test was then circled and highlighted. This procedure was followed for both Unit 1 and Unit 2 tests. Once these procedures were completed the researcher compiled a chart that listed the raw scores and percentage scores for each student on both Unit 1 and Unit 2 tests.

**Questionnaire**

A questionnaire was given to the students once they completed the test from each unit (see Appendix Q). Each questionnaire was labeled with the students designated number and the researcher instructed them to fill out the questionnaire in pencil to make it easier for students to erase their answers if they wanted to. Students were asked to take the questionnaire out in the hallway where it was quieter and they could not be distracted or intimidated by students not participating in the study. The questionnaire had two parts: one that incorporated a Likert-type scale that asked students whether they liked or disliked the units taught and whether they felt it helped them prepare for the test. The second part included open-ended questions that asked specifically what parts of the unit students liked the most, if any. The Likert-type scale gave the researcher quantitative data over student attitudes towards the two units of study. The open-ended questions provided qualitative data and were used along with the teacher/researcher reflective journal to verify student attitudes exhibited during class time. It was important to include open-ended questions with this study to better understand students’ grasp of the content.
knowledge and to gather qualitative data that would refute or verify the quantitative data gathered from both post-tests. By comparing the open-ended questions with the post-test results, the researcher wanted to find out whether there were any similarities or differences between the students experience with a non-integrated unit and an integrated one. The answers received on the questionnaire enabled the researcher to better understand what students actually understood and absorbed during the two units of study. This helps explain what content knowledge students grasped during Unit 1 and Unit 2.

**Teacher/Researcher Reflective Journal**

During the course of Unit 1 and Unit 2 a teacher/researcher reflective journal was kept documenting the process along the way. The researcher felt it was important to keep a detailed document of the daily activities during the two units for use as data in the research. Any interruptions, problems or difficulties encountered during the units of study would be recorded and used during the data-analysis for this research paper. The journal enabled the researcher to reflect back on any limitations or problems experienced during the units and to better explain them. It was also important to detail student comments or questions they may have had during the two units of study. Comparing student comments during class with comments made from the open-ended portion of the questionnaire was helpful in the overall analysis of the data. For instance, if a student expressed doubt about a particular section during Unit 1 and also expressed that doubt on his/her open-ended section of the questionnaire, the researcher evaluated whether that affected their test score.

**Limitations of the Study**
There were some limitations experienced during this study. During Unit 1 there were several students absent due to illness or field trips. They were gone no more than two days but this definitely affected their ability to participate fully in the study. On day 5 of Unit 1 half of the class was absent due to illness or because of a band field trip. Day 5 was a discussion of the War of 1812 and the researcher had students read and take notes. This was something easily accomplished at home for those students who were absent, but was a limiting factor when it came to testing. This did not limit the results that much because our class was cut short due to a spelling bee. So students who missed the lesson did not miss much and the researcher was forced to give the rest of the lesson the following day. Student number 118 was absent for both Unit 1 and Unit 2 tests. That students’ data was still used in the results and explains the huge difference in her scores. This was a limiting factor in the overall results.

There were also errors on both tests after the researcher received approval from the IRB. While explaining the directions for Unit 1 test to the students a typing error was noticed on question 18. There were two words missing from the sentence. As it was an incomplete sentence the researcher asked the students to not answer question 18, thus it is not used in the overall scores. Question 7 also had an error and students were asked to correct it and answer the question. However, many students missed this question and this may have been a cause. A similar error was found on question 13 on Unit 2 test. It covered material about immigrants, which was not a topic discussed during Unit 2. It was an old question used the previous year and was thus omitted from the test. Interestingly, both tests had one error each and the researcher was able to keep the same amount of questions for both tests. Another limitation was the fact that the researcher felt more
comfortable teaching Unit 2 than Unit 1. The researcher had a lot of background
knowledge over the Industrial Revolution and felt more confident in teaching the unit.
This had the greatest impact on the overall research. The researcher and the students also
were very familiar with teaching in an integrated classroom. The classroom is set up as an
integrated language arts and social studies classroom. The teacher is certified in both
areas and thus may give a slight advantage towards the integrated unit (Unit 2) over the
non-integrated unit (Unit 1). However, no integrated materials were used in the non-
ingegrated unit (Unit 1).

One last limitation encountered during this research project was the lack of a pre-
test for each unit. Initially, the researcher did not want to give a pre-test before the units
began because it was felt that a pre-test was not needed. In eighth grade U.S. history most
of the curriculum taught to students is all new material. The last time students were
exposed to United States history was in fifth grade. It was felt that students would have
little background knowledge in the subject and thus a pre-test was not warranted.
However, looking at the data the study would have been much stronger if a pre-test had
been included in both units.
CHAPTER IV

FINDINGS

Introduction to Findings

During the course of this research study a methodology was used to determine whether an integrated curriculum can improve student content knowledge in the U.S. history classroom. The data collected from this study enabled the researcher to answer three questions guiding the research study. The research questions were:

1. What are the similarities and differences in understanding content knowledge of U.S. history on end-of-unit tests between integrated social studies classroom instruction and non-integrated classroom instruction?

2. What are the similarities and differences in attitudes of U.S. history students when it comes to being taught an integrated social studies curriculum and non-integrated curriculum?

Ultimately, these questions led to the over-arching question that guided this research:

Does implementing an integrated curriculum unit in the secondary social studies classroom help improve student’s content knowledge in U.S. history?

The findings of this research study found a difference between content knowledge learned when comparing non-integrated test scores with integrated ones. Although the difference is small, it is statistically significant to establish a relationship between an
integrated curriculum and improved content knowledge. The following data table displays the differences in test scores between the two units given. The data was broken down in two different ways: the first set of data compares the test scores of each individual student from each unit, and the second set of data compares the percentage of questions answered correctly by the students from each unit test.

