

Example Social Studies Curriculum Unit with Ed TPA Components

Spring, 2015

Prepared by Ava L. McCall

1. Classroom Context

Use what you included for your science unit unless the schedule of when you can teach, your cooperating teacher's expectations for grouping students, use of specific resources, and other resources available changed from teaching your science unit.

2. Lesson Plans

Follow the lesson plan template and prepare 10 lesson plans. See the example social studies lesson plan for additional guidance in preparing lesson plans.

3. Central Focus of Unit

For sections A and B, use what you included in your social studies research paper.

A. The central focus of the unit is how different groups of people from Wisconsin (Native people, early European American immigrants, and lumber barons) used the natural resources to survive and/or earn a living in the 19th century. Students need to understand how people from earlier times affected the natural resources they used so they can make decisions on how to use natural resources wisely today.

B. The unit addresses the social studies benchmark SOCA1.4.4 Understand ways in which people in Wisconsin interact with their environment (use of land and construction of human made features), which is directly connected to the unit's central focus. Students will learn about how different groups of people used the natural resources, which is one example of how people in Wisconsin interacted with their environment. The unit will help students learn two important ideas in history and geography: (1) people's lives are affected by their physical environment as they use natural resources to meet their basic needs during different time periods and (2) as people use natural resources to meet their needs, they also change their physical environment. The unit addresses the science benchmark SCIE1.4.3 Understand ecosystems (identify various ecosystems, various organisms within an ecosystem, features of an ecosystem, explain how living and nonliving things within an ecosystem are interconnected and interdependent), which is also connected to the unit's central focus. The ecosystems provide natural resources which people use to meet their basic needs, and people change the ecosystems as they use resources. Both are important ideas in science education.

C. I will use inquiry activities to guide students in making connections among the knowledge of the natural resources (plants, animals, soils, bodies of water) in Wisconsin during the 19th century, the values and beliefs of different groups of people in using natural resources (including Native people, early European American immigrants, and lumber barons), the tools and technology available to each group, and each group's pressing need to survive and/or earn additional income. In addition, I want students to understand the perspective of people living during the 19th century rather than impose their present knowledge and values regarding using Wisconsin's natural resources.

I am using the inquiry arc, which means guiding students to develop an inquiry question (who made the wisest use of Wisconsin's natural resources?), use different disciplines (geography, history, anthropology, and economics) to investigate the question, use different sources and evidence and to evaluate the sources to construct explanations and arguments regarding the inquiry question. For example, students will read different texts from more than one author and perspective and examine photographs of four major ecosystems in Wisconsin, the natural resources in each one, and early immigrants' and lumber barons' use of Wisconsin's natural resources to determine the natural resources in Wisconsin and how different groups of people used those resources. To complete the inquiry arc, students will make an argument for which group made the wisest use of Wisconsin's natural resources in the 19th century supported by evidence from their inquiry and take informed action about current debates about using Wisconsin's natural resources. For example, students can use what they learned from this inquiry to apply to the current issue about cutting or preserving trees in the Chequamegon-Nicolet National Forest.

Inquiry activities and specifically the inquiry arc is a recommended practice by the National Council for the Social Studies, the main social studies education professional organization in the United States. The inquiry arc should help students arrive at conclusions and generalizations regarding how people used natural resources during earlier times, an important idea in history, geography, economics, and anthropology. In addition, by arriving at their own defensible conclusions through inquiry, the students will remember their learning longer because they made the connections among the ideas and built the neural pathways in their brains rather than listen to my conclusions and generalizations.

D. I will help students make connections to the central focus of the unit or how different groups of people from Wisconsin (Native people, early European American immigrants, and lumber barons) used the natural resources to survive and/or earn a living in the 19th century. I will also help them make connections among the main ideas in the unit (Wisconsin's natural resources during the 19th century, the values and beliefs of different groups of people in using natural resources, the tools and technology available to each group, and each group's pressing need to survive and/or earn additional income) and the different disciplines of literacy, mathematics, and science.

I will guide students through questioning and discussion to recognize the importance of literacy in reading and understanding various resources on how different groups used Wisconsin's natural resources, the central focus of the unit. I will also guide them in the use of literacy skills in comparing diverse resources and perspectives and arriving at conclusions about how different groups used the natural resources and the current issue of cutting trees in the Chequamegon-Nicolet National Forest.

