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ABSTRACT

The study that is the subject of this document focused on how fifth-graders' knowledge and thinking about the westward expansion of the pre-Civil War United States was affected by students' participation in a curriculum unit on the topic. A stratified sample of 10 students was interviewed before and after they participated in the unit to determine, first, what they knew (or believed was true) about the subject and second, what they learned about it. Prior to the unit, students' knowledge about U.S. history was focused on events that occurred east of the Appalachian Mountains, except for what they may have remembered from a unit on Michigan history that they studied as fourth graders. Through the unit, students learned a great deal about the Wilderness Trail, the Louisiana Purchase, the Lewis and Clark expedition, the war against Mexico, the California gold rush, and the transcontinental railroad. While there were few outright misconceptions on such topics among the students, they had not yet developed a rich context of background information within which to assimilate what they were learning about westward expansion of the new nation. In particular, they could have used more information about the pioneers' tools and supplies, the federal role in westward expansion, and the fate of various Native American tribes whose traditional lifestyles came under increasing pressure as frontier lines advanced. (Contains 22 references.)
(Author/LBG)

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FIFTH-GRADERS' IDEAS ABOUT THE
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PRIOR TO THE CIVIL WAR, EXPRESSED BEFORE
AND AFTER STUDYING THE TOPIC WITHIN A
U.S. HISTORY COURSE

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Center for the Learning and Teaching of Elementary Subjects

The Center for the Learning and Teaching of Elementary Subjects was awarded to Michigan State University in 1987 after a nationwide competition. Funded by the Office of Educational Research and Improvement, U.S. Department of Education, the Elementary Subjects Center is a major project housed in the Institute for Research on Teaching (IRT). The program focuses on conceptual understanding, higher order thinking, and problem solving in elementary school teaching of mathematics, science, social studies, literature, and the arts. Center researchers are identifying exemplary curriculum, instruction, and evaluation practices in the teaching of these school subjects; studying these practices to build new hypotheses about how the effectiveness of elementary schools can be improved; testing these hypotheses through school-based research; and making specific recommendations for the improvement of school policies, instructional materials, assessment procedures, and teaching practices. Research questions include, What content should be taught when teaching these subjects for understanding and use of knowledge? How do teachers concentrate their teaching to use their limited resources best? and In what ways is good teaching subject matter-specific?

The work is designed to unfold in three phases, beginning with literature review and interview studies designed to elicit and synthesize the points of view of various stakeholders (representatives of the underlying academic disciplines, intellectual leaders and organizations concerned with curriculum and instruction in school subjects, classroom teachers, state- and district-level policymakers) concerning ideal curriculum, instruction, and evaluation practices in these five content areas at the elementary level. Phase II involves interview and observation methods designed to describe current practice, and in particular, best practice as observed in the classrooms of teachers believed to be outstanding. Phase II also involves analysis of curricula (both widely used curriculum series and distinctive curricula developed with special emphasis on conceptual understanding and higher order applications), as another approach to gathering information about current practices. In Phase III, models of ideal practice will be developed, based on what has been learned and synthesized from the first two phases, and will be tested through classroom intervention studies.

The findings of Center research are published by the IRT in the Elementary Subjects Center Series. Information about the Center is included in the IRT Communication Quarterly (a newsletter for practitioners) and in lists and catalogs of IRT publications. For more information, to receive a list or catalog, or to be placed on the IRT mailing list to receive the newsletter, please write to the Editor, Institute for Research on Teaching, 252 Erickson Hall, Michigan State University, East Lansing, Michigan 48824-1034.

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Abstract

This study focused on how fifth-graders' knowledge and thinking about the westward expansion of the United States prior to the Civil War was affected by their participation in a curriculum unit on the topic taught within a U.S. history course. Prior to the unit, a stratified sample of 10 students was interviewed to determine what they knew (or thought was true) about several key aspects of this historical period. Following the unit, they were interviewed once again to determine what they had learned. Prior to the unit, the students' knowledge about U.S. history was focused on events that occurred east of the Appalachian Mountains, except for what they may have remembered from a unit on Michigan history that they studied as fourth graders. During this westward expansion unit, the students learned a great deal about the Wilderness Trail, the Louisiana Purchase, the Lewis and Clark Expedition, the war against Mexico, the California Gold Rush, and the transcontinental railroad. Informed by selections from children's literature, much of this learning focused on specifics such as the difficulties involved in traveling over the Appalachians on the Wilderness Trail, the adventures of Lewis and Clark, and the ordeals endured by a woman who survived the Alamo. There was less evidence of outright misconceptions in the students' interview responses for this unit than there had been for units taught earlier in the school year. Still, the students had not yet developed a rich context of background information within which to assimilate what they were learning about westward expansion of the new nation. In particular, they could have used more information about what kinds of tools and supplies the pioneers were and were not able to bring with them, about the role of the federal government in stimulating the exploration and settlement of the west, and about the fates of various Native American tribes whose traditional life styles came under increasing pressure as frontier lines advanced.

FIFTH-GRADERS' IDEAS ABOUT THE WESTWARD EXPANSION OF THE
UNITED STATES PRIOR TO THE CIVIL WAR, EXPRESSED BEFORE AND AFTER
STUDYING THE TOPIC WITHIN A U.S. HISTORY COURSE

Jere Brophy, Bruce A. VanSledright, and Nancy Bredin¹

Current theory and research on subject-matter teaching emphasize the importance of teaching school subjects for understanding, appreciation, and application, not just knowledge memorization and skills practice. Drawing on neo-Vygotskian theorizing and work on knowledge construction and conceptual change, educators have been developing methods of teaching school subjects in ways that connect with students' existing knowledge and experience and engage them in actively constructing new knowledge and correcting existing misconceptions. Progress is most evident in mathematics and science, where rich literatures have developed describing what children typically know (or think they know) about the content taught at their respective grade levels. Curriculum developers can then use this information as a basis for developing instruction that both builds on students' existing valid knowledge and confronts and corrects their misconceptions.

The potential for applying similar concepts and methods to curriculum development appears to be at least as great in social studies as in other school subjects, but realization of this potential cannot occur until a significant knowledge base is developed describing children's knowledge and misconceptions about the social studies content commonly taught at each grade level.

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Establishment of such a knowledge base is only just beginning, especially with respect to children's developing knowledge of U.S. history. So far, child development researchers have concentrated on cognitive structures and strategies that children acquire through general life experiences rather than on their developing understanding of knowledge domains learned primarily at school. Much of this research has focused on mathematical and scientific knowledge, although there have been some studies of stages in the development of economic, political, and social knowledge (Berti & Bombi, 1988; Furnham & Stacey, 1991; Furth, 1980; Moore, Lare, & Wagner, 1985). The literature on cognitive and social development is useful for establishing a context within which to study children's knowledge and misconceptions about topics featured in social studies curricula, but it provides little direct information about particular developments in this knowledge domain.

Nor have scholars concerned with curriculum and instruction in the social studies developed much such information. There have been occasional surveys of children's knowledge about particular social studies topics (Guzzetta, 1969; Ravitch & Finn, 1987). These have concentrated mostly on isolated facts such as names, places, or definitions, with analysis and reporting of findings being limited to the percentages of students in various categories who were able to answer each item correctly. To be more useful to educators, research on children's social studies knowledge needs to shift to more sustained interviewing approaches in which questions are designed to probe children's understanding of connected networks of knowledge. Similarly, the children's responses need to be analyzed with attention to qualitative aspects of their thinking about the topic, including identification of commonly held misconceptions.

Not much work of this kind has been done in history. There have been a few studies of degrees of sophistication in adolescents' historical

understandings, mostly in Great Britain (Dickinson & Lee, 1984; Shemilt, 1984). However, there has not been much research on children's knowledge of and thinking about U.S. history. Levstik and Pappas (1987) explored the development of children's historical understandings by asking them to recall a historical narrative and then to define history and distinguish it from "the past." McKeown and Beck (1990) studied fifth-graders' knowledge and thinking about the American Revolution before and after a curriculum unit on the topic. Ramsey, Holbrook, Johnson, and O'Toole (1992) studied four-year-olds' beliefs about Native Americans expressed before and after a curriculum unit designed to broaden understanding of traditional and contemporary Native American life and to counteract specific stereotypes.