**Unit 1 and Unit 2 Tests Compared**

After comparing the tests from Unit 1 and Unit 2 there was a difference between the two scores. Unit 1, the non-integrated unit, test scores were slightly lower overall than the integrated unit (Unit 2).

Table 1

<table>
<thead>
<tr>
<th>Student Number</th>
<th>Unit 1 Class Test</th>
<th>Unit 2 Class Test</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>16/24 (76%)</td>
<td>15/24 (62%)</td>
<td>-1</td>
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<tr>
<td>102</td>
<td>21/24 (87%)</td>
<td>21/24 (87%)</td>
<td>0</td>
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<tr>
<td>103</td>
<td>19/24 (79%)</td>
<td>17/24 (70%)</td>
<td>-2</td>
</tr>
<tr>
<td>104</td>
<td>12/24 (50%)</td>
<td>10/24 (41%)</td>
<td>-2</td>
</tr>
<tr>
<td>105</td>
<td>23/24 (95%)</td>
<td>22/24 (91%)</td>
<td>-1</td>
</tr>
<tr>
<td>106</td>
<td>18/24 (75%)</td>
<td>20/24 (83%)</td>
<td>2</td>
</tr>
<tr>
<td>107</td>
<td>9/24 (37%)</td>
<td>18/24 (75%)</td>
<td>9</td>
</tr>
<tr>
<td>108</td>
<td>21/24 (87%)</td>
<td>24/24 (100%)</td>
<td>3</td>
</tr>
<tr>
<td>109</td>
<td>18/24 (75%)</td>
<td>19/24 (79%)</td>
<td>1</td>
</tr>
<tr>
<td>110</td>
<td>16/24 (66%)</td>
<td>17/24 (70%)</td>
<td>1</td>
</tr>
<tr>
<td>111</td>
<td>21/24 (87%)</td>
<td>21/24 (87%)</td>
<td>0</td>
</tr>
</tbody>
</table>
Out of 21 students taking the Unit 1 test, no student had a perfect score and the average test score was 16/24 which is a 76%. Fifteen out of the 21 students passed with a percentage score greater than 60%, six (6) students failed the test with a score lower than 60%. Sixty percent and above is considered passing in the researchers classroom. Out of the 21 students who took Unit 2 test, one (1) student had a perfect score. The average test score for Unit 2 was 18/24 which is 85%. Eighteen out of 21 students passed with a percentage score greater than 60%, while three (3) students failed with a score lower than 60%.

Table 2.

*One-Sample T-test Assessment Results*

<table>
<thead>
<tr>
<th>Variable</th>
<th>T-Value</th>
<th>Degrees of Freedom</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAR00001</td>
<td>14.689</td>
<td>20</td>
<td>.000</td>
<td>16.28571</td>
</tr>
<tr>
<td>VAR00002</td>
<td>22.917</td>
<td>20</td>
<td>.000</td>
<td>18.66667</td>
</tr>
</tbody>
</table>
Table 2 displays data analysis using a one-sample T-test. This T-test indicates that student test scores for both the non-integrated unit (Unit 1) and the integrated unit (Unit 2) were significant at the .000 level. The data analysis was conducted using SPSS ©. The results from the one sample T-test does promote the assertion that students understanding of the content knowledge in the U.S. history classroom would improve with an integrated curriculum.

Comparing the results between the two scores, it is clear to see that overall students improved their test scores when presented with an integrated curriculum. Twelve students scored better on Unit 2 test when compared with Unit 1 test. Seven (7) students scored lower on Unit 2 test in comparison to Unit 1 test, and two (2) students had no change between the two test scores. Overall there was a 9% increase in test scores between the two unit tests.

Unit 1 Test Questions

Questions number 7, 12, and 19, were the most commonly missed on Unit 1 test. Question 7, as stated before had an error in it and students were asked to fix the error and answer the question. Some students may not have made the change and this could account for the large number of students who missed the question. Question 7 was over the XYZ Affair and 3 students expressed that they found this concept confusing on the questionnaire. Students 101 and 120 who expressed this confusion also answered question 7 incorrectly on the test. Only 4% of students answered question 12 correctly. Although it was the most missed question, only student 106 mentioned that they had difficulty with the concept and found it confusing. Question 19 was commonly missed,
yet no students commented either positively or negatively on the questionnaire. Question 19 was a multiple choice question related to the idea of states’ rights.

**Unit 2 Test Questions**

Questions 4, 16, and 19 were the most commonly missed. Question 4 was fill in the blank and dealt with the increase demand for cotton in northern factories. Question 16 was a True/False question that talks about Cyrus McCormack and the invention of the mechanical reaper. Question 19 was multiple choice and asked why women would want to work at the Lowell mills. Only 47% of students answered question 4 correctly, yet not one student stated on their questionnaire that they found that concept difficult. Students 103, 106, and 110 all missed question 16, yet on the open-ended portion of the questionnaire they felt that learning about the technologies during the industrial revolution was one of the most helpful parts of Unit 2. Student 103 found that remembering inventors names was the hardest part about Unit 2 and his statement is backed up by the fact that he missed question 16. Only 33% of students answered question 16 correctly. Student 114 stated on her questionnaire that she found information over factory life the most helpful to her, yet she missed question 19. Student 113 found the names of factories confusing and she also answered question 19 incorrectly. Overall, only 47% of students answered question 19 correctly.

**Student Responses to Questionnaire**

After each unit test was completed, participating students were asked to complete a questionnaire (see Appendix Q). The questionnaire was broken into two sections; one a Likert scale and the other open-ended student responses. The following analysis will be looking closely at the Likert scale. This scale focused on student attitudes and perceptions.
of the two units. Students strongly agreed that the unit helped them learn what their
teacher wanted them to know. Thirty-three percent (33%) of students felt they would
receive a good grade on the test and only 24% liked the unit of study. Only 24% felt they
were prepared to take the test after the unit was concluded. With the average score on
Unit 1 test being 76%, it seems students exceeded their expectations. Students overall had
a poor view of Unit 1, yet still felt that they learned the information they needed to know.

