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Hands-On or Hands-Off: Effective Elements of Elementary Social Studies Hands-on Lessons

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Hands-On or Hands-Off: Effective Elements of Elementary Social Studies
Hands-on Lessons

A Senior Honors Thesis

Presented in Partial Fulfillment of the Requirements for graduation in the College Honors Program

By
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Educational use of this paper is permitted for the purpose of providing future students a model example of an Honors senior thesis project.
Abstract

In today’s American school system a hole has begun to form in elementary schools as social studies education has been on the decline, or in some cases, cut out entirely in order to allow more time for mathematics and literacy instruction. Modern educators have begun to acknowledge this gap and want to develop new ways of instructing social studies as a way to keep the subject current, interesting, and effective. Hands-on learning may be one solution for this issue. The purpose of this study was to describe what happened in regard to students’ understanding of and engagement in social studies content when presented in a hands-on teaching style. One fifth grade inclusive classroom, one fourth grade inclusive classroom, and one self-contained fourth grade classroom were taught using hands-on social studies lessons in a rural school district in Western New York. After utilizing a variety of hands-on lessons and activities, and researching the existing literature there is on hands-on learning as it relates to social studies instruction, five themes of effective hands-on lessons emerged that may aid elementary teachers in their creation of these types of lessons: Collaboration, Open-Ended, Meaning, Experience, and Timing (C.O.M.E.T.).
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Introduction

Lifting the bag of sticks, bark, and empty plastic bottles, I walked into the fourth grade classroom a few minutes early before the social studies lesson plan I was getting ready to deliver began. When the kids saw me entering they sat up in the seats, smiled, and began chattering with one another. One little boy cheered, “Yes, it’s time for social studies!” “There’s still four more minutes of math!” The math teacher reminded the kids.

In today’s American school system a hole has begun to form in elementary schools as social studies education has been declining, or in some cases, cut out entirely. In my own experiences as a preservice teacher, I have personally seen the decrease in the amount of time dedicated to social studies instruction. When No Child Left Behind (NCLB) was signed into law in 2002, accountability systems for schools fueled the creation of high-stakes testing in reading and math, yet social studies was left out of high-stakes testing altogether (Bailey, Shaw & Hollifield, 2006, VanFossen, 2005). High-stake test results can help influence decisions including whether or not a student graduates from high school and often sets the salary scales of teachers. As a result, social studies has become, in many instances, an “if there’s time” subject, lowering its status to that of a second-rank subject when compared to math or reading (Zhao & Hoge, 2005). Many schools have begun to reduce the amount of social studies education as a survey given in the states of Illinois, Maryland, New Mexico, and New York indicated that 47% of the principals who oversaw K-5 schools (FIX ME). A second study of teachers in Colorado demonstrated that 82% of 161 teachers reported reduced social studies teaching in response to high-stakes tests. Finally, the Center on Educational Policy surveyed all fifty states (229 school districts) and found that 33% of the districts reported reducing social studies instruction in response to high-stakes testing (Au, 2009).
In addition to these three studies, the awareness of the lack of social studies has been growing to a point where even government officials are taking notice. In a recent speech by President Barack Obama regarding NCLB’s flexibility, he stated, “No Child Left Behind had some serious flaws that are hurting our children instead of helping them. Teachers too often are being forced to teach to the test. Subjects like history and science have been squeezed out.” (Obama, 2011). These recent claims about the lack of social studies demonstrate that the tide is shifting in education to where the social studies deficit is becoming more and more noticed. In my own experiences working in an elementary school in Western New York, social studies is only taught to a fourth grade class twice a week for thirty minutes, whereas two periods of math and reading occur each day. Teachers explain that they wish they could focus more on social studies, but worry that they won’t have enough time to cover the high-stakes testing subjects, or haven’t had enough exposure to different methods of social studies instruction. An excerpt taken from my anecdotal notes reflect the feelings shared by teachers I have worked with when implementing the hands-on social studies lessons I taught during this study. One fifth grade teacher explained, “I’d like to be able to focus more on making social studies both effective and fun, but with the stress of test results, I can’t spare the time to work on social studies.” Based on my experiences with professionals in the field, modern educators acknowledge this gap and want to develop new ways of instructing social studies as a way to keep the subject current, interesting, and effective during the little time there is for social studies. Hands-on learning may be one solution for this issue that, through this study, has demonstrated potential.