The authors have initiated a program of research designed to build on these beginnings by interviewing elementary students before and after each of their social studies units. The preunit interviews develop information about the knowledge and misconceptions about unit topics that students possess even before instruction in the unit begins. Thus, the preunit data provide information about what students know (or think they know) about a topic via information acquired in earlier grades or through reading or out-of-school experiences. The postunit data show how the students' knowledge and thinking about the topic have changed in response to the instruction and learning activities they experienced during the unit. These data identify the aspects of unit instruction that were most salient to the students, the degree to which knowledge gaps were filled in and misconceptions were corrected, and the degree to which misconceptions have persisted despite exposure to correct conceptions during the unit.

Procedures

As the first step in a program of research that eventually will encompass the full K-5 range, we have begun interviewing at the fifth-grade level. Fifth graders are generally more knowledgeable and easier to interview than younger students. However, they usually have not been exposed to history as a discipline or to sustained, chronologically organized instruction in history prior to their fifth-grade U.S. history course. They possess bits and pieces of knowledge about the past (Native Americans, the Pilgrims and the first Thanksgiving, Columbus, presidents and other famous Americans, and smatterings of state history), but they usually have not yet studied systematic, chronological history. Thus, although they are relatively sophisticated learners, fifth graders usually enter their U.S. history course with very little systematic prior knowledge.

The students that we have been interviewing are typical in this respect. Their school district's curriculum guidelines and adopted elementary social studies series both follow the expanding communities framework that focuses on the self in kindergarten, the family in first grade, the neighborhood in second grade, the community in third grade, the state and region in fourth grade, and the United States in fifth grade. The teachers do not always rely heavily on the adopted textbooks and accompanying worksheets and activities suggestions, but they do follow the district guidelines and teach the topics traditionally emphasized within the expanding communities framework that has been called the de facto national curriculum in elementary social studies (Naylor & Diem, 1987).

The interviewees are a stratified sample of fifth graders who attend an elementary school located in a working-class/lower middle-class suburb of Lansing, Michigan. All of the students are white, as are the vast majority of

their classmates. The sample includes five boys and five girls. Within each gender group there are two high achievers, two average achievers, and one low achiever, based on academic achievement in fourth grade. Because we could interview no more than 10 students due to resource limitations, we weighted the sample toward higher achievers in the expectation that this would yield more substantive responses.

Students were interviewed individually in quiet rooms outside of their classrooms. Interviews required 15-30 minutes. They were tape-recorded and later transcribed for analysis, using pseudonyms to preserve the students' anonymity. This report focuses on a unit on westward expansion of the United States between the Revolutionary War and the Civil War. The unit was taught during the Spring of 1991. It was the sixth unit of the U.S. history course, following an introductory unit on history and the work of historians, a second unit on Native Americans, a third unit on European discovery and exploration of North America, a fourth unit on the English colonies, and a fifth unit on the American Revolution. Findings from interviews conducted before and after the first unit are presented in Brophy, VanSledright, and Bredin (1991, in press). Findings from the Native American unit are presented in VanSledright, Brophy, and Bredin (1992a); findings from the explorers unit are presented in Brophy, VanSledright, and Bredin (1992a); findings from the colonies unit are presented in Brophy, VanSledright, and Bredin (1992b); and findings from the American Revolution unit are presented in VanSledright, Brophy, and Bredin (1992b).

In developing questions for the interviews, we focused on two overlapping sets of ideas: (1) the unit topics and associated key ideas traditionally taught in fifth-grade U.S. history courses and (2) the major goals and key ideas emphasized by this particular fifth-grade teacher. Thus, although our primary interest was in seeing how representative students would respond to

questions about commonly taught curriculum topics, we adapted the questions to the particular curriculum that these students would experience. The teacher's intended goals and content emphases were taken into account in selecting questions to be included in the interview, and her knowledge of what transpired as the unit progressed was included in interpreting the findings.

The teacher's approach to teaching U.S. history is noteworthy for her use of children's literature and her own storytelling and explanations, rather than a textbook, as a major source of input to students; her emphasis on depth of development of key ideas rather than breadth of coverage in selecting and representing content; her use of several devices designed to help students focus on key ideas and structure their learning around them (e.g., introducing units by asking students what they already know and what they would like to learn about the topic; asking them to summarize what they learned at the end; displaying key terms, organized within "people," "places," and "events" categories, on a history bulletin board; and creating, reviewing, and then posting story maps that summarize and connect the key details of important historical episodes); and her emphasis on cooperative learning activities and extended writing assignments over worksheets and short-answer tests. Her major social studies content goal for the year is to teach students about the establishment and development of the United States as a nation. In addition to providing information through stories and explanations, this includes keeping track of developments by locating them on time lines and maps.

The teacher's earlier units had established a context for this unit on westward expansion. The units on Native Americans and on explorers took North America as a whole as their purview. In the Native Americans unit, the students studied five major tribal groups who developed different cultures and customs in the process of adapting to life in different parts of the continent.

In the explorers unit, the students learned that the voyages of discovery sponsored by western European nations beginning in 1492 were initially focused on finding shorter ocean routes to the Far East, but that as they began to realize that they had encountered a whole "New World," they began to claim land and seek to exploit it through trade, conquest, and colonization. This learning included study of maps indicating which portions of the North American continent were claimed and later controlled by England, France, and Spain, respectively.

During the next two units, attention focused on the English colonies that later became the original 13 states. During the colonies unit, the students learned about the difficulties experienced in establishing the first settlements in the New World and about life and times in the colonies in the 17th century. In the American Revolution unit, the students learned about how growing conflict over taxes and other issues eventually led the colonies to unite and declare independence from England, then secure that independence through the Revolutionary War.

During this westward expansion unit, the purview would revert from a focus on the 13 eastern seaboard states to a consideration of the continent as a whole and of some of the key people and events involved in the nation's gradual spread westward. The emphasis was not on chronological study of events occurring between the American Revolution and the Civil War. Instead, it was on developing knowledge and appreciation of the challenges faced by people involved in different aspects of the westward movement. Students learned about the desire to expand west over the Appalachian Mountains, about the role of Daniel Boone in blazing the Wilderness Trail, and about the lives of the pioneers who traveled westward in wagon trains and established homesteads along the frontier. Brought to life with readings from several historically based

children's literature selections, the students learned about such topics as the difficulties involved in crossing the mountains in those days, attempts by Native Americans to resist incursions into their lands, the practice of circling the wagons to form a defense perimeter during attacks, and the many ways in which the pioneers had to be self-sufficient (building their own houses, spinning wool yarn and making their own clothes, etc.).

Following study of these pioneers who established the first homesteads beyond the mountains, the students learned about selected aspects of westward expansion beyond the Mississippi River. These included the Louisiana Purchase, key events in the southwest (the Alamo, Davy Crockett, war with Mexico over Texas), exploration of the Northwest (focusing on the Oregon Trail, Lewis and Clark, and Sacajawea), the Gold Rush in California, and the building of the transcontinental railroad.

Students' knowledge and thinking about these and related topics were addressed through interviews that emphasized open-ended questions that encouraged students to tell all they knew (or thought they knew) about the topic. There were 19 questions on the preunit interview and 22 questions on the postunit interview. The students' responses to these questions will be presented in groups arranged to contrast their entry-level knowledge and thinking with their knowledge and thinking after exposure to the unit.

Interview Findings

Highlights of the findings are shown in Table 1, in which the students are grouped by gender, and within gender, by achievement level. Jason, Tim, Teri, and Sue were high achievers; Mark, Brad, Helen, and Kay were average achievers; and Ned and Rita were low achievers. (Names of students are pseudonyms.)