Only 57% of students felt that Unit 2 helped them to learn what their teacher
wanted them to know. 48% of students felt they would receive a good grade on the test,
yet only only 33% of students liked the unit of study. Only 48% of students felt prepared
to take the test; however, the average test score for Unit 2 was an 85%. As with Unit 1,
students greatly exceeded their expectations.

Unit 2 received more positive feedback overall than did Unit 1. Questions 2, 3,
and 4 received higher percentages than did Unit 1. Question 1 received a higher
percentage rate on Unit 1 than did Unit 2; however, this difference was only by 5%.
When you compare the percentage of students that felt positively about question 1 on
both Unit 1 and Unit 2, the difference is very small. As a whole, students felt that both
units helped them learn what they needed to know, which is contradictory to what the test
scores and student responses indicate.

Student Responses to Open-Ended Questions on Questionnaire

The following analysis will review the second half of the questionnaire given to
students after each unit test. These questions were open-ended and displayed the students
reactions and attitudes towards the two units of study. The researcher found five key
words that emerged from student responses from questions one through four. From these
four questions the most common remarks made by the students from both Unit 1 and Unit 2 open-ended questions were: helpful, interesting, boring, confusing, and fun. Four (4) students from Unit 1 found the unit helpful, eight (8) interesting, seven (7) found the unit boring, four (4) confusing and four (4) found the unit to be fun. Students responded to Unit 2 slightly more positively. Eight (8) found the unit helpful, nine (9) interesting, two (2) boring, one (1) student said it was confusing, and 11 students found the unit to be fun. Students overall had a slightly more favorable attitude toward the integrated unit (Unit 2) than the traditional, non-integrated unit (Unit 1).

**Conclusion**

Overall the data shows that there was a 9% increase in the end-of-unit test scores when students experienced learning through the integrated unit. This increase, however, is softened by the many errors found in both tests. Students displayed a slightly more positive attitude toward the integrated unit over the non-integrated unit as demonstrated on both the Likert-type scale and the open-ended response sections of the questionnaire.
CHAPTER V

CONCLUSION

The purpose of this research project was to determine whether student content knowledge can be improved in the U.S. history classroom when students experienced learning through an integrated curriculum unit. Throughout the research process two questions have guided the experimental study. These questions are:

1. What are the similarities and differences in understanding content knowledge of U.S. history on end-of-unit tests between integrated social studies classroom instruction and non-integrated classroom instruction?

2. What are the similarities and differences in attitudes of U.S. history students when it comes to being taught an integrated social studies curriculum and non-integrated curriculum?

This research study was guided by the overarching question: Does implementing an integrated curriculum unit in the secondary social studies classroom help improve student’s content knowledge in U.S. history? These questions guided the research and enabled the researcher to come to the conclusion that an integrated curriculum can be a tool to help students improve their content knowledge in the U.S. History classroom.

Based on the findings, there was evidence that students’ understanding of content knowledge rose when they were exposed to an integrated curriculum unit. However,
students’ responses on the questionnaire indicated that both units helped them learn what
their teacher wanted them to know. This is a significant finding, especially in light of the
fact that students scored higher overall on Unit 2 (the integrated unit) than on Unit 1 (the
traditional unit). Based on the survey and test results, student attitudes toward the
integrated curriculum unit was more positive than it was to the non-integrated unit. Ten
(10) students stated that both Unit 1 and Unit 2 were either “fun,” “cool,” or
“interesting”. However, six (6) students described Unit 1 as “boring” as opposed to only
two (2) who stated this same sentiment for Unit 2. One (1) student actually stated that
Unit 2 was “not boring.” Overall student attitudes were more favorable to the integrated
curriculum unit than to the more traditional unit.

This study found that utilizing an integrated curriculum can help raise student test
scores and thus seems to improve students’ content knowledge. Student scores improved
by 9% when they were taught lessons using integrated teaching strategies. However,
these findings are hampered by the fact that there were many limitations which evolved
during the course of the research. As a result, this study should be replicated on a larger
scale. In the future, a similar study could be conducted using two separate classrooms and
continue over the course of an academic year. One classroom would be exposed to an
integrated U.S. history curriculum while the other would be taught using a traditional,
non-integrated curriculum. At the end of the school year, the students’ scores on the state-
mandated test could be evaluated to determine whether differences exist between the two
sets of scores. The results from the new research study might present documentation that
could enable educators to appreciate and understand the power of an integrated curriculum and its worth in pursuing the implementation of such materials in the secondary social studies programs.

Although more research needs to be conducted to broaden the research in this project, it is clear that there is a slight difference in students’ learning between studying an integrated curriculum versus a traditional, non-integrated one. This researcher found that students were more engaged and enthusiastic during the integrated curriculum unit (Unit 2). As this engagement seems to translate into slightly higher test scores, it is only natural to want to explore further whether this type of curriculum can really help enhance students’ understanding of the U.S. history content.

**Future Implications**

During this experimental study the researcher found that there was a 9% increase in student test scores when students were exposed to an integrated curriculum unit. Attitudes towards the integrated unit (Unit 2) were also slightly higher when compared to the attitudes expressed regarding the traditional, non-integrated Unit 1. This data reinforces similar studies that have been completed in the past. As reported by McKean in 1994, Singer Gabella found that by studying the differences students constructed when exposed to different types of visuals, students were more likely to be challenged within the classroom setting (McKean, 2002). The integration of visual materials in the curriculum instills a deeper meaning into what students learn. Bruner, Eisner, Dewey and Gardner all believed that making-meaning must include multiple modes, not just through
recitations or the written word. Students need to be exposed as well to visual, narrative, spatial and musical modes of learning (Epstein, 1994).