There is little exploration in the education field as a whole to the role that hands-on learning plays in student understanding and engagement with regards to teaching social studies content. Educators have often heard that hands-on learning is incredibly effective, but there are
very little peer reviewed studies on this topic. In my own experiences, one of the major concerns of the teachers in this study when thinking about teaching social studies, let alone using hands-on approaches, was the preparation time it would take for hands-on lessons to be created and effectively used. Even if teachers had the time to focus on social studies, they were unsure as to how to create an effective hands-on lesson that truly fostered learning by doing. In light of the implications high-stakes testing has had on how teachers structure their instructional time, in addition to the lack of professional development provided to teachers with regards to teaching social studies using research-based methods, teachers find it very difficult to make strides when seeking to teach social studies in engaging ways. The purpose of this study was to describe what happened in regard to students’ understanding of and engagement in social studies content when presented in a hands-on teaching style to answer the research question, “How, if at all, do hands-on lessons impact student understanding and engagement in elementary social studies?” Three different fourth and fifth grade classrooms containing both general education and students with disabilities were taught using hands-on social studies lessons in a rural school district in Western New York. After utilizing a variety of hands-on lessons and activities, and researching the existing literature there is on hands-on learning, I have discovered a collection of five themes of effective hands-on lessons, while also providing examples of these hands-on lessons and activities in addition to samples of student work.

Education is mainly about interaction: between students and teachers, teachers and other teachers, students and curriculum, and so on. How this interaction is facilitated in the classroom is determined by the instructor and should primarily reflect the individualized needs of the students. Each learner is different, and these unique differences may impact how students will respond to certain teaching styles. Hands-on learning may be one method that teachers can use
that will allow students to use their five senses along with their peers to discover and socially construct their own learning through inquiry and exploration. By allowing students to see, touch, and fully experience learning, instructors hope that this personal and active method of instruction will keep students engaged. Engaged students are more likely and willing to learn, develop both social and cognitive skills, and pursue higher education and achievement (Marks, 2000).

Throughout each of the hands-on lessons taught to fourth and fifth graders during this study, students were on the edge of their seats, smiling and collaborating with one another during projects. But why was this engagement present? What made these lessons so exciting, engaging, and effective for these students?

*What exactly is hands-on?*

In this study, hands-on learning will be defined as a by-product of any classroom activity that forces students to use their five senses: see, touch, taste, smell, and hear. A study by Renwick (2004) on hands-on learning discovered that visual and kinesthetic learners, non-native English speakers, and struggling writers readers have responded significantly well to this type of instruction and allow, “otherwise-struggling learners to show their real strengths” (p.9). Educational theorist Kolb (1984) defines learning as, “the process whereby knowledge is created through the transformation of experience” (p. 41). Schunk (2011) explains his definition of learning as, “an enduring change in behavior...which results from practice or other forms of experience” (p. 3). Hands-on learning, therefore, fits within both of these perspectives as students physically experience something, whether it be the process of creating and maintaining a longhouse village or sculpting landforms on a make-believe island. Throughout research in both literature and in the classroom itself, I have discovered that an effective hands-on lesson
involves five key components: Collaboration, Open-Ended, Meaning, Experience, and Timing (C.O.M.E.T.). In the following review of the literature, each of these five characteristics will be defined with the exception of “Timing”. While my own personal experiences teaching using hands-on instructional strategies revealed the importance of timing, this characteristic will be discussed more substantially in the results section, as there was not a significant number of empirical studies supporting the importance of timing to include in the literature review.