I will guide students to recognize the connections between mathematics and the central focus of the social studies unit. I will pose mathematics problems, such as determining the change in the number of trees in Wisconsin's forests from the 1800s to the 1900s, the change in the Ojibwa's land area in Wisconsin between 1848 and 1992 and the effects on resources available to them, and to compare the amount of money made each year by the Menominee using sustainable lumber harvesting practices and lumber barons using clear cutting lumber harvesting practices. Through mathematics problem solving and discussions, I will guide students to recognize that mathematics provide data to support generalizations about how different groups in Wisconsin used the natural resources.

I will guide students through class discussions and inquiry activities to make connections between science and the central focus of the social studies unit. I will guide students to identify Wisconsin's natural resources as renewable and nonrenewable and the different resources available in each of the four ecosystems. By classifying natural resources in each ecosystem as renewable and nonrenewable, students use important science concepts to conclude which group of people made the wisest use of Wisconsin's natural resources by preserving nonrenewable resources.

4. Knowledge of Students to Inform Teaching

A. For the pre-assessment, I asked students to study a map of Wisconsin's early vegetation in the 1840s and photographs of three different biomes or ecosystems (pine and hardwood forests, oak savannas, and prairies), and then list the natural resources, such as soils, trees, plants, animals, lakes, and rivers, which they thought would be included in the three different ecosystems in the 1840s. I expected students to draw on their background knowledge and the clues in the photographs to arrive at an initial list of natural resources in each ecosystem and then predict how people might use these resources to meet their basic needs for food, clothing, and shelter or earn income, the central focus of the unit.

The results of the pre-assessment were that the majority of students knew that trees could be used to build houses and boats, rivers and lakes could be sources of fish for food and water to drink and cook, animals, such as deer were important food and clothing sources, and people could use the soil to grow food. However, several students had limited knowledge of different animals which could be sources of food and their skins or furs used for clothing (such as bear, rabbits, and squirrels). Only a few students knew that wild turkeys, acorns, maple sap, and wild rice were important food sources for Native people and early immigrants.

The students had experience with analyzing photographs to gather information and arrive at conclusions. They also had experience with completing inquiry activities by reading different sources, summarizing main ideas, and citing evidence to support the main ideas. I can build on these skills in the unit. The students have had less experience with comparing different sources to notice which ideas are the same and which are different, identifying point of view, and comparing different perspectives in readings. Four students are struggling readers and writers and are reading at the second grade level. They need texts with modified vocabulary, but with the same main ideas as more complex texts so they can still learn the same content as other students. They also need modified writing tasks or additional support with writing tasks in order to complete writing assignments successfully.

B. About half the class have family traditions of hunting and/or fishing for food and recreation, which will help them make personal connections to Native people's and early immigrants' hunting and fishing for food. A few students and their families are vegetarians and believe it is unethical to eat animals. They may have difficulty understanding why Native people and early immigrants did not rely on plant resources to survive. I will need to encourage these students to empathize with the survival needs of Native people and early Wisconsin immigrants when plants may not have been available to eat in winter. A few students may not agree with the practice of killing game and catching fish to eat, but sometimes people did it in order to survive.

C. The majority of students are in Piaget's concrete operational stage in their cognitive development. They need concrete data, such as objects and photographs, in order to develop the concepts of different ecosystems/biomes and the natural resources within each ecosystem/biome. A few students exhibit signs of moving into Piaget's formal operations stage in which they can conceptualize different ecosystems and natural resources without seeing photographs or examples of each. They can use written text to develop these concepts.

The majority of students enjoy and benefit from collaborating with others in constructing knowledge through social interactions (Vygotsky's Social Development Theory). Students are more engaged when they have opportunities to explain their ideas to others and listen to others' ideas. Most students have developed the social skills of listening to others, asking appropriate questions, summarizing their group's ideas, taking turns, and compromising. However, a few students have not developed these social skills and prefer to work alone. In order to strengthen students' cognitive and social development, they need opportunities to work alone as well as structured group activities in which they must use social skills to accomplish a task. Including both independent inquiry and cooperative learning activities are a recommended social studies education practice (Zemelman, Daniels & Hyde, 2005).

All students are physically able to handle photographs and objects and use a pencil, pen, or marker for writing or drawing. They can sit and concentrate on a task for 20 to 30 minutes at a time. A few students have a shorter attention span (10-15 minutes) and need opportunities to move around as they work. Students need flexible work spaces and focused activities for relatively short periods of time, but opportunities to increase the amount of time they concentrate on an engaging task.