The study funded by the Arizona Arts Education Research Institute and the Tucson Pima Arts Council found that students exposed to an integrated curriculum saw an increase in test scores (Betts, Fisher & Hicks, 1995). A similar study was conducted by Julie Romero (1996) that looked at student attitudes and improved content knowledge when students were exposed to an integrated social studies curriculum. Although no quantitative data was provided, improvement in student motivation and students’ desire to learn increased. These studies support this experimental study and the data that has been discussed earlier. There is improvement in student content knowledge when they are exposed to an integrated curriculum.

This research project has not shown a significant increase in student content knowledge between the two units; however, the slight improvement students showed does warrant further study. In the future, the researcher would like to continue this study on a much larger scale. The researcher would like to have this project replicated over the course of a year. Using two different classrooms from similar 8th grade schools, the researcher would compare two different curriculum approaches over the course of a year. One classroom's curriculum would be based upon the textbook and more traditional modes of teaching, while the other classroom would use an integrated curriculum method to teach U.S. history. At the end of the year the scores for the state-mandated 8th grade U.S. history test would be examined to determine whether a difference existed between
the scores of the students in the two classrooms. This research method might provide a more accurate picture of whether an integrated curriculum can improve content knowledge in the U.S. history classroom. Through more research, it is hoped that these questions will be addressed more fully.
REFERENCES


APPENDICES
Appendix A

Oklahoma State University Institutional Review Board

Date: Friday, December 05, 2008
IRB Application No: ED08176
Proposal Title: The Case for Integrated Teaching Strategies: Does it Stand Up to the Test?

Reviewed and Processed as: Exempt

Status Recommended by Reviewer(s): Approved  Protocol Expires: 12/4/2009

Principal Investigator(s):
Heather Taylor  Jeffrey Hawkins
1548 E. 49th Street  255 Willard
Tulsa, OK 74105  Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research, and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-6700, bmcternan@okstate.edu).

Sincerely,

Malika Konnion, Chair
Institutional Review Board
Appendix B

Student Assent Form

I am trying to learn about teaching strategies that work for Middle School students in my classroom and whether they help to raise test scores. If you would like, you can be in my study.

If you decide you want to be in my study, you will be expected to complete the following:

- Complete a questionnaire at the end of each unit
- Allow me to use your test scores for the two units of study for my research
- Allow me to use my own observations of you during the study for my research

You will take the tests regardless of your participation in the study. The only requirement is that you take the two questionnaires after each unit.

You will be under no risk during the course of this study.

Other people will not know if you are in my study. I will put things I learn about you together with things I learn about other students, so no one can tell what things came from you. When I tell other people about my research, I will not use your name, so no one can tell who I am talking about. I will identify each of you by a number. The list of names and numbers will be kept in a locked drawer then destroyed after a period of four months.

Your parents or guardian have to say it's OK for you to be in the study. After they decide, you get to choose if you want to do it too. If you don't want to be in the study, no one will be mad at you. If you want to be in the study now and change your mind later, that's OK. You can stop at any time.

You can talk to me if you have questions about the study or if you decide you don't want to be in the study any more.

I will give you a copy of this form in case you want to ask questions later.

Agreement

I have decided to be in the study even though I know that I don't have to do it. Heather Taylor has answered all my questions.

_________________________  _______________________
Signature of Study Participant  Date

_________________________  _______________________
Signature of Researcher  Date
Appendix C

Parent Permission Form

Project Title: The Case for Integrated Teaching Strategies: Does it Stand Up to the Test?

Investigators: Heather Taylor
B.A. Langston University

Purpose:
The purpose of this research study is to find out whether integrating lesson plans that include the visual arts, math, science and language arts can help students raise their test scores.
The information needed for this research will be two test scores and two questionnaires.
- The units the students will be involved in will be no different from their normal classroom lessons.
- The only difference is that I will use their test scores in my research.

Procedures:
The students will be asked to complete the following:
- Complete two tests over each unit
- Complete two questionnaires over each unit
The unit tests are not a part of the research, only the test scores will be used in my research. I will use the data from the questionnaires in my research also. The purpose of the questionnaire is to figure out what the students think about the unit and the tests. I want to know whether they think the unit of study helped them with their test or not. The questionnaire will take no longer than ten minutes to complete. I will also keep a daily journal during the course of the two units of study. My entries will record any reaction by participating students over the course of study. The information I will record will deal with student confusion, difficulty and whether the units are helpful to them.

Risks of Participation:
There are no known risks associated with this project which are greater than those ordinarily encountered in daily life.

Benefits:
No expected benefit is expected other than that which is reasonably expected from a public school education.

Confidentiality:
The following is a description of the types of protections the investigator will provide for the students:
No names will be used to identify the participating students in the study. I will have a list of student names and each student will be assigned a number to identify them in the study. This list will be kept in a locked desk drawer in my room. The data will be maintained in my locked
drawer for no more than four months and then will be destroyed. The data will be used for my Master's Thesis.

The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify your child. Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. It is possible that the consent process and data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

Contacts: Please feel free to contact me or my advisor about any concerns you may have.

Heather Taylor Dr. Jeffrey Hawkins
#833-9723 (405)744-8023

If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu

Participant Rights:
Participation in this study is voluntary and subjects may drop out of the study at any time.

Parental Signature for Minor
I have read and fully understand the consent form. As parent or guardian I authorize ___________________________ (print name) to participate in the described research.

Parent/Guardian Name (printed) Date

I certify that I have personally explained this document before requesting that the participant sign it.