**Literature Review**

After observing student actions during each of the hands-on social studies lessons I taught in the field, several themes emerged that also seemed to run throughout the existing literature there is on the topic. To be considered hands-on in this study, each lesson needed to involve an aspect of experience, where students used their senses to discover something new. Not only does an effective hands-on lesson require students to use their senses to discover something new, but also requires students to work collaboratively to come to a solution. As students brainstormed ideas and shared responses they worked together towards a common goal. In order for students to work together as an exploration team, they needed a problem that was open-ended so that multiple solutions could be produced. While staying open-ended, there also needed to be social studies content and meaning behind the problem. Activities needed to be educationally sound with curriculum-based goals behind it and not simply be an activity just to do as “busywork”. Finally, each lesson needed to be well-prepared for by the teacher with an accurate amount of time set aside for each piece of the lesson. Time needed to be dedicated to exploration in order for understanding to take place. These themes that emerged in both my
experiences and the literature that guided my study of hands-on social studies instruction led me to form C.O.M.E.T.: Collaboration, Open-Ended, Meaning, Experience, and Timing. Each component of C.O.M.E.T. describes a different aspect of an effective hands-on lesson plan and through this literature review, each characteristic will be explored and explained with the exception of the final characteristic of timing, which was deemed necessary after carrying out the hands-on lessons in the field.

**Collaboration**

Collaboration is the social process of interacting and exchanging ideas between people toward a common goal. When students discuss with one another their process of combining new ideas together, they help each other grow as learners. As Phillips & Soltis (2009) agreed in their research, “Education, in its broadest sense, is the means of this social continuity of life. As a matter of fact every individual has grown up, and always must grow up, in a social medium” (p. 55). Dewey advocated the social nature of learning as one of the foundations of learning, leading to this first component of C.O.M.E.T. Roschelle and Teasley (1995) discussed how when responsibility and authority are shared, students can engage together in a coordinated effort to solve problems and construct meaning effectively. In addition to teaching content, elementary teachers also teach interpersonal skills to increase this social development. The subject of social studies itself stresses the importance of teaching these communication skills. Learning how to listen actively, resolve conflict, empathize with others, and recognize the ideas and viewpoints of others are key concepts taught to elementary students (Silberman, 2007). The New York State Core Curriculum Guide’s overview places a heavy emphasis on collaboration among students with two of the four skills sections being devoted to the development of social skills. Teachers,
therefore, model how to effectively discuss social studies when they begin classroom
discussions. Hess (2004) explained how teachers can facilitate classroom discussion as a way for
students to realize that knowledge does not only come from the teacher but from the synthesis of
ideas from multiple people in the classroom. The characteristics of effective classroom
discussion include analyzing multiple perspectives, a prepared facilitator, and a classroom
atmosphere that is open and comfortable for students to participate.

The idea of collaboration, or including a social aspect to learning, has appeared in
numerous learning theories. Beginning in 1941 with Miller and Dollard’s *Social Learning and
Imitation* and continued by Bandura in 1986, the idea of language as a key component in
learning suggested that classroom environments strongly influence student behavior. Bandura’s
“social learning theory” focused primarily on modeling, where learning occurred mainly through
observation or learning by example (Phillips & Soltis, 2009). Bandura’s work contributed and
helped to forge the social cognitive theory, stressing the idea that learning occurs in a social
environment where humans observe others and form beliefs and attitudes about a particular
aspect of life during the collaboration (Schunk, 2011). Through observation, students learn some
components of new information and then fill in the gaps by actually performing the new skill,
like football coaches watching plays on television and then actually having the team attempt the
new play. Connected with this theory of observation is the idea that language plays a key role
throughout this process. Educational theorist Dewey stressed in his works that the school was a
community and it was the school’s duty to engage students in problems where they had to work
with others. According to Dewey, the best way to learn a new idea was through communication
with others in purposeful activities (Phillips & Soltis, 2009). Soviet psychologist Vygotsky
stressed that most of what we learn, we learn from others through one of man’s greatest “tools”:
language. Learners use language to transmit concepts and relationships to others. As Leh, Kouba, and Davis (2005) wrote, “Human beings are social creatures with an instinctive need and desire to exchange information with fellow community members” (p. 238). This is explored further in Vygotsky’s social constructivism theory, where ideas are constructed through both student and teacher interaction and idea sharing. Classrooms are built around social interactions developing students along their zone of proximal development, or a zone where learning occurs when a student receives help learning a certain concept in the classroom (Vygotsky, 1962, Powell & Kalina, 2009). Scaffolded collaboration between students and teachers assists development along this zone because both teachers and students share ideas that open new connections of understanding based upon previous experiences with content. Each student brings with them different perspectives and by encouraging this diversity, students can use each other to deepen understanding. As indicated above, the role that communication has in learning has been expressed by numerous researchers and learning theories.