5. Supporting Students' Social Studies Learning

A. I want to affirm students' accurate prior knowledge of the characteristics of three major ecosystems/biomes in Wisconsin (pine and hardwood forests, oak savannas, and prairies) and the natural resources (plants, animals, soils, and bodies of water) which can be used to meet Native people's, European/Yankee immigrants', and lumber barons' basic needs and/or to earn income. According to Darling-Hammond and colleagues (cited in Dean, Hubbell, Pitler & Stone, 2012), one of the principles of learning for the 21st century is that teachers must address and build on students' prior knowledge. However, since students have limited knowledge of the content I want them to learn, I also have to provide resources which expand their prior knowledge. I am following Vygotsky's social constructivist model of learning and providing photographs, objects, and written text for students to use, opportunities for students to discuss their interpretations and ideas with others, and guiding them to identify new ideas they did not previously have and the meaning of the ideas. Ultimately, I want them to develop deep understandings of each ecosystem/biome and some of the natural resources within each. In each lesson, I will also ask students to review what they have learned in prior lessons to allow them to build their content knowledge. I am following another of the principles of learning for the 21st century that students need conceptual knowledge to develop deep understandings in order to remember and apply their knowledge in current issues (Darling-Hammond et al, 2008, cited in Dean, Hubbell, Pitler & Stone, 2012).

I want to extend students' existing skills in analyzing photographs to gather information and arrive at conclusions and completing inquiry activities by reading different sources, summarizing main ideas, and citing evidence to support the main ideas. I am using photographs and objects representing natural resources and people's use of natural resources in each of Wisconsin's three ecosystems/biomes to provide additional opportunities for students to analyze photographs and arrive at conclusions from the photographs. I am also providing texts at different levels of reading difficulty for students to read, summarize, and cite as evidence for the main ideas. Because students enjoy and benefit from working in small groups, I have planned several small group inquiry activities in which they share their analysis of photographs and summaries of texts. Despite students' prior experiences in analyzing photographs and completing inquiry activities through reading and summarizing different sources, I need to monitor small groups to check that they are developing defensible interpretations of photographs and summaries of texts and that they can use the resources to defend their interpretations and summaries. As students report on the results of their small group work, I need to listen for students' reporting accurate, defensible ideas and citing the sources for the evidence. If students arrive at inaccurate interpretations and ideas, I must guide them to analyze photographs or read texts more closely to correct inaccurate ideas.

I want to build on students' family traditions of hunting and fishing for food and recreation and other students' views that it is unethical to eat animals. I plan to encourage students to explain their own family traditions and ethical views on hunting and fishing for food to increase motivation to learn and personal connections to the content. However, I will encourage all students to show respect for different cultural views on the issue of hunting and fishing animals for food by asking that students summarize each cultural view and the reasons for embracing each view.

B. I am using the inquiry arc (National Council for the Social Studies, 2013), a recommended practice in social studies education because it helps prepare students for college, career, and civic life, encourages rigorous learning, and assists students in making sense of how the world works. I am also guiding students to construct knowledge collaboratively, which follows Vygotsky's social constructivist learning theory. I chose to use this strategy because students' learning increases through social interactions with others. In addition, I am asking higher level thinking questions to challenge students' thinking and invite discussion, a recommended practice in social studies as well as other disciplines (Dean, Hubbell, Pitler & Stone, 2012; Zemelman, Daniels, & Hyde, 2005). I am using this strategy because it prepares students for their role as citizens who work with others to solve problems and develop sound reasoning for taking specific positions and actions.

I am following a recommended practice in science education by focusing on the crosscutting concept of cause and effect from the Next Generation Science Standards. As students use inquiry to investigate the natural resources in three different ecosystems/biomes in Wisconsin and how different groups of people used those resources during the 19th century, they should learn how people's actions affected the resources. By understanding cause and effect, students can recognize how people have affected the natural resources in the past and how people continue to affect natural resources today. Students can understand the causes in the decline of some natural resources and how people can affect the conservation of natural resources.

I am following a recommended practice in reading education by allowing students to choose their own reading materials (Zemelman, Daniels, & Hyde, 2005). When small groups complete the inquiry arc to investigate natural resources and how different groups used natural resources, I will provide each group with a folder of a variety of reading materials at different reading levels students can choose from. When students choose what they read, they are more motivated to read.