Signature of Researcher Date
Appendix D

A New Nation - Unit 1 Outline

Day 1

Alien and Sedition Acts/Marbury vs. Madison/Whiskey Rebellion (Chpt. 8.4&9.1)

1. Focus Topic: Have students discuss/define the following: Alien and Sedition Acts, States Rights, Marbury vs. Madison.

2. Have students read Chapter 8, Sec. 4 and Chapter 9, Sec. 1. Go over the headings in both chapters before reading.

3. Have students copy Notetaking Guide into their notes under A New Nation notes in their binders. As a class fill in the blanks with the students and discuss.

4. Have students complete the following for homework: Chapter 8, Section 4, CheckYour Progress, Question 2(a) and Chapter 9, Section 1, Check Your Progress, Questions 2(a&b) for the next day.

Day 2

Louisiana Purchase (Chpt. 9.2)

1. Vocabulary: Have students write down in their notes the following terms and define them: Expedition, Continental Divide

2. Read Chapter 9, Sec. 2 aloud with class and discuss.

3. Display overhead of Map: Exploring the Louisiana Purchase

4. Hand out Louisiana Purchase Mapping assignment and have students begin working on it.
5. Have students complete the Louisiana Purchase Map for the next day.

Day 3

A Time of Conflict/ Embargo Act (Chpt. 9.3)

1. Have students write down in their notes the following terms and define them: Tribute, Embargo, Smuggle, Impressment

2. Read Chapter 9, Section 3 at tables quietly.

3. Notetaking Guide/Embargo Act: Have students copy notetaking guide into their notes under A New Nation notes in their binders. As a class fill in the blanks with the students and discuss.

4. Have students complete the following for homework: Chapter 9, Sec. 3 Check Your Progress Questions 1(a&b) & 2(a) due the next day.

Day 4

War of 1812 (Chpt. 9.4)

1. Have students write down in their notes the following terms and define them:
   Nationalism, War Hawks, Blockade, Secede

2. Read Section 4 out loud with students and discuss. Hand out and have students complete Dolly Madison Worksheet once they read page 330.

3. Fill out Notetaking Guide over War of 1812. Have students copy Notetaking Guide into their notes under A New Nation notes in their binders. As a class fill in the blanks with the students and discuss.
4. Homework: Chapter 9, Sec. 4 Check Your Progress, Questions 1(a), 2(a), 4, 5 due the next day.

Day 5

1. Complete Notetaking Guide from the previous day.

2. Have students copy the study guide for the test into their binders.

3. Go over the Study Guide with the students and discuss any questions they may have about the test for tomorrow.

4. Students study at their tables.

5. Have students study for the test tomorrow.

Day 6

1. A New Nation Test.
Appendix E

Unit 1 Daily Lesson Plan-Day 1

Objective: Describe how Washington responded to the Whiskey Rebellion. What were the Alien and Sedition Acts. Discuss the importance of Marbury vs. Madison. How were the founding fathers able to keep the rule of law in the first decade of the new U.S. government’s existence?

PASS Standards: Standards 5.8 & 5.9

Materials:


2. U.S. History Binder

3. Notetaking Guide

Lesson:

1. Bellwork: Write the following topics on the board- Alien and Sedition Acts, States Rights, Marbury vs. Madison and Whiskey Rebellion. Tell students should be instructed to copy these terms into their binder. They will be expected to define these terms at the end of the class period.
2. Read Chapter 8, section 4 and Chapter 9, section 1. Before reading, go over the headings in each chapter with the students. As a class discussion, have students predict what might be happening in these two sections.

3. Introduce the Notetaking Guide to the class on the Smartboard. (The Notetaking Guide are notes that students have to fill in the blanks as it is presented to them on the Smartboard.) They should copy the notes into their binders. As we discuss the Notetaking Guide for that day, students will fill in the blanks using their textbook.

4. Have students complete the following for homework due the next day. Chapter 8, section 4 Check Your Progress questions 2(a) and Chapter 9, section 1 Check Your Progress questions 2(a&b).
Appendix F

Unit 1 Daily Lesson Plan-Day 2

Objective: Describe how the United States gained the Louisiana Territory and discuss Lewis and Clark’s expedition. How did purchasing the Louisiana Territory affect the future of the United States?

PASS Standards: Standards 5.9 & 9.3

Materials:

2. Louisiana Purchase Map

Lesson:

1. Bellwork: Students should copy the following terms into their U.S. History binder and define them using their textbook. –Expedition –Continental Divide

   Students will find the definition in Chapter 9, section 2 of their textbook.

2. Read Chapter 9, section 2 aloud with the class and discuss. Making sure that you go over the map on page 316 with the students.

3. Display the overhead of Map: Exploring the Louisiana Purchase

4. Hand out the Louisiana Purchase mapping assignment to students

5. Have students complete the Louisiana Purchase Map for homework due the next day.
Objective: Discuss the events leading up to the Embargo and how the newly formed United States government dealt with foreign threats. How did the U.S. government respond to threats to the nation? What mistakes did they make?

PASS Standards: Standard 5.9

Materials:

2. U.S. History Binder
3. Notetaking Guide

Lesson:

1. Bellwork: Write the following topics on the board- Tribute, Embargo, Smuggle, Impressment. Students should be instructed to copy these terms into their binder. They will be expected to define these terms at the end of the class period.
2. Read Chapter 9, section 3 with their table groups. Once all tables are finished, have a class discussion over the section, using the section headings as a guide.
3. Put the Notetaking Guide up on the Smartboard. They should copy the notes over section 3 into their binders. As we discuss the Notetaking Guide for that day, students will fill in the blanks using their textbook.
4. Students should complete Check Your Progress questions 1(a&b) 7 2(a) in section 3 for homework due the next day.
Appendix H

Unit 1 Daily Lesson Plan- Day 4

Objective: Discuss why the U.S. declared war on Britain. Describe the major events of the war and how it came to an end. Why, despite their best efforts, did the U.S. government finally go to war with Britain?