Throughout each lesson in this study, students discussed with one another how to solve the problem. Each student brought different prior knowledge to the discussion and contributed to the learning of the group as a whole. When creating a longhouse, for example, students were grouped into teams of three and provided with sticks, a cardboard slab, and tree bark. Students problem-solved with one another as to how to create the structure, with one student even explaining to her partner, “The Native Americans didn’t use scissors, so we won’t either.” These students discovered together through social constructivism that the easiest way to cut the branch up was to have one student hold the stick while another bends the stick where it has to be cut. Once one group discovered this method, others began to model this new way of reaching their goal of building a replica longhouse.
Collaboration reinforces a student’s need to develop oral language. As Rief and Heimburge (2006) explained, students must become aware of the importance of communication in their lives and the process of speaking and listening that it involves. While still respecting students’ culture and personality, educators often strive to help students to use oral language as regularly as possible. Cambourne’s 1995 research on the conditions of learning reflected this need for oral language development among students as he argued that learning requires a social dimension to facilitate an authentic exchange of ideas. As students discover new knowledge and share it with others, they socially construct their own learning because they use each other to understand (Jadallah, 2000). Collaboration adds this necessary element to hands-on lessons as Ships in a Bottle, a hands-on lesson about early American explorers, demonstrated when taught to students as part of this study. Students worked in pairs to create their own miniature ship based upon one of the early American explorers: Columbus, Hudson, or de Champlain. Students were required to survey a large section of information, compromise with one another over which facts were the most important, and then decide upon a way to display these facts within their bottle. Many students then transformed these facts into waves under a ship or fluffy clouds in the sky. When teaching this lesson, the classroom was full of discussion, not about what happened at lunch, but on how they did not know that Christopher Columbus died thinking he had landed in India and not North America. My experiences in the classroom demonstrated that when given the chance to talk about what they were learning, students were more focused on the topic. Collaboration, therefore, can’t exist without a problem with the potential to elicit multiple solutions. Despite the lack of existing literature connecting hands-on learning and social studies, students need different perspectives and opinions so that they have something to discuss with one another, stressing the need for an open-ended problem to serve as the basis for the lesson. Social
studies lessons in particular thrive when students discuss current events and possible solutions to them.

Open-Ended

Hands-on activities should allow students to see multiple perspectives and debate with one another which solution method is the best way to answer the problem. Open-ended refers to the ability of a lesson to spark multiple solution methods. Often times in elementary classrooms, hands-on activities are created but lack an element of open-ended expression. Examples of this can be found in traditional cotton-ball beard Santa or hand-traced turkey crafts, as they lack multiple solution methods. When students merely copy the exact same project so that every student’s final product looks exactly the same, it’s just like copying down notes from an overhead (Cornet, 2006).

Bloom’s Revised Taxonomy, a widely-accepted classification system of learning behaviors, encourages students to seek higher levels of reasoning, such as through creating or evaluating. Closed-ended questions, such as remembering and understanding questions, assess only one specific area of knowledge, yet may be the appropriate method if students are being checked for understanding. Higher order learning such as creating and evaluating may be stimulated through the use of open-ended questions as a way, “to elicit discussion, brainstorm solutions to a problem, or create opportunities for thinking outside the box” (Neal, 2011, p.49). By encouraging students to answer open-ended questions, we are also encouraging them to open up to wider fields of information. For example, one hands-on lesson plan taught to the students in this study asked them to create a class timeline of key political, social, and economic events in American history. The open-ended nature of the assignment allowed students to choose events
that they believed were most important after researching American history using both print and non-print resources. One student noted the date the submarine was created on the timeline. But this wasn’t enough for him. He then continued to research the first submarine and can now share more information about aquatic warfare than any of the teachers in the room knew. By allowing the learning task to be open, students were able to grow in any direction they wished to create products that were unique and meaningful to them.