I am following a recommended practice in mathematics education by emphasizing problem solving using word problems with a variety of structures and solutions and open-ended problem solving to allow students to develop understanding (Zemelman, Daniels, & Hyde, 2005). I want to guide students to use mathematics problem solving to increase their understanding of human-environment interactions.

These recommended practices are appropriate for all students, including struggling readers and writers. I plan to provide modified reading materials for struggling readers as well as check on their understanding of important ideas as they read. If I provide this additional support to struggling readers, they will be more likely to report correct ideas to their small inquiry group.

C. Several students had misconceptions or limited knowledge of different animals which could be sources of food and their skins or furs used for clothing (such as bears, rabbits, and squirrels). Instead, they primarily gave deer and fish as sources of food. Only a few students knew that wild turkeys, acorns, maple sap, and wild rice were important food sources for Native people and early immigrants. To correct these misconceptions, I will give students different texts at various reading levels to read which introduce additional animals used as sources of food and clothing for Native people and early immigrants in Wisconsin. Additionally, I will question and guide students to notice the new ideas in each reading in order to correct their misconceptions. I will lead a whole class discussion on summarizing the different animals which could be sources of food and clothing and create an anchor chart summarizing these ideas to solidify students' new knowledge and correct their misconceptions.

6. Monitoring Student Learning

A. The formative assessment strategy of student contributions to class discussions allows students to explain their thinking verbally about the unit's main ideas. During class discussions, students can clarify their understanding of the characteristics of three different ecosystems/biomes in Wisconsin, the difference between renewable and nonrenewable natural resources, the value of natural resources, and reasons for humans to conserve natural resources. When students contribute to class discussions, they can also demonstrate their ability to construct a verbal, logical argument about which group of people, Native American, European or Yankee immigrants, or lumber barons, made the wisest use of Wisconsin's natural resources in the 19th century.

The formative assessment strategy of individual students' completed graphic organizers allows individual students to record in writing what they learned about the characteristics of three of Wisconsin's ecosystems/biomes, how one group of people (Native American, European/Yankee immigrants, or lumber barons) used the natural resources to meet their basic needs and earn a living, and their conclusion and evidence for which group made the wisest use of Wisconsin's natural resources in the 19th century. Struggling writers may use drawings with verbal explanations to record what they learned.

For the formative assessments, students can receive feedback from their peers and me regarding the accuracy, clarity, and completeness of their ideas. They can correct and expand their writing on their graphic organizers in preparation for completing the summative assessment.

For the summative assessment, students must demonstrate their understanding of the unit's main ideas in a creative way. Students may choose to either write an article or prepare several illustrations in order to convey their understanding of the unit's main ideas for a class book or class blog to readers who did not participate in the unit (such as family members and other students). They must meet the criteria for successful completion of the assignment while still writing an interesting article or illustrations in order to show proficiency in meeting the benchmarks. See the "Rubric for Assessing Article for Class Book or Blog" for criteria.

B. For students who are unable to demonstrate proficiency in meeting the science and social studies benchmarks for the unit through their article for the class book and blog, I will meet with each student individually, reteach the concepts and ideas for which they did not demonstrate proficiency, and allow them to explain their ideas verbally or in drawings.

7. Analyzing Student Learning

A. B. See the “Wisconsin’s Natural Resources and Wise Use of Wisconsin’s Natural Resources Rubric for Assessing Article for Class Book or Blog” for a list of the social studies and science benchmarks the unit addresses and the evaluation criteria used to assess how well each student met each benchmark.

C. See the “Wisconsin’s Natural Resources and Wise Use of Wisconsin’s Natural Resources Record Sheet Showing Students’ Achievement of Each Benchmark.” This is a spread sheet showing how well 10 students met the five benchmarks of the unit.

D. By looking at the student work samples and the spread sheet, most students (seven out of 10 students) met these three benchmarks:

SCIE1.4.2 Understand nonrenewable and renewable resources

SOCA1.4.4 Understand ways in which people in Wisconsin interact with their environment (use of land and construction of human made features).

SOCA1.4.8 Understand the positive and negative impact of people in Wisconsin on the environment.

Two benchmarks were more difficult to meet and only four or five out of 10 students met these benchmarks:

SCIE1.4.3 Understand ecosystems (identify various ecosystems, various organisms within an ecosystem, features of an ecosystem, explain how living and nonliving things within an ecosystem are interconnected and interdependent).