Table 1

Summary of Students' Responses to Pre- and Post-Unit Questions

| | Jason | Tim | Mark | Brad | Med | Ieri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|---|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| <u>Pre-Question #1. How did the U.S. expand westward?</u> | | | | | | | | | | | | | |
| Population expansion/over-crowding | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 2 | 2 | 4 |
| Land acquisition via wars, appropriations | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 3 | 3 | 6 |
| <u>Post-Question #1. How did the U.S. expand westward?</u> | | | | | | | | | | | | | |
| Population expansion/over-crowding | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| General desire for more land, gold | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 3 |
| U.S. government explored, advertised, sold land | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 1 | 4 |
| Louisiana Purchase | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 3 | 4 |
| War with Mexico | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 3 |
| California Gold Rush | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 2 |
| <u>Pre-Question #2. Why did colonists want to move west?</u> | | | | | | | | | | | | | |
| Population expansion/over-crowding | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 3 |
| <u>Post-Question #2. Why did colonists want to move west?</u> | | | | | | | | | | | | | |
| Population expansion/over-crowding | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 2 | 4 |
| Gold | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 2 | 6 |
| Cheaper land/bigger plots | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 3 | 2 | 5 |

Table 1 (cont'd.)

| | Jason | Tim | Mark | Brad | Hed | Teri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|--|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| <u>Pre-Question #3. Why did westward expansion take so long?</u> | | | | | | | | | | | | | |
| Transportation limited to horses, walking, boats | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 3 | 4 | 7 |
| Had to cross mountains | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 |
| Resistance from Indians, French, British | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 2 | 4 |
| Sheer size of continent | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 |
| <u>Post-Question #3. Why did westward expansion take so long?</u> | | | | | | | | | | | | | |
| Transportation limited to horses, walking, boats | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 5 | 2 | 7 |
| Had to cross mountains | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 2 | 3 |
| Resistance from Indians, Mexicans | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 4 | 5 |
| Sheer size of continent | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| Had to get wagons across rivers | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 3 | 2 | 5 |
| Had to blaze trail through wilderness | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| <u>Pre-Question #4. How did the colonists find out about all the land to the west?</u> | | | | | | | | | | | | | |
| Don't know | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 1 | 4 |
| They knew the French and Indians lived there | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 |
| They explored little by little along the frontier | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 5 |

Table 1 (cont'd.)

| | Jason | Tim | Mark | Brad | Med | Ieri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|---|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| <u>Post-Question #4. How did the colonists find out about all the land to the west?</u> | | | | | | | | | | | | | |
| They explored little by little along the frontier | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| They government sent out explorers (Lewis and Clark) | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 5 | 8 |
| They heard about Gold discovered in California | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 2 |
| Boone blazed a trail over the mountains | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 3 |
| They read advertisements in newspapers | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| <u>Pre-Question #5. Have you heard about the Louisiana Purchase?</u> | | | | | | | | | | | | | |
| Never heard of it | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 5 | 2 | 7 |
| Heard, but has no information | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 3 | 3 |
| <u>Post-Question #5. Tell me about the Louisiana Purchase.</u> | | | | | | | | | | | | | |
| Bought by the president/Jefferson | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 4 | 3 | 7 |
| Bought more than he thought | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 3 | 5 |
| From France | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 4 |
| From Indians, Spanish | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 2 | 4 |
| <u>Post-Question #6. How would things have developed differently if there had been no Louisiana Purchase?</u> | | | | | | | | | | | | | |
| U.S. would be a small, 13-state country | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 5 | 9 |
| U.S. would be overcrowded | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 |

Table 1 (cont'd.)

| | Jason | Tir | Mark | Brad | Med | Teri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|--|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| There would have been more wars over land | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| U.S. might have purchased more land later | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 2 | 3 |
| Different language(s) would be spoken west of the Appalachians | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 |
| <u>Pre-Question #6. Who were the pioneers?</u> | | | | | | | | | | | | | |
| Traveled west/in wagons | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 |
| <u>Post-Question #7. Who were the pioneers?</u> | | | | | | | | | | | | | |
| First settlers/moved west | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 7 |
| Explored the west | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| <u>Pre-Question #7. What was life like for the pioneers?</u> | | | | | | | | | | | | | |
| Had to gather, hunt, grow food | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 5 | 8 |
| Slow, difficult travel in wagons | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 3 | 5 |
| Limited tools, supplies/had to make most things | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 2 | 4 |
| Danger from Indian attacks | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 |
| Don't know | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| <u>Post-Question #8. What was life like for the pioneers?</u> | | | | | | | | | | | | | |
| Had to gather, hunt, grow food | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 3 | 4 | 7 |
| Slow, difficult travel in wagons | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 4 |
| Limited tools, supplies/had to make most things | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 |
| Danger from Indian attacks | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 4 | 6 |
| Danger from wild animals | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 3 |
| Sickness (often fatal) | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 4 |

Table 1 (cont'd.)

| | Jason | Tim | Mark | Brad | Ned | Ieri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|---|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| <u>Pre-Question #8. What kind of food did they eat, and how did they get it?</u> | | | | | | | | | | | | | |
| Hunted game animals, birds | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 4 | 3 | 7 |
| Farmed | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 4 | 8 |
| Fished | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 |
| Gathered berries | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| <u>Post-Question #9. What kind of food did they eat, and how did they get it?</u> | | | | | | | | | | | | | |
| Hunted game animals, birds | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 10 |
| Farmed | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 4 | 4 | 8 |
| Fished | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 3 |
| Gathered berries | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| <u>Pre-Question #9. What kinds of clothes did they wear, and how did they get them?</u> | | | | | | | | | | | | | |
| Don't know | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 1 | 4 |
| Brought clothes from stores | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 3 | 4 |
| Made clothes from animal skins, fur | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 4 |
| Made clothes from bark, leaves | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 |
| <u>Post-Question #10. What kinds of clothes did they wear, and how did they get them?</u> | | | | | | | | | | | | | |
| Don't know | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Brought/bought clothes from stores | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 3 | 5 |
| Made clothes from animal skins, fur | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 3 | 5 |
| Made clothes from cloth | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Made clothes from bark | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 |

Table 1 (cont'd.)

| | Jason | Tim | Mark | Brad | Med | Ieri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|---|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| <u>Pre-Question #10. What kinds of homes did they live in and how did they get them?</u> | | | | | | | | | | | | | |
| Don't know | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Simple homes made from natural materials | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 4 | 4 | 8 |
| <u>Post-Question #11. What kinds of homes did they live in and how did they get them?</u> | | | | | | | | | | | | | |
| Don't know | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Simple homes made from natural materials | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 5 | 9 |
| <u>Pre-Question #11. How did they travel westward?</u> | | | | | | | | | | | | | |
| In wagons pulled by horses, oxen | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 5 | 3 | 8 |
| In wagon trains | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Post-Question #12. How did they travel westward?</u> | | | | | | | | | | | | | |
| In wagons pulled by horses, oxen | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 10 |
| In wagon trains | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 |
| <u>Pre-Question #12. Have you ever heard of wagon trains?</u> | | | | | | | | | | | | | |
| Explains basic concept of a wagon train | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 4 |
| <u>Post-Question #13. What are wagon trains?</u> | | | | | | | | | | | | | |
| Explains basic concept of a wagon train | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 5 | 4 | 9 |

Table 1 (cont'd.)

| | Jason | Tim | Mark | Brad | Ned | Teri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|--|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| <u>Pre-Question #13. Did the pioneers run into difficulties with other people as they traveled?</u> | | | | | | | | | | | | | |
| Indians | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 10 |
| French, British | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 |
| <u>Pre-Question #14. How did the pioneers get along with the Native Americans they encountered?</u> | | | | | | | | | | | | | |
| Wars, conflict | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 5 | 3 | 8 |
| Friendship, helping | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 2 | 5 |
| <u>Post-Question #14. How did the pioneers get along with the Native Americans they encountered?</u> | | | | | | | | | | | | | |
| Wars, conflict | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 5 | 4 | 9 |
| Friendship, helping | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 3 | 2 | 5 |
| <u>Pre-Question #15. What was the Trail of Tears?</u> | | | | | | | | | | | | | |
| Don't know | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 10 |
| <u>Post-Question #16. What was the Trail of Tears?</u> | | | | | | | | | | | | | |
| Don't know | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 10 |
| <u>Post-Question #15. What happened to the Native Americans who lived in the west?</u> | | | | | | | | | | | | | |
| They died. | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 4 | 8 |
| They were killed. | | | | | | | | | | | | | |
| They were sent to reservations. | | | | | | | | | | | | | |
| They were killed and their land taken. | | | | | | | | | | | | | |
| They were sent to reservations and their land taken. | | | | | | | | | | | | | |
| They were killed and their land taken. | | | | | | | | | | | | | |
| They were sent to reservations and their land taken. | | | | | | | | | | | | | |