PASS Standards: Standard 5.9

Materials:

2. U.S. History Binder
3. Notetaking Guide
4. Dolly Madison Worksheet

Lesson:

5. Bellwork: Write the following topics on the board- Nationalism, War Hawks, Blockade, Secede. Tell students should be instructed to copy these terms into their binder. They will be expected to define these terms at the end of the class period.
6. Read aloud in Chapter 9, section 4 with the students. Pause on page 330 and hand out the Dolly Madison Worksheet. Have students complete this together at their tables and then have a brief discussion over the burning of the White House. Complete the remainder of the section aloud with students.
7. Display the Notetaking Guide on the Smartboard. They should copy the notes into their binders. Students will fill in the blanks using their textbook as we discuss.

8. Complete Check Your Progress questions 1(a), 2(a), 4 and 5 for homework due the next day.
Appendix I

Industrial Revolution Lesson Plan

Day 1 (K)

1. Introduce the unit by displaying the two images of a colonial family at work and industrial life. Complete PIE chart over each of the images.

2. Vocabulary: List these two terms on the board for the students and have them define them in their binders: Agricultural Economy, Industrial Economy.

3. Display the Compare and Contrast Diagram.

4. Homework: Students will write a 1 page entry describing the changes to American families during the early part of the Industrial Revolution. Must be in ink. Due the next day.

Day 2 (L)

1. Have students take notes as I lecture over the Industrial Revolution.

2. Handout the Timeline of Events assignment and explain to the students. Due in two days.

Day 3 (M)

1. Complete notes from yesterday.

2. Hand out Lucy Larcom primary source document to the students and have them read it in their table groups. Have them list the positive and negative aspects of factory life.
3. Hand out the primary source document analysis sheet to the students and have them complete it with their table groups.

4. Have students write a two page letter as a factory worker in the Lowell mills for homework. Using the information they received during their analysis they must write a letter to a family member back home and give detailed information about life in the mills. Due tomorrow.

Day 4 (N)

1. Have students complete the Factory vs. Craftsman simulation in their tables.

2. Students will graph the results of their simulation as a group to turn in at the end of their class.

3. Have students present their graph and lead a discussion on the results.

Day 5 (O)

1. Have students complete their Quickwrite on the board.

2. Hand out Bucket Art images to each table group. Students will classify these images into categories. Discuss Bucket Art images.

3. Show Power Point presentation over Technology and Transportation on the Smartboard. Stop during the presentation to complete the steam power experiment and telegraph display.

4. Have students complete a paper over one of the inventions they learned about in class. Topic: The most important invention during the industrial revolution was___________. Due the next day.
Day 6 (P)

1. Have students copy the study guide for the test into their binders.

2. Go over the Study Guide with the students and discuss any questions they may have about the test for tomorrow.
Appendix J

Unit 2 Daily Lesson Plan-Day 1

**Objective:** Introduce the Industrial Revolution to the students through art. Why did life change so drastically during the Industrial Revolution?

**PASS Standards:**

**Materials:**

1. An overhead of Colonial family at Work and Textile factory image.
2. PIE Chart-two copies per student (double-sided)
3. Overhead of Compare/Contrast Chart

**The Lesson:**

1. Introduce the unit by displaying the image of a colonial family at work and have students complete the PIE chart with their tables. Next display the image of the textile mill and have students complete the PIE chart over this image.

2. Have students compare the two images with their tables and have them list five differences they observed while analyzing these images. Have each table orally tell the class of the differences they observed. Then lead the students in a discussion of how drastically life changed during the sixty year period of the early industrial revolution. Discuss the changes in the American landscape, work habits and family life.

3. **Vocabulary:** List these two terms on the board for the students and have them define them in their binders: Agricultural Economy, Industrial Economy.
4. Display the Compare and Contrast Diagram on the overhead and have students list what life was like before and after the industrial revolution and have them save the diagram in their notes.

5. Homework: Students will write a 1 page entry describing the changes to American families during the early part of the Industrial Revolution. Must be in ink. Due: Tomorrow.
Appendix K

Unit 2 Daily Lesson Plan-Day 2

Objective: To give students an overview of the transformation of American life from an agricultural society to an industrial one. Why did this transformation take place?

PASS Objectives:

Materials:

1. Overhead of notes
2. Timeline of Events assignment

Lesson:

1. Have students take notes as I lecture over the Industrial Revolution. Take time to answer student questions and to look over the map of the U.S. so students can begin to realize the dividing line between north and south.

2. Handout the Timeline of Events assignment and explain to the students. Due in two days.
Appendix L

Unit 2 Daily Lesson Plan-Day 3

Objective: To help students understand the impact the industrial revolution had upon ordinary Americans. How did the industrial revolution affect peoples lives?

PASS Standards:

Materials:

2. Primary source document analysis sheet.

Lesson:

1. Complete notes from yesterday.

2. Hand out Lucy Larcom primary source document to the students and have them read it in their table groups. After they finish reading the document in their groups have the students collectively list some of the positive and negative experiences Lucy encountered while working at the factory. Have each group appoint a speaker and have them share their list with the class. Hand out the primary source document analysis sheet to the students and have them complete it with their table groups.

3. Homework: Have students write a two page letter as a factory worker in the Lowell Mills. Using the information they received during their analysis they must write a letter to a family member back home. Due tomorrow.
Appendix M

Unit 2 Daily Lesson Plan-Day 4

Objective: Students will learn the differences between hand made goods and goods made from a factory. What are the advantages and disadvantages of factory made goods.

PASS Standards:

Materials:

1. Paper skates.
2. Scissors, crayons, glue, rulers, markers and graphing paper.
3. Timer.

Lesson:

1. Hand out several sheets of the skates to every one in the class. Instruct the students that they have ten minutes to cut out, color, and glue as many pairs of skates as they can on their own. After they are done have them write down how many pairs they made by themselves on a piece of scratch paper.