SOCE1.4.8 Understand the values and beliefs of different groups in Wisconsin.

Students 3, 4, 6, and 8 were struggling readers and writers, which likely contributed to their difficulty in reading, understanding, and writing about or illustrating five different characteristics of each ecosystem. Most students could describe two or three characteristics of each ecosystem, but not five. If I modified the number of characteristics students should list for each ecosystem/biome from five to three, eight of the 10 students could demonstrate proficiency. Students had many opportunities to learn about the characteristics of each ecosystem, including group research, individual graphic organizers, class concept map, and small group visuals and presentations. However, students may have had difficulty learning about the ecosystems/biomes they did not research.

Students also struggled with inferring the values of each group of people (Native Americans, European/Yankee immigrants, and lumber barons) based on their actions in using the natural resources. All four struggling readers and writers did not demonstrate proficiency for this benchmark. This benchmark required inferential thinking, which was more difficult than understanding explicit ideas in texts.

8. Using Assessment to Inform Instruction

A. Meet with all students who did not score proficient on the summative assessment task during independent work time so as not to take the students away from instruction in new content. Talk with each student individually to discover her/his difficulties in completing the summative assessment task at a proficient level. Build on this information and provide additional instruction and different activities from earlier instruction for students needing an additional chance to meet the benchmarks at a proficient level. For example, guide the students in creating individual concept maps of characteristics of each biome/ecosystem with words and images that represent each student’s understanding of at least five characteristics. Work with the students to develop physical movements and a piggy back song about each biome/ecosystem, highlighting at least five characteristics of each. Work with the small group of students to make a class chart of actions taken by each of them in how they use the natural resources in their environment (water, plants, animals, soil) and how these actions show what they value or consider important in their environment. Then discuss how each Wisconsin group (Native Americans, early immigrants, and lumber barons) from the 19th century used the natural resources to survive and/or make a living. Guide students to make connections between a group’s actions and what they value or consider important.

Once students appear to have a grasp on the two benchmarks they did not demonstrate proficiency, give individual students an oral exam to check for understanding. Students can answer the questions verbally or draw their responses. This should be done outside of the regular class time so students do not miss other class activities.

B. Struggling learners gain the most when teachers adopt formative assessment procedures (William and Black cited in Dueck, 2014). By allowing students another chance to demonstrate proficiency in learning, I am encouraging student mastery rather than allowing only one opportunity for students to prove they met the benchmarks. When students have opportunities to correct their errors and improve their work, their learning increases and they view learning as the result of effort rather than innate abilities (Dweck, 2006). When teachers emphasize mastery, they help students to increase their achievement because students’ self-efficacy (the belief in one’s own ability to complete tasks and reach goals) and motivation increase (Dean, Hubbell, Pitler & Stone, 2012).

Sleeter and Grant (2009) also recommend that teachers use different forms of assessment to allow various ways for students to demonstrate learning and communicate high expectations for all students and provide support to meet expectations. If I offered only one avenue and one chance for students to demonstrate learning, I may not be providing the support that all learners need to be successful. By providing an additional opportunity for students to show their learning, I am communicating to students I believe they can learn and be successful, and they have another chance to show mastery of the benchmark.

Brophy and Alleman (2008) and Zemelman, Daniels, and Hyde (2005) recommend that teachers connect important social studies content to students' backgrounds in order to make the curriculum personally relevant and meaningful, which also encourages greater learning among students. By encouraging students to think about how they use the natural resources in their environment and how their actions in using the resources reflect what they value may help them develop a better understanding of how earlier groups of people used natural resources, which also reflected their values.

9. Content Knowledge

Include the final, corrected copy of your research paper.

10. Reflections on Teaching the Unit

A. Describe at least one lesson that went well in terms of student learning and how you helped students meet the benchmarks/standards. Describe at least one lesson that could be improved because students had difficulty meeting the benchmarks or standards. Clarify what hindered students from meeting the benchmarks/standards.

B. Explain at least one insight you gained from working with students, another insight gained from collaborating with other educators (your teaching partner(s), cooperating teacher, university supervisor, methods professor, and/or other school staff), and a third insight gained from your experience in teaching a unit rather than individual lessons.

11. Resources

Include all the resources used in teaching your unit. You do not need to include the resources used in preparing your research paper unless you used those resources in your lessons.