Open-ended lessons allow students’ individual strengths to shine and allow different learners to demonstrate what they know best (Doyle & Rutherford, 1984). Gardner’s Theory of Multiple Intelligences described different ways in which students process information based on a certain trait that they excel in, whether it be interpersonal, visual/spatial, or linguistic. Students often fit into several different intelligences and by offering students choice and space to work the way they do best, students can truly excel (Lorenzi, 2011). Individual creativity emerges when students are allowed to work the way they do best by allowing their multiple intelligences to develop together through mutual reinforcement (Randall, 1996). Students may have greater interest and attention in the classroom, while also helping classrooms become more inclusive. Randall (1996) researched how allowing students to utilize their multiple intelligences through hands-on learning often benefited students with special needs because these students can learn both content knowledge as well as skill development, primarily in hand-eye coordination, balance, body awareness, and manual dexterity. Students with different cultural backgrounds or gifted students were also found to benefit from this variety of instructional modes. Creative or open-ended thinking often requires significant content knowledge as students delve deeper into certain topics because they excel in that particular style of learning (Baer & Garret, 2010). While
this may not benefit all students’ learning styles, these multiple intelligences do allow both
curriculum and instruction to open up learning creativity to a variety of students.

Another benefit to open-ended tasks is that they provide the instructor with useful
information about the student’s learning. These types of lessons provide teachers with
opportunities to explore children’s thinking and using that data to plan instruction that builds
upon student’s knowledge. By allowing multiple ways to solve a problem, the teacher can
analyze the process more than the product and the actual learning that takes place. Students too
can begin to better understand their own thinking. This metacognitive behavior presented by
focusing on the process may help students see the connections they are making between ideas.

Neal (2011) explained how in the constantly evolving “real-world,” seldom are problems
black-and-white, emphasizing that only through critical and innovative thinking can students
become contributing members of society. That being said, teachers may find it difficult to create
open-ended tasks for their students. Example open-ended tasks may require students to
brainstorm ideas, negotiate conflict resolutions, synthesize and search through large amounts of
information, or apply concepts to other situations. The key to creating open-ended questions,
however, is that they are grounded in what the curriculum requires and not a different, unrelated
concept.

Meaning

Each lesson should be created with an educationally sound foundation structured around
curriculum. Arthur Jersild (1955) supported the importance of meaning in schools when he
stated, “Where there is meaning, there is involvement. When something has meaning, one is
committed to it…When meaning is lacking in one’s work…the self is uninvolved. The substance
is lacking and (education) is just an empty formality” (p. 79). Baer and Garrett (2010) argued in their essay “Teaching for Creativity in an Era of Content Standards and Accountability” that often times educators believe that creativity relates to divergent thinking and therefore moving away from content that teachers are held accountable for, when in reality, this type of thinking can only exist when grounded in significant content knowledge. Open-ended thinking, therefore, depends heavily on content knowledge and understanding.

As indicated in the previous section, some elementary classrooms have students complete activities that all end up looking the same. Using fun “crafts” in the social studies classroom are often seen as fun by students because it would be a different activity than the kids are used to doing and gets them active in the classroom. What makes this different than using educationally sound activities is that kids are stuck in a box, and aren’t allowed to think outside of it (just like every cotton ball beard Santa must look the same, as indicated in the earlier section). Activities that have a solid foundation in meaning allow students to have fun while also learning grade-level content (Cornet, 2006). The Academic Value of Hands-on Craft Projects in Elementary Schools found that 72 percent of teachers link their craft projects to the standards (Renwick, 2004). Activities that allow for creative variation are the ones that require students to “research” how they want to solve the problem, think about possible solutions to it, and then go through a trial and error process when actually constructing the project. This process of learning goes on during the entire process, opposed to just imitating something else exactly.

In addition to ensuring that the lesson itself is meaningful, teachers also should remember to make the lesson meaningful to the students. Larmer and Mergendoller (2010) described the essential characteristics for essential problems-based learning. The first criteria listed in their study is the need to make a lesson personally meaningful to the student so that the task matters to
them in addition to making the project itself fulfill an educational purpose. Many students may find everyday classwork meaningless because they are unmotivated by simply being told that this new knowledge will help them later in life. By actually seeing results from schoolwork, students may want to actually complete the activities. Dewey’s laboratory school involved students using folk crafts to learn about the workforce, intertwining the community to help students see meaningful connections between what they do in their own lives and how it affects the community as a whole (Morris, 2007). When students can see this direct connection, they increase their understanding of the world and the concepts the lesson taught, and apply them to a variety of situations. The American timeline lesson described in the earlier section allowed students to select events in American history that interested them. Students then took these events and researched them to discover more information not because it was required, but because it was a topic that interested them, such as one student looking into Elvis because her mother really liked him and she wanted to find out more about him and his music.