Table 1 (cont'd.)

| | Jason | Tim | Mark | Brad | Ned | Teri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|--|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| <u>Post-Question #17. What do you know about Native Americans today?</u> | | | | | | | | | | | | | |
| The live like other Americans now | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 5 | 9 |
| They preserve their culture in some ways | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 4 |
| <u>Pre-Question #16A. What do you know about the Alamo?</u> | | | | | | | | | | | | | |
| It was a place in Texas | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| It was a battle site | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| <u>Post-Question #18A. What do you know about the Alamo?</u> | | | | | | | | | | | | | |
| It was a place in Texas | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 4 | 2 | 6 |
| It was a battle site | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 5 | 9 |
| Susanna was a survivor | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 4 | 4 |
| <u>Pre-Question #16B. Who was Davy Crockett?</u> | | | | | | | | | | | | | |
| A pioneer | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 1 | 4 |
| A famous fighter/hunter/cowboy | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 3 | 5 |
| Fought at Alamo/against Mexicans | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Song, TV show, movie about him | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 6 |
| <u>Post-Question #18B. Who was Davy Crockett?</u> | | | | | | | | | | | | | |
| Fought in Mexican-American War | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 4 | 7 |
| Died at Alamo | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 3 | 3 | 6 |
| <u>Pre-Question #16C. What do you know about the Mexican-American War?</u> | | | | | | | | | | | | | |
| Don't know | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 3 | 4 | 7 |
| U.S. versus Mexico | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 3 |

Table 1 (cont'd.)

| | Jason | Tim | Mark | Brad | Med | Teri | Sue | Helen | Kay | Rita | Boys | Girls | Total |
|---|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| <u>Post-Question #18C. What do you know about the Mexican-American War?</u> | | | | | | | | | | | | | |
| U.S. eventually won Mexico ceded land | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 3 | 3 | 6 |
| | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | 4 |
| <u>Pre-Question #17. What was the Gold Rush?</u> | | | | | | | | | | | | | |
| Don't know | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 2 | 2 | 4 |
| People came to look for gold | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 3 |
| To California | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 1 | 4 |
| To Colorado/the West | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 |
| <u>Post-Question #19. What was the Gold Rush?</u> | | | | | | | | | | | | | |
| Don't know | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| People came to look for gold | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 5 | 9 |
| To California | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 5 | 8 |
| In 1849 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 3 |
| found by Marshall/At Sutter's Mill | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 3 | 5 |
| <u>Pre-Question #18. What was the Trans-continental Railroad?</u> | | | | | | | | | | | | | |
| Describes it accurately | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <u>Post-Question #20. What was the Trans-continental Railroad?</u> | | | | | | | | | | | | | |
| Describes it accurately | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 |
| <u>Post-Question #21. How did this railroad change the westward growth of the U.S.?</u> | | | | | | | | | | | | | |
| Increased travel to West/speeded up growth | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 |

Table 1 (cont'd.)

| | Jason | Jim | Mark | Brad | Med | Ieri | Sue | Helen | Key | Rita | Boys | Girls | Total |
|--|-------|-----|------|------|-----|------|-----|-------|-----|------|------|-------|-------|
| Post-Question #22. How was the country different after there was no more unclaimed land? | | | | | | | | | | | | | |
| No more wars over land | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 3 |
| No more adventure/exploration | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 |
| People built cities | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| More rules, restrictions | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 4 |

General Introductory Questions

The first four questions in each interview were relatively general ones designed to encourage students to tell what they knew about westward expansion in their own words. The first question simply asked students to tell what they knew about westward expansion. The next three questions asked why the colonists wanted to expand to the west, why it took them so long to do so, and how they knew about the land that lay to the west.

Pre-Question #1. You have been studying about how the 13 colonies became the nation called the United States. Eventually the United States expanded to the west by forming additional states. Tell me what you know about how this happened.

Most of the students did not respond to this question by talking about the expansion of the United States as a nation. Instead, they talked about migrations of individual families or small groups of people acting on their own initiative. No one mentioned the Louisiana Purchase, the Lewis and Clark Expedition, or other government-sponsored activities.

Six students spoke of pioneers gradually driving the Indians and the French (and in one case, the British) out of these western territories by defeating them in wars or arriving in such force that they could simply appropriate the land without fearing retaliation. In addition or instead, four students suggested that the Atlantic seaboard states were getting crowded due to continued immigration from England or expansion of the colonial population, and that pioneers moved westward to escape this crowding.

No one directly mentioned a federal government role in westward expansion. However, Brad and perhaps one or two others might have implied it in talking about wars and Rita noted that colonists started moving westward once they got their freedom from England. Perhaps Rita remembered that one of the

bones of contention between Great Britain and the colonies had been British policies forbidding settlements beyond the Appalachians.

Jason: More people came and lived here and moved westward. They had babies.

Tim: Once they became 13 colonies, they just thought all this land was theirs, so they just took all of it.

Brad: There was wars with the British and we had wars over the land and eventually the U.S. won more wars and we gained more land.

Ned: More people started coming over from England and other countries and they started to spread out.

Sue: People from the colonies started to need more room, so they moved over here. The French and the Indians were getting mad, so that's how the French and Indian War got started.

Helen: The people from Europe and stuff came over here and found land and they sent a message out, "This land's better; come to this land." So people came to this land and they filled up this area right here (points to the eastern seaboard on the map) and then so many people came over because they thought it was such a wonderful place to live and it got so crowded so they moved over. They said, "This place is pretty good too." So they kept bringing people over here and that got crowded, so it kept moving on and stuff until it filled up the whole entire United States.

Kay: The colonists wanted more land and they thought there was more land towards the other ocean, so they started to explore. They ran into Indians and they had a war. I'm not sure what that war was called.

Rita: The English who was in control of the army surrendered at Lexington and then the colonies got their freedom from England and they started moving over and went over. And the maps were better.

Mark's response is interesting because he had learned a little about westward expansion from the computer game *Westward Ho!* However, his response indicates that what he learned (or at least, what he reported here) was focused on the strategies needed to win the game rather than on its historical content base.

Mark: I don't really know anything about it, but I have a computer game called *Westward Ho!* It's about traveling on the Oregon Trail. You start out with a certain amount of money and try to make it to Oregon. I haven't made it all the way, but I've made it halfway.

[Why is it so hard?] Because you have to choose how good you want to eat and if you want to fight or just continue. [Who would you fight?] Indians and stuff. Then if you use up too much money and you run out of money, the game's over.

Taken together, the responses to Prequestion #1 indicate that the students possessed very little specific prior knowledge about westward expansion as they began the unit. However, they did possess a context for understanding westward expansion, in that they understood that the original 13 states now contained a significant population that included many people who wanted to move westward over the mountains. Although naive in many respects, the students' beliefs were free of significant misconceptions, with the possible exception of the notion that the 13 original states were quite crowded in the early years of the 19th century. Also, unaware as yet of the Louisiana Purchase, the students assumed that the United States expanded solely through war and conquest.

Post-Question #1. You have studied about how the 13 colonies became the nation called the United States. Eventually the United States expanded to the west by forming additional states. Tell me what you know about how this happened.

Informed by what they had learned during the unit, the students' postunit responses were much more sophisticated. Only one student (Ned) still spoke of settlers seeking to escape overcrowding in the east. Along with Helen and Kay, Ned also suggested that westward expansion was fueled by settlers' desire either for gold or for bigger or better plots of land on which to farm.

In addition to or instead of these general notions, all of the students except Ned named at least one of the following specific factors that fueled westward migration: exploration, advertising, and sale of land sponsored by the federal government (4), the Louisiana Purchase (4), the war with Mexico (3), or the California Gold Rush (2). All of these factors had been emphasized by the teacher during the unit.

Jason: They were looking for new land and there was farmland and it was for sale, so people went out there and bought it. [Who did they buy it from?] The U.S.

Tim: The Louisiana Territory. They thought it was just the regular Louisiana state, but they got a lot of Texas and they got Oklahoma, Kansas, Nebraska, South Dakota, North Dakota, Minnesota, Iowa. It was called the Louisiana Purchase. They got the rest because they won the Mexican War.