2. Hand out several sheets of skates to the table groups. Instruct students that they are to make as many skates as possible in a group within a ten minute period. The skates must be cut out, glued and colored for them to be counted. After they are finished have the group write down how many skates they completed.

3. Hand out a sheet of graphing paper to each table group. In their table groups, have the students calculate the average number of skates each student made individually. After finding the average individual number of skates each person produced, have the
group create a graph that displays the average for individually made skates and the average for the group. The graph must be in color and labeled correctly. Make sure all students names are on the graph.

4. Have students present their graph and lead a discussion on the results.
Appendix N

Unit 2 Daily Lesson Plan-Day 5

Objectives: Students will learn about the many different technological innovations in Transportation /Technology during the early industrial period in America. What were the scientific breakthroughs that enabled the industrial revolution to occur?

PASS Standards:

Materials:

1. Bucket Art : Images of the different inventions during this time-copies for each table.
2. Transportation /Technology Revolution Power Point.
3. Authentic telegraph and steam power demonstration.

Lesson:

1. Quickwrite: Have students journal about the following question. List the types of technology and machines that you have at home and describe why they make our lives so much easier? What would life be like without them?
2. Have students share their responses with the class.
3. Hand out to each table the Bucket Art images prepared. Tell the students they must first try to guess what the images are. They also need to discuss the commonalities of the visuals.
4. Once they have guessed what each image is have students classify these images into groups or Buckets. Students must have at least three Buckets (categories).
Let students know they should be physically moving their images around into their Buckets (categories).

5. After students are finished Bucketing, go around to each table and have each table share their Buckets and images.

6. Smartboard: TT Power Point. Have students take notes over the PP. They will see the images they investigated with the Bucket activity. On slide 3 stop the presentation and display the steam power experiment. We used copper tubing clamped to a wooden base with a small hole drilled into the side of the pipe. By pouring a little water into the tube and heating it using a small blow torch you can display the experiment by corking the top of the tube and the steam power will pop the cork out of the copper tubing. After the water heated up the cork will pop out of the tubing and hit the ceiling tiles.

7. Proceed with the presentation, displaying both the notes, video and interactive steam powered engine.

8. If there is enough time, display the telegraph to the students.

9. Homework: Have students do a 4-Square and paper over one of the inventions they learned about during the lesson today. Their topic should be: The most important invention during the industrial revolution was______.
Appendix O

A New Nation
Test

Fill in the Blank  Write the correct term for each blank.

1. The ___________________________ punished people who openly criticized the government.
2. The ___________________________ was set up to issue paper money and make loans to farmers and businesses.
3. A tax on liquor led to the _______________________, which marked the first time the government sent troops to fight American citizens.
4. Once President, Washington elected ________________ members to advise him on matters of the government.
5. The British seized sailors from American boats and forced them to serve in the British navy, a practice that was called ________________________.
6. The ___________________________ were supporters of the War of 1812.
7. The ___________________________ Act occurred when French agents tried to get bribes from the United States and caused a huge scandal.
8. A __________________________ is an outsider or someone from another country.
9. The ___________________________ was an attempt by the French to bribe Americans seeking to stop French attacks on American ships.
10. The ___________________________ allowed the President to expel foreign citizens if needed.
11. The ___________________________ created the Federal court system.
12. The ___________________________ states that the US will remain neutral towards all nations at war in Europe.
13. Because of _____________________________, Spain agreed to change the Florida border and reopen the Port of New Orleans.
**True or False**

14. The War of 1812 was a struggle between the United States against the French and British

15. Jefferson bought the Louisiana Territory from France for 3 million dollars

16. The battle of New Orleans was fought at the end of the War of 1812

17. Lewis and Clark set out on an expedition to explore the Minnesota Territory

18. The Alien and Sedition Act forced many

**Multiple Choice** Circle the correct letter

19. Which of the following was related to the issue of states’ rights?
   a. The XYZ Affair
   b. War of 1812
   c. The Kentucky and Virginia Resolutions
   d. The Whiskey Rebellion

20. Which of the following is an example of judicial review?
   a. Congress votes to approve a Supreme Court appointment
   b. A decision by a lower court is appealed to the Supreme Court
   c. The National Bank sues Congress
   d. The Supreme Court rules that a new law violates the Constitution

21. The Sedition Act punished people who openly disapproved of the government. When Thomas Jefferson took office he,
   a. founded a newspaper to publish information about the executive branch
   b. jailed hundreds of people
   c. released people who had been imprisoned
   d. supported the passage of a “freedom of the press” bill in Congress

22. Washington’s response to the Whiskey Rebellion
   a. led to a reduction of the excise tax
   b. supported the doctrine of states rights
   c. proved the strength of the national government
   d. imported whiskey from Canada

23. Which of the following was a result of the War of 1812?
   a. the border between Canada and the United States was redrawn
   b. The United States and Britain agreed to stop fighting
   c. New England States left the Union
   d. New Orleans became a possession of Spain

24. The United States purchased Louisiana from
25. Thomas Jefferson was uneasy about buying the Louisiana Territory because
   a. he worried that he would bankrupt the United States
   b. he did not have the constitutional power to buy land from another country
   c. he worried about angering farmers who shipped their crops to New Orleans
   d. he worried that the land in the territory would be of poor quality
Appendix P

Test
Industrial Revolution

Fill in the Blank  On your paper, write the correct term for each blank.