One method to ensure that meaning stays within a hands-on social studies lesson is to focus on teaching concepts rather than facts. The New York State Social Studies core curriculum guide describes concepts as abstract content organizers that synthesizes facts and experiences rather than facts to be memorized. Fact-based learning focuses only on single pieces of learning and provides the false view that social studies is a simple subject that can be answered in a single thought. Rather than focusing on the year George Washington was born, students can focus on how the time period he was born into affected his life. By seeing the big picture, students don’t need to worry about remembering individual facts as long as they understand the overarching themes. Concepts continually change as meaning expands after different experiences and relationships are explored (Solomon, 1987; Cordier, 1968; & Jadallah, 2000). Often times, social
studies educators focus on big ideas to focus their classrooms on the main concepts to be taught for a single lesson. Grant and Vansledright (2006) proposed the concept of big ideas to describe a question or generalization that helps elementary teachers focalize their instruction in a way to effectively engage learner understanding. Individual facts such as dates aren’t necessarily taught but rather the idea or issue that the fact brings about. By revolving an entire lesson around a particular question or idea, teachers and students continually remember the reason for the lesson and the content that the lesson seeks to address (Sheehan, 2008). These big ideas are often open-ended so that students can discover the information themselves by experiencing content through hands-on strategies. When students construct their own learning around a central idea through physically experiencing a concept, they tend to make stronger connections that relate to a single over-arching idea based on curriculum.

Experience

Social studies offers students the chance to learn about the world they live in. Students learn the key part that social studies plays in their lives when they realize how all of their experiences are defined under the umbrella of social studies. As Alleman, Knighton, and Brophy (2007) described, every student experiences geography by living on Earth; anthropology through their cultural backgrounds; history through living and experiencing events; economics through needs and wants; political science through the need of governance; and so on. Students experience social studies on a daily basis, and we as teachers should try to bring everyday experiences into the classroom to help students make this realization. When students experience a lesson such as this, they do not simply listen to a lecture or read from a textbook, but
participate in an activity that directly engages them in content through exploration. The true essence of hands-on learning is allowing students the opportunity to experience first hand content by allowing them to design, create, apply, and actually be an active participant in social studies. Randall (1996) described experiential learning as, “the activity of a person in time and space” that assists memory, as indicated by a 1993 Bennet report that found students who read and listened to lecture only retained 42% of the lesson’s content compared to the students who experienced the lesson and remembered 80% of the content (p. 11). By experiencing content, students now have concrete examples they can refer to when confronted with the same material again because they have registered information through several different senses.

Returning to Dewey’s educational philosophy, the majority of his theory focused on student growth through experience. Dewey’s students interacted not only with other students and teachers, but also the community and society, as he explained, “…the immediate and direct concern of an educator is then with the situations in which interaction takes place” (Dewey, 1938, p. 45). By authentically interacting with actual objects and people, students form a connection with the world through relevant, planned experiences by the teacher (Randall, 1996, Cordier, 1968). The teacher, therefore, must arrange and prepare the conditions for students to experience learning without simply telling the student what to do and what to learn (Phillips & Soltis, 2009). One way to facilitate this type of experiential learning is through inquiry in social studies. Through inquiry, students find work more meaningful because they have a direct desire to learn something within the concept the teacher is having students explore. Students work and learn by discovering answers to their own problems through explorations that they design, often leading to further questions, ideas, and conclusions (Larmer & Mergendoller, 2010 & Solomon, 1987). Inquiry is only possible through open-ended questioning based upon curriculum, guided
by teacher encouragement. Social studies inquiry is guided by exploring human behavior, made up of history, sociology, anthropology, and other disciplines studying social phenomenon to answer how and why (Ellis, 1977). By allowing students to explore these disciplines by experiencing social studies concepts such as change, progress, or growth, students are provided with their own self-directed study of understanding that is conceptualized in the curriculum.