Mark: The Americans decided that they wanted to know what was over the mountains that they hadn't climbed, so they sent some people out to look and see what was over there. They called them the pioneers. More people gradually kept on going over.

Brad: Well, they had certificates over the colonies that said Kentucky was the land of opportunity and people moved to Kentucky and they kind of flowed out from Kentucky to the western United States. [They saw notices in the newspaper?] Yeah.

Ned: They went west because it was getting too crowded. [What else?] They heard of land out there, and gold.

Teri: There was this guy and he said that he wanted to buy Louisiana and so he did, but he bought all the rest of the territory too, without even knowing it. So he sent out three people and they had Indian names and they were sent out to explore the land.

Sue: Well, the president, I can't remember his name, he bought all this land and it was called the Louisiana Purchase. Before that they moved out here, but they wanted more land, so they bought it. Then people started moving down here and Mexico got mad and had a war.

Helen: There was this one guy and he came to California and he found gold and he told other people about it, which was a real big mistake. Then everybody started to come over to look for gold because they wanted gold too. A lot of people came over, so not a lot of people got gold. Some people got a lot of gold and some people didn't get any. So people just kept coming, looking for gold and it all happened because this one guy went over and found another's gold. [Do you know who he was?] Something Marshall. I can't remember. [Any other reason people went out there?] They went for new land.

Kay: Settlers started wanting more land and people were saying, "If you move west, you get free land and bigger land," so the settlers started moving west. Then there was the California Gold Rush.

Rita: They kept on winning land over and over and then they bought . . . they wanted Louisiana, and they got all the way up to Michigan. They bought more land than they wanted. Then they fought

the Mexicans for Mexico, then we got Texas, then we got California and then we had the whole United States.

A few nuances of these responses are worth noting. Mark's use of the term "pioneers" did not distinguish between the initial explorers or trailblazers and the pioneers who later came to settle along the frontier. Responses by several students made throughout these interviews indicated a similar use of the term "pioneers" in this way. Teri does not remember the names of Lewis and Clark (or Sacajawea), but she remembers that they had Indian names. This was true of several students, as responses to Postquestion #4 will indicate.

Pre-Question #2. Why were the colonists interested in expanding to the west?

Three students could not respond to this preunit question and three others suggested that settlers desired to escape overcrowding in the east. The remaining students produced unique responses. Tim and Kay showed some understanding of what was occurring, Mark took a guess, and Helen reverted to giving reasons why people emigrated from Europe to America. Her notion that early European emigrants were slaves who came to America to escape their masters (European monarchs) is a misconception that she expressed in several interviews. It stuck with her despite the teaching of accurate information during the colonies unit that should have dislodged it.

Tim: Because it was pretty much unexplored and they didn't know much about this part and not much about the far west part. It was just free land and they just took it.

Mark: I don't know . . . to grow more crops.

Brad: They had so many people, they needed more land for the people, and they were trying to get more land.

Teri: They wanted more land, because more people were coming and it was too small.

Helen: People down in Europe were slaves and they wanted freedom, so they came up here. And for religion.

Kay: So they could be richer and plus they wanted the land from one ocean to the other.

Rita: Because they were selfish, maybe . . . they knew there was more land out there and they wanted to explore. They knew that if they were going to keep on producing babies, then this was going to get too full and they needed more land and they knew there was land over here.

Post-Question #2. Why were the colonists interested in expanding to the west?

Responses were more confident and specific following the unit. Four students still mentioned a desire to escape overcrowding in the east as a motive for westward migration. In addition or instead, however, six students mentioned the desire to find gold and five mentioned some version of the notion that people of limited means could acquire larger or richer farm plots in the west than they could in the east. The more elaborated of these responses were the following.

Tim: Because it was just unexplored land and the land was pretty cheap. They would build a home there and it was really cheap. They could get a certain amount of acres for not a lot, compared to in the colonies, so they moved out there and eventually there was gold and a lot of different things that they wanted to find and explore.

Brad: There was too many people in the colonies, and they couldn't have all those people, so they kind of moved. Then, once they were settled and they had more land, people wanted to move because there were some opportunities in the other lands. [Like what?] In the mountains, you can mine gold and there was good farmland, lots of trees to build bigger and better houses out of, and just nature materials there was more of.

Sue: To find gold and to have bigger space for farming and stuff and just explore the land.

Kay: They wanted more land. They wanted to find gold and get richer and they thought there was more meat and more property out west, so they started moving.

Pre-Question #3. It took the colonists a long time to expand westward. Do you know why it took so long?

Two students could not respond to this preunit question. The remaining students suggested one or more of the following reasons: lack of motorized transportation (7), resistance from Indians or Europeans who lived in the west (4), the difficulties involved in crossing mountains (2), and the sheer size of the continent (2). Rita suggested that lack of water was a problem. Apparently, her reasoning was that water was scarce in the west and therefore settlers would have to carry a great deal of water with them and refill their water supplies whenever they had a chance, and that this would slow down their progress. Jason also noted that the need to stop and let animals eat and drink would slow down progress (in fact, he emphasized this factor more than the lack of motorized transportation).

Jason: Because they had horses and bulls pulling them. [Why did that make it take so long?] Because they had to stop and let them eat and drink.

Tim: Other countries wanted that land, so they had to have a couple of wars over it and stuff. They just fought over the land for a long time and that's why it took so long.

Brad: We just got done with Desert Storm, and it seems like a really short one compared to the wars that were back then. In Desert Storm we were trying to get Saddam out and there wasn't too much land there to cover, when you compare it to the wars of the 13 colonies. They were trying to get more land than we were now, so it took more to get that land. The wars were different. They had different machines and stuff and they didn't have the vehicles we have now. They had horses that were pretty fast, but that was the only fast transportation they had. [Any other reasons?] The Revolutionary War started in Lexington and then they had to fight from town to town. [Well, there aren't any towns out there, so why was it slow going out there?] Because the British knew we were coming and we wanted to fight each other, so when the colonies came along and tried to get more land, the British were trying to hold them back.

Ned: Because they had to use wagons and horses. [Any other reasons?] Because they couldn't take their carriage or the wagon everywhere they wanted to go, because of narrow places in the mountains.

Sue: Because they had to walk, or maybe go by horse or something. [Any other reasons?] Maybe some wild animals, or maybe Indians attacked them.

Helen: Well, the United States is so big and there were no planes or trains or any kind of cars or portable transportation besides walking and the sea, so they either had to walk on foot or row with paddles and that didn't go very fast.

Kay: Because they didn't have cars or anything. They had to walk or ride horses or ride in wagons, plus they had to fight a war with the Indians.

Rita: Because there was no water. [Why would that be a problem?] Their supplies. [Any other reasons?] The mountains, because they didn't have cars, they didn't have airplanes. They traveled on horses and so it took them a long time probably just to get half.

Like Rita's response to Post-Question #1, Brad's response to Pre-Question #3 probably was based on some memory of what had been learned about British policies against colonial expansion beyond the Appalachians. Working from this limited knowledge and knowing nothing about the diplomatic reasons for the British policies, Brad assumed that British armies were stationed west of the Appalachians for the primary purpose of preventing colonial expansion.

Post-Question #3. It took the colonists a long time to expand westward. Do you know why it took so long?

Following the unit, all 10 students supplied at least one substantive response to this question, and most supplied two or more. Seven students mentioned the lack of motorized transportation, five mentioned difficulties in getting wagons across rivers, and three mentioned difficulties in crossing mountains. These responses reflected the explanations and stories that they heard during the unit that were designed to develop knowledge and appreciation of the challenges faced by the pioneers. Five students mentioned the need to fight people who resisted the westward expansion. Now, however, these people were described as the Indians and the Mexicans, rather than as the Indians and the French or British. This reflected what the students had learned about the

Mexican War. Finally, one student again mentioned the sheer size of the continent as a factor that explained the lengthy westward expansion, and another mentioned the need to blaze a trail through the wilderness before settlement could proceed apace.

Jason: They had to go in covered wagons and they didn't go very fast. It was hard, the traveling. It's hard going across rivers and stuff like that.

Tim: All they had was horses and oxen. If you wanted to take your family, you had to have oxen and a big wagon, and it took months and months to get there. [Any other reasons?] There was Indians and maybe some Mexicans when they went down in Texas.