1. __________________ was responsible for bringing the textile machine technology to America from England.
2. An inventor who promised to build 10,000 muskets for the US government within a period of two years using machines and the concept of interchangeable parts was__________.
3. The period of rapid growth in the use of machines in manufacturing and production is known as the ____________.
4. The new textile factories created an increased demand for ________ from the south.
5. A __________ economy is based on jobs and money (where people earn wages and buy goods).
6. In a _________ economy most people take care of their own needs and rarely use money.
7. The industrial revolution caused the ______economy to change to a ________economy.
8. A rapid growth in the speed and convenience of transportation during the 1800s is called the ____________.
9. ____________invented the cotton gin as a way to improve the time it took to clean cotton.
10. A big ditch with a towpath on the side for horses to pull the boats is called a________.
11. Although several inventors in the US and Europe had developed steam-powered boats in the late 1700s, the most successful person was______________.
12. The inventor of the telegraph was ______________.
13. Many of the Irish who immigrated to the United States in the 1840s came to escape ________ in Ireland.

True or False  On your paper, write down an F if the answer is false or T if the answer is true

14. Morse code uses combinations of dots and dashes to represent each letter of the alphabet.
15. John Deere invented a plow with a steel blade that could easily slice through soil.
16. Cyrus McCormack invented a mechanical reaper that cut down cotton quickly and easily.
17. Isaac Singer was a very successful inventor of sewing machines.
18. Iceboxes cooled by blocks of ice were available in the 1930s.

**Multiple Choice** On your paper, write down the letter of the correct answer.

19. Why did young women want to work at the Lowell mill?
   a. There were no other types of jobs available to women at that time.
   b. The advantages of mill work outweighed the disadvantages.
   c. They would be given ownership of their own mill after working at the Lowell Mill for a period of 10 years.
   d. The mill paid them a higher wage than they could earn in other jobs.

20. Which of the following statements concerning the Lowell mill correct?
   a. Workers worked an eight-hour day.
   b. The work was perfectly safe.
   c. Daily life was carefully regulated.
   d. Mill owners steadily decreased the size and speed of their machines.

21. Workers in the 1830s and 1840s began forming trade unions in order to
   a. provide education for workers.
   b. Improve working conditions.
   c. Trade manufactured goods for farm produce.
   d. Trade goods with other countries.

22. The most effective of the major advances in roads in the early 1800s was
   a. macadam road
   b. plank roads
   c. corduroy roads
   d. mud pits

23. Railroads and trains became the transportation of the future because
   a. people like to say “choo choo”
   b. they can be used all year long and they carry heavy loads
   c. they use coal and wood
   d. train track is easy to lay

24. Eli Whitney’s invention of the cotton gin had the unintended result of
   a. increasing the need for tobacco
b. increasing the need for machines
c. increasing the need for slaves
d. increasing the need for gin

25. Because of the industrial revolution, the north begins to develop into a/an
   a. agricultural economy
   b. industrial economy
   c. capitalist economy
   d. communist economy
Appendix Q

Unit Survey
Number:_________________

1. I think the unit helped me learn the information my teacher wanted me to know.
   
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<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
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2. I expect to receive a good grade on the test after completing this unit of study.
   
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<th>Somewhat Agree</th>
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3. I liked this unit of study.
   
<table>
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<th>Strongly Agree</th>
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4. I felt confident and prepared to take the test after completing this unit of study.
   
<table>
<thead>
<tr>
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<th>Somewhat Agree</th>
<th>Strongly Agree</th>
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Please answer the questions below in the blanks provided.

1. List three words that describe your experience during the unit.
   
   ________________________________________________________

2. Was there one part of the unit that was especially helpful and useful to you?
   
   _______________

   If yes, please explain.
   
   ________________________________________________________

3. Was there one part of the unit that was harder than other parts? _______________
If yes, please explain. ____________________________________________________________

4. Was there any part of the unit that you found confusing and/or not helpful? __________

If yes, please explain. ____________________________________________________________
VITA

Heather A. Taylor

Candidate for the Degree of

Master of Science

Thesis:  THE CASE FOR INTEGRATED TEACHING STRATEGIES: DOES IT STAND UP TO THE TEST?

Major Field:  Education

Biographical:  I have a strong background in the study of history and have plans to teach at the college level in the near future.

Personal Data:
1548 E. 49th Street
Tulsa, Ok 74105

Education:
Bachelor of Arts in History from Langston University-Tulsa, 2004.
Oklahoma State University, Tulsa, Oklahoma, 2004-2009.

Completed the requirements for the Master of Science in Teaching, Learning, and Leadership at Oklahoma State University, Tulsa, Oklahoma in July, 2009.

Experience:
2005 - 2007: Thoreau Demonstration Academy; Tulsa, Oklahoma
Para-Professional

2007- 2009: Thoreau Demonstration Academy; Tulsa, Oklahoma
8th Grade Social Studies and Language Arts Teacher
Courses Taught: U.S. History, Language Arts
Name: Heather A. Taylor                                Date of Degree: July, 2009

Institution: Oklahoma State University        Location: Tulsa, Oklahoma

Title of Study: THE CASE FOR INTEGRATED TEACHING STRATEGIES: DOES IT STAND UP TO THE TEST?

Pages in Study: 75               Candidate for the Degree of Master of Science

Major Field: Teaching, Learning, and Leadership

Scope and Method of Study:
This study is an experimental research study that looked at whether an integrated approach to teaching U.S. history can help raise student test scores. 21 8th graders were the focus of the study over the course of a month. Students were exposed to two units of study; one a non-integrated unit based upon the required textbook, and another integrated unit that used non-traditional methods of teaching and included the arts, language arts, science, and math. After each unit students were tested and given a questionnaire to complete. The test scores and questionnaire were used to establish whether there was any change in test scores and student attitudes between the two differing units of study.

Findings and Conclusions:
Based upon the data collected, there was a slight difference between the two units of study. Students scored slightly higher on the integrated test than they did on the non-integrated test. There was a 9% increase in students’ overall test scores when comparing the two unit tests. Although statistically small, this increase does warrant future study. In conclusion, the researcher would like to replicate this study on a wider scale to find further evidence for the findings in this study.