A recent method that many elementary schools have used to engage students with content through experience is project-based learning, particularly service learning. Projects are defined as in-depth investigations around a central question involving students throughout each stage of the process, culminating in an end product. Brown’s and Campione’s (1996) research on the project-based approach suggest that projects develop conflict resolution, planning, curiosity, reflection, and the process of transporting conceptual ideas to different situations and environments. The underlying main focus of these projects is to develop a sense of social studies problem-solving, progress monitoring, decision-making, and reflection that can be applied to explain other situations, emphasizing the connection of knowledge to context (Solomon, 1987, Barron, et all 1998). As teachers, we do not know what types of conflicts or situations our students will have to face throughout their lives, so we must equip them with a set of skills containing inquiry, understanding, and reasoned knowledge that they can apply to other situations beyond formal education for decisions and judgments in a changing world (Cordier, 1968). While students may not remember the specific steps to putting a longhouse together, they have a better chance at remembering why the need for community is important when providing shelter to a group of people. These projects are carefully designed by teachers to ensure that necessary learning standards are met, but after this initial foundation, question development,
research, problem-solving, analysis, and reflection are placed under student ownership (Mitchell, Fougler, Rathkey & Wetzel, 2009).

A particular type of project that is growing in popularity in the field of social studies is that of service learning. Service learning integrates instruction and reflection with community service as a way to strengthen communities through real-life problem solving. A national survey indicated that 64% of all public schools require students to partake in community service (Ohn & Wade, 2009). The National Council of Social Studies Standards (1994) requires explicit instruction of global connections and civic ideas, while also encouraging individual development through social and political issues (Fox, 2009). Service learning, therefore, combines this community service with curriculum, such as interviewing veterans about their war experiences and creating a landmark in a public area to symbolize their stories. These types of projects allow students to meet actual community needs beyond the classroom, learn social studies concepts, promote active and educated citizenship, apply skills to real-life situations, and help develop a sense of empathy (Ohn & Wade, 2009; Alliance for Service Learning in Education Reform, 1993; & Fox, 2009).

By encouraging students to participate in activities that require their direct hands-on involvement, teachers can ensure that they have provided their students with real-life applications to curriculum. As students take content knowledge, use it to develop an idea, monitor and adjust this idea, create a product, and then reflect upon the experience, they are encompassing a wide variety of social studies skills. The teacher’s role in this learning is to create an open-ended problem grounded in curriculum that encourages students to collaborate together and experience the real-life situations that they apply to their learning. The final aspect
of C.O.M.E.T. that makes these lessons happen is timing, a component fully discovered and determined essential after conducting these lessons in the field.

**Timing**

Once teachers have developed a hands-on lesson that encompasses collaboration, open-ended problems, meaning, and experience, they need to plan the actual facilitation of the lesson itself. Today’s elementary teachers work on an extremely tight schedule, between core content, specials, special education services, and other daily school commitments. One of the major concerns expressed by the educators in this study was that they wouldn’t be able to fit all that a hands-on lesson entails into a single lesson. As discovered throughout my work with the fourth and fifth grade students, preparation is key to an effective hands-on social studies lesson. Teachers plan how long each activity should take in addition to the time necessary for discussion afterwards. Teachers remain in control of time during each lesson, regulating how long student exploration should be while also monitoring and adjusting the plan to fit the individualized needs of the learners. In addition to length of each lesson, teachers also keep in mind when hands-on lessons are appropriate, whether they be to introduce a lesson, teach a key concept or vocabulary term, or to experience previously taught content in a different way. By keeping timing in mind, teachers can be sure that their lesson containing collaboration, open-end questioning, meaning, and experience will be effective and successful in the classroom.

After uncovering these themes to hands-on learning, there still remained gaps in the literature. While these themes served as common threads throughout the literature, there lacked studies where each theme was explored together. Few studies focused on actual hands-on learning in the field of social studies and the impact these lessons have on student engagement and learning. This particular study attempted to address these gaps by creating hands-on lessons,
and through observation and student responses, analyzing the impact these lessons had on student learning. Each characteristic of C.O.M.E.T. was intertwined throughout each lesson as a way to see the role each aspect plays in student learning and engagement. Teacher comments and suggestions were used to improve each lesson and helped greatly to determine how teachers felt about using hands-on methodologies. Through this study, the connection between hands-on learning and social studies instruction was explored to determine if this type of methodology does in fact impact student learning within a social studies context.