Mark: Mostly, I'd say because they couldn't go across the Mississippi because they didn't know what was on the other side and what would happen to them. . . . Mostly they were taken by horses and they explored a large amount of area at one time, and stopping and looking around and then going and then stopping again.

Brad: When they traveled, they'd have to cross rivers and they'd have to take wheels off their wagons, cross the rivers, and then put the wheels back on. They did things like that and they had to chop down trees and clear a trail so the wagon could get through and some people had to walk some distance and when they were walking, they had to carry some luggage.

Ned: They had to go by horse and wagons and they had to cross the Rockies and stuff.

Teri: They didn't have cars to do that. They only had wagons and horses. [Any other reasons?] They had to go through rivers and go over mountains and that took awhile, and there were Indians.

Sue: Because of wars and stuff. [What wars?] With Mexico. And they just bought this land. [Did they fight wars with others?] Yeah, probably the Indians because they didn't really like them moving into this area right here (points to the west).

Helen: There were a lot of mountains and it took a long time to get over the mountains and past the rivers.

Kay: They were in little wagon trains and it took about a month to just go to the Mississippi River, and maybe longer. Plus they had to fight wars with the Indians. One was with the Mexicans.

Rita: They had to fight all these wars.

Pre-Question #4. How did the colonists find out about all the land to the west?

Four students could not respond to this preunit question. Among the six students who did respond, five expressed some version of the notion that the people explored little by little along the frontier. In addition or instead, three students said that the colonists knew there were additional lands because they knew that the French and Indians lived to the west of them. Most of these responses were guesses or tentative inferences from a limited knowledge base. No one mentioned government-sponsored exploration or encouragement of migration.

Tim: Because the French went this way (points along the St. Lawrence River on map), and they knew they were out there.

Brad: Well, the French and the Indians lived out west . . . see, when you're in the colonies, when you explore, what you find you can have. But then they were fighting for it. They kind of ventured out and then they saw more land and they said, "Well, we can use this." And they used it.

Sue: Maybe they traveled. I don't know.

Helen: They didn't know. I'm guessing they just had to take a chance. They didn't know there was more land over here, and they had to walk and take a chance of dying.

Kay: Well, they knew there was land because they couldn't see the ocean yet, so they kept on walking until they found the ocean.

Rita: Well, they knew that the French and Indians were out there. The French and Indians told them about the land, and then they were greedy and that's how the French and Indian War started.

Post-Question #4. How did the colonists find out about all the land to the west?

All 10 students responded to this question following the unit, and the responses were notably more lengthy and confident. Eight students mentioned the Lewis and Clark expedition or the more general notion that the government sent out explorers to find out more about the western lands. In addition or instead, three students mentioned Daniel Boone or the fact that a trail had been blazed over the mountains, two mentioned news about gold being discovered

in California, one mentioned advertisements in the newspapers, and one repeated the earlier notion of exploring little by little along the frontier.

An interesting feature of several students' responses was their reference to the three key figures from the Oregon Trail expedition as Flaming Hair, Long Knife, and Bird Woman, rather than as Clark, Lewis, and Sacajawea. This was because their learning about the Oregon Trail expedition had been based, not on a textbook, but on a children's literature selection entitled Bird Woman and Flaming Hair (by Clare Thorne, published in 1968 by Child Craft, Chicago). This illustrates the trade-offs involved in using children's literature as a content base for social studies. The narrative structure helps the students remember the gist of the story and certain details (Egan, 1988), but sometimes at a cost in the validity or sophistication of the social science content knowledge that is learned or retained (VanSledright & Brophy, 1991, in press).

Jason: Because of the explorers Lewis and Clark who traveled to the Pacific Ocean. [Who told them to do that?] President Jefferson. [Why?] To see if there was land out there.

Tim: I think they knew it was there because they knew about the territories by Lake Michigan and stuff. They just kept traveling. Once they had Louisiana, they just kept going (explains about how the Louisiana Purchase turned out to be much bigger than expected). [Who went out there to figure all that out?] Pioneers and stuff. Explorers and people that wanted new homes and wanted it cheap.

Mark: They sent some men over the mountains to see what was on the other side, to see if it was smart to go there or if it wasn't smart to go there. They went over there and they decided it would be a good idea to move over there because there was a lot of space. [Do you know who these men were?] The pioneers. [Was there a special exploration group that went to investigate?] I can't remember.

Brad: Well, for Kentucky as an example, I think two people moved there and they cleared the path and they got there and they wanted to explore, and they'd go back and tell the people, "There's great land and you can come," and they moved. [What about the land farther west than Kentucky?] I think it was Andrew Jackson that bought the Louisiana Purchase and he . . . [Actually it was Thomas Jefferson.] and he sent explorers to discover the land. The

explorers explored it and came back to Jefferson and told him what kind of land he had and people moved there. The reason Jefferson bought it was so the colonies could have more land to say that was theirs. Then more people moved into where the Louisiana Purchase was. Then explorers would explore more land and then people would move there. [Do you know what the explorers' names were?] They had nicknames and real names. Their nicknames were Flaming Hair and Bird Woman, and I forget the third one. I can remember two names. It was Lewis and Clark.

Ned: In the newspaper. (Couldn't elaborate)

Teri: Three people were sent over to explore it all--one was Long Knife, another was Flaming Hair, and I can't remember the other one. [Who asked them to explore that area?] The president.

Sue: Daniel Boone went over the mountains and he found land and then he went back and told the people and they traveled more. They were looking for what they called the "wide lake" or "wide waters," the Pacific Ocean. They were trying to get there so they could find it. [Who told them about the land farther west?] People traveled out there . . . Narcissus or something like that, and Marcus, and . . . the Red Hair, Long Knife, and "something Bird." They were going to find more land out farther west. She got kidnapped first by this man, I can't remember his name, he was the king of Mexico. Then he wanted her to go tell the people that he was going to do something. So she told him "No way," and they would turn back at the king, and this man told her they were going to retreat and stuff and so they retreated. [Are you talking about the Mexican-American War?] Yeah. [Have you heard of Lewis and Clark?] Yeah, that was Red Hair and Long Knife. [Where did they explore?] (points correctly on map). [Who told them to do that?] I think the president. [Did they make it back to tell Jefferson?] No, they got killed by Indians.

Helen: One explorer, Marshall something, went over there and he found the land and he kept going and finally he got to California and saw the Pacific Ocean and didn't go any farther than that and he stayed in California. [How did he get the word back to the people?] Well, they didn't have a telephone. I guess they would have gone back. [How about other ways to find out?] Well, it was like President Jefferson told them he already owned this land and this land belonged to Spain and he wanted this land, so he told an explorer to go out and see if there was more land, "Because if there is, I want to have it." [Who was the explorer?] I don't know. Anyway, the explorers went out and found the land and they came back and they told him and he spread it out that there was land over here (pointing to the west). The people moved over because there was more land.

Kay: They found out because Lewis and Clark . . . the president, Jefferson, bought the Louisiana Purchase and he just thought it was Louisiana, but he had this big area from France. He sent Lewis and

said bring a partner to explore the land to see what was on it. They ran into an Indian village and there was Sacajawea. He [sic] helped them get to the Pacific Ocean.

Rita: They went over the mountains. Daniel Boone went over and then Davy Crockett and they went right to the Mississippi and they stopped for a little while and then they sent Lewis and Clark over. [Who sent them?] The president at the time. I think it was Thomas Jefferson. [To do what?] To explore the land. [Then what?] They went back and told. Thomas Jefferson wanted people to go out there. Then someone discovered gold in California.

Although most students correctly understood basic information about pioneering beyond the Appalachian Mountains, the Lewis and Clark expedition, the war with Mexico, and the Gold Rush, many of them garbled or conflated particular details. Several students were confused by the fact that the Louisiana Purchase turned out to be something different than the buyer and seller envisioned when they signed the documents. Sue conflated events occurring on the Oregon Trail expedition with events occurring in the Mexican war. Kay apparently believed that Sacajawea was male.

The girls' responses concerning Sacajawea/Bird Woman are unusual in the context of our larger corpus of interview data. Typically, the girls are more likely than the boys to remember and mention female individuals that they learn about in their history units. However, Teri remembered the names Long Knife and Flaming Hair but not Bird Woman; Sue referred to Bird Woman as "something Bird;" Kay referred to Sacajawea as male; and both Helen and Rita made reference to the Oregon Trail expedition but did not mention Sacajawea/Bird Woman. We were surprised that the girls did not remember her more clearly and mention her more often, although it should be noted that only Brad mentioned her among the boys.

Questions About the Louisiana Purchase

Pre-Question #5. Have you ever heard of the Louisiana Purchase?

Prior to the unit, seven students had never heard of the Louisiana Purchase. The other three (all girls) said that they had heard of it but could not give any information about it.

Post-Question #5. Have you ever heard of the Louisiana Purchase?

In assessing students' responses to Postquestion #5, we included anything that they might have said about the Louisiana Purchase in the process of answering Postquestions #1 or #4. Following the unit, all of the students except Ned were able to provide specific information about the Louisiana Purchase. All nine of these students were able to identify the territory included in the Louisiana Purchase by pointing to it (approximately) on a map. Seven of them identified Thomas Jefferson or "the president" as the purchaser, five noted that he bought more land than he realized at the time, and four noted that he bought the land from France. Four other students identified the seller incorrectly. Two thought it was the Indians, one thought it was the French and the Indians, and one thought it was the Spanish.

Most of the students simply recounted the basic facts that they had been taught. However, Helen initially stated that Jefferson bought the Louisiana Territory from the Indians, then later said that he took it from them after defeating them in a war. Her response is quoted below, along with those of Jason and Brad, who struggled to answer a follow-up question about how land occupied by Indians could be sold.

Jason: Jefferson thought he was buying a little piece of land but instead he bought a whole bunch (indicates on map). [Who did he buy it from?] The Indians. [Anybody else?] Indians. [The French were

involved?] Yeah. [How could you sell a piece of land with the Indians already on it?] I don't know. Give them half the money. [Did they do that?] No.

Brad: Jefferson bought it . . . from the Indians and I think the French. He purchased it and it kind of started down in Louisiana. It starts about here by the Mississippi River and it went up by the border of Canada and came down in the middle of Montana and it went through Utah and Wyoming and went down kind of towards Texas. [Were there Indians on this land?] Yeah. [So how could Jefferson buy it if Indians were already on it?] Yeah, but the Indians and the French sold it to Jefferson, but there were a couple of tribes on the property.

Helen: I know about Jefferson and I know about Louisiana. I just know he bought that land when he was president. I think he fought over it and won it (goes on to explain that Jefferson first fought the Spanish for the southwest but lost, then fought the Indians for the Louisiana territory and won). He was fighting the Indians for Louisiana.

Post-Question #6. What if there had never been the Louisiana Purchase? How would things have developed differently?

This question, asked only during the postunit interview, was designed to determine the degree to which students could use what they had learned about the importance of the Louisiana Purchase to U.S. expansion to draw defensible inferences about the probable course of events in North America if the Louisiana Purchase had not occurred. Nine students (all but Ned) responded. All nine understood that, barring expansion in some other way, the United States would have been a small nation little or no larger than the original 13 states. In addition, three of these students noted that the country would have become overcrowded, three suggested that wars against France might have developed, three suggested that other land purchases might have occurred later, and two noted that the people living west of the Appalachians would not be speaking English.

Brad also noted that the Pacific Coast states probably would belong to France as well. In contrast, Sue suggested (more accurately) that the west would have been dominated by Spain/Mexico. However, she also expressed the

naive idea that perhaps certain parts of the Louisiana territories would never have been discovered and would remain as "space" on the maps. Rita suggested that increasing overpopulation would eventually cause English emigrants to go back to England, and that this would somehow cause the English to "come over here to take over." Perhaps she meant to wage war against the French and expand the colonial territory (i.e., forgetting that the United States had become an independent nation by then). Finally, Helen believed that the smaller United States somehow would have extended far enough west to include Michigan (where she lives), but that the land beyond that would still be wilderness.

Jason: We would have had less land . . . if more people kept on coming, we wouldn't have had room for them. [Any other ways things would have turned out different?] We might have fought for it.

Tim: There might have been a war to get that land if they wanted the land that badly. They would have fought for it. [Who?] The Americans and the French . . . basically, they'd either stay a small country or there'd be a war.

Mark: We wouldn't be a very big country. [Any other things that would have been different?] No. [What language do you think they would have spoken?] French.

Brad: If he didn't purchase the land, the colonies would have less land to claim and now in 1991 the area where the Louisiana Purchase was and right over by California, Oregon, and Washington would probably belong to France and the French would be living there, so the United States would be smaller now. It could have been bought later and there probably would have been more wars between the colonies and the French and then possibly the colonies would win more land, and then the French could win more land.

Teri: We'd only have 13 states. [Anything else?] I don't know.

Sue: Probably Spain would own it or later on we could buy it in the future. It belonged to Spain and probably they would have a king and people would talk a different language. . . . If they didn't find out about this southern part, there'd probably be space here and then this big piece of land right here would be owned by the Mexicans.

Helen: I don't think it would be different because there are about 15 presidents that we've had to far, and there's not one out of 50 that's just going to want this land (i.e., that would be satisfied to confine the U.S. to its 1803 borders). [What if Jefferson didn't

get that land? What would we be like today?] I don't think we would have been the United States. This part over here might have been the same. It would just be the 13 colonies. We'd still have Michigan but it wouldn't have been called Michigan and Louisiana and Florida. [So we'd have the eastern third of what we'd have today?] Over in the west would be woods.

Kay: We would just have the 13 colonies and we wouldn't have had much more land, and this would be overpopulated. It would be so crowded and so polluted. More people would leave. [Who would have been in charge of what is now the rest of the U.S.?] France and the Mexicans.

Rita: Then it would have been overpopulated and people would have went back to England. Then the English would have come over here to take over.

Questions About the Pioneers' Lives

Pre-Question #6. Who were the pioneers?.

Prior to the unit, only Jason, Mark, and Rita could provide reasonably specific definitions of the pioneers as the people who migrated westward in covered wagons. However, most of the other students' responses were appropriate in a more generic sense (explorers, travelers, Pilgrims).

Jason: People that moved in covered wagons. [Can you tell me more?] They moved in groups. [Where were they going? What were they after?] I don't know.

Tim: I always thought of them as being the lumber guys that cut down the trees. Sort of explorers--guys that are just real strong guys.

Mark: I think they were the first people that went to the west.

Ned: The people who were fighting against the British.

Teri: A traveler.

Sue: People from England coming over to explore new land.

Helen: Like the Pilgrims.

Kay: Explorers. [What did they do?] I'm not sure. [Where did they explore?] I think it was on the water.

Rita: They were the people who went out here (points to the west on the map).

Post-Question #7. Who were the pioneers?

Following the unit, seven students (including all five girls) indicated that the pioneers were the first people to settle westward beyond the existing frontier lines. Tim and Mark also had the general idea that the pioneers "opened up" the west, but they described them as explorers rather than as settlers. Finally, Brad was confused and gave a definition that is almost the opposite of the actual meaning of the term.

Jason: The people that moved out west.

Tim: The people that traveled west and explored the land and stuff.

Mark: A person who went over to look and see what was in the west during the westward expansion. They went over the frontier to see what the land was like and to see if it would be good to live on.

Brad: I think they were kind of like the colonies people and they're pretty much the people that stayed in the colonies.

Ned: People who moved west.

Teri: People that moved into this land (points on map).

Sue: Colonists who moved out west to find more land.

Helen: Settlers that went out to find new land.

Kay: Someone who travels to new land and finds it and settles there and brings more settlers.

Rita: People that went over the Appalachian Mountains and they moved over into Oregon.

Pre-Question #7. What was life like for the pioneers?

Tim and Ned could not respond to this preunit question. The other eight students gave responses that were generally correct as far as they went, although some of them did not distinguish clearly between pioneers and other early Americans. Eight students noted that the pioneers had to gather, hunt, or grow their own food because they could not purchase it in stores, five noted that travel in wagons was slow and difficult in the absence of well-developed

roads, four noted that the pioneers could bring few tools and supplies with them and thus had to make most of what they used, and two noted the danger of Indian attacks. In addition, Mark noted that they often didn't know what potential foods were poisonous. Finally, Rita noted that travel along rivers involved encountering swamps, mosquitoes, and "pricker bushes."

Jason: It was rough. They could take only so many things, because they didn't have enough room in the wagons. [How else was it rough?] They had to grow their own food. [Any other reasons?] Indians.

Mark: It was probably pretty rough because they only had a certain amount of food with them and they had to find their food on their own and they really didn't know what was poisonous and what wasn't. [Why else was it rough?] There were probably a lot of hills and rocks that would make it bumpy.

Brad: They didn't have much to bring with them but they had enough to survive. They had to build out of what was there and they just couldn't go some place and "boom," it would be there. They had some trees and some natural resources to build with but they didn't have everything they needed. They had to make do with what they had there.

Teri: They didn't have all that much food and they had to travel in wagons or something like that.

Sue: They didn't have as much food as they would if King George was sending it over. [What other problems did they have?] Not much clothing. [Why was that a problem?] It was really a problem because some of the women would sew.

Helen: It was very difficult because there wasn't a lot of things. You couldn't go to McDonalds or Country Fried Chicken to eat food. You had to grow your own crops and make log houses and stuff and you couldn't get bricks or anything to make a real fancy house. You'd have to chop down wood yourself and go hunt for food, so it was very difficult.

Kay: I think it would be hard and it was probably kind of dangerous because they didn't know what was ahead and it was slow moving. They couldn't buy food out of the store. [How did they get their food?] Off of bushes, like berries, and maybe they grew corn or something. [Any other ways they might have gotten food?] Hunting. [Any other ways that made it hard?] Probably running into Indians.

Rita: It was hard because they had families back here but this was getting too crowded and they had to move over, and over, and over. There was no food. They didn't know where to find it. [How did

they get food?] They killed animals, like raccoon and rabbit and deer. And they grew corn. [Any other reasons why it was difficult?] There was all trees and it was growing whichever way it wanted to, plus sometimes it was swampy along the river and there were mosquitoes and pricker bushes.

Post-Question #8. What was life like for these pioneers?

Following the unit, all 10 students responded to this question, usually at some length and often with animation. This time, seven students mentioned the need to gather, hunt, or grow food; four mentioned the slow and difficult travel; two mentioned the need to make everything from natural materials; and six (up from two prior to the unit) mentioned the danger of Indian attacks. In addition, three now mentioned the danger of attacks from wild animals and four mentioned the possibility of getting sick and dying during the trip. Finally, a few individual students added details such as the difficult winters or the heavy schedule of chores that left little time for recreation.

Students' responses differed somewhat according to whether they concentrated on the trip itself, on life after reaching the destination, or both. Some responses, especially those involving sickness and dying during the trip, reflected incidents depicted in stories that the students had heard during the unit.

Jason: It was hard because the wagon might break or the animals pulling the wagon might die or you might die. [Why would I die if I were a pioneer?] Sick.

Tim: Sometimes it was real hard to get there. Once you set up and stuff, it wouldn't be fun, it would be just work all the time, but it would be easier than traveling the whole time. They'd find gold and stuff and they just liked to explore, I guess. I don't know if they had fun but they didn't mind it that much. [Was it dangerous?] Yeah. A lot of people couldn't even make it that far. [Did they run out of food?] They could run out of food at any time. [Were there hostile groups of people out there?] Yeah, there was Indians out there and there were a lot of things. It was like going through stuff you didn't know anything about. You just went through it, and if you got caught, you got caught.

Mark: Hard mostly, because they might not have had enough food or water, and they could easily get sick and die.

Brad: It would be kind of rough because they moved constantly. They wouldn't be able to have a home. They'd have something they could set up and stay in for overnight and then they'd move again. [Was it dangerous?] Yeah, they could have danger from the Indians and their wagon trains could get shot at by Indians, and some people could die of colds from traveling and people could get really sick and they couldn't live because of that. Most of your life would be traveling. It would be really hard work.

Ned: It was hard because they had to hunt all their food and make all their stuff, all their clothes. [Was it safe?] No, because they could run out of food and starve to death. [How else?] Wild animals and stuff.

Teri: Not so great. They had to face Indians and they didn't have a lot of food, so they'd have to go back and get some more. [Was it dangerous for other reasons too?] For other reasons, like bears and dangerous animals.

Sue: Hard, because they had to hunt for their own food and in the winter time, snow would leak through the cabins and it was no vacation on Christmas. [Why? What would they be doing?] Going to school. [How else was it hard?] In the winter time, even in a bad storm, they had to go to school. [Was it pretty exciting?] Yeah, and hard and dangerous. [How might it have been dangerous?] Bears and sickness and a lot of things--diseases, Indians.

Helen: They had to get up real early and they had to do their chores and they had to tend the fire and stuff, and they had to take care of the animals and cut down wood and go fishing for food and go hunting because they couldn't go get it at the shopping mall. It was pretty hard and it was pretty dangerous because not only did they had to do the chores and things, they also had to fight the Indians and stuff because some Indians weren't really nice. The Indians were there first, but the settlers had to make sure they didn't take over their land.

Kay: It was hard because they had to survive through the desert and across the Mississippi River, and then they had to survive the winter and they had to hunt their own food. They didn't have little towns to go shopping and get their food at. They had to make their own clothes and they had to make their own houses. Once they got settled, it would be about two years after they had got there. [Was it dangerous?] Yeah, because of all the Indians. At night they attacked because they didn't like the white man on their land.

Rita: Oh, it was hard! There was a hard trail and most of the time you'd lose the trail and people would die. Like the Snake River, they'd have to get on a ferry thing, dodge all those rocks and

stuff, and then if you missed your landing, you'd like die because there's no way you can get back. They could get lost because there's no highway--just a small trail.

Pre-Question #8. What kind of food did they eat, and how did they get it?

Teri could not answer this preunit question. Among the other nine students, seven mentioned hunting and eight mentioned farming. In addition, two mentioned fishing and one mentioned gathering of berries. Helen suggested that fishing was difficult because they did not have fishing poles like we use now, so the pioneers had to "go down and use some kind of trap or catch them with your hands." Students who spoke of hunting mentioned a variety of game animals and birds, but students who spoke of farming emphasized corn as the crop.

Post-Question #9. What kind of food did they eat, and how did they get it?

Following the unit, all 10 students said that the pioneers hunted for game. In addition, eight said that they farmed, three that they fished, and two that they gathered berries. The two students who did not mention farming were two of those who focused on the lives of the pioneers during their travel rather than on their lives after they reached their destination. Had they focused on the latter, these two students probably would have mentioned farming too.

Both before and after the unit, most students' responses to this question simply listed the ways that the pioneers obtained food and perhaps named some of the animals or birds hunted or some of the crops grown. Exceptions were the following postunit responses that included some interesting elaborations.

Tim: They'd hunt for some of it, but some of it they'd buy from forts. They had forts that they set up where the pioneers could buy supplies. They could stop and buy supplies and rest. [Did they grow anything?] Once they got to where they wanted to be, they grew stuff, but not on the way.

Mark: They ate corn--mostly any food they could find that looked all right to them, because mostly along the way, the Indians showed them what they could eat and what they couldn't. [What did they have for meat?] Mostly deer and squirrel and rabbit from hunting.

Pre-Question #9. What kinds of clothes did they wear, and how did they get them?

Four students could not respond to this preunit question. The remaining six students produced nine ideas among them. Four suggested that the pioneers brought clothes with them from England (in one case, fancy clothes), four suggested that they made their own clothes out of animal skins or fur, and Helen suggested that they made clothes out of leaves and bark (although she dropped this idea, rather than try to explain it, when it was questioned by the interviewer).

Tim: They just could have got it from animal skins.

Brad: They'd skin animals and use that for clothes and they might have had some from where they used to live.

Sue: They had knickers that went up to about their knees and stockings that went up to about here, and they had shoes with little buckle things on it, and they had really fancy ruffles at the neck and stuff, and a vest and an overcoat. [Did they wear those kinds of clothes out on the frontier?] I don't know.

Helen: They made them out of nature's givings that they had. [Like?] Leaves and bark. [They made clothes out of leaves and bark?] I don't know. [Anything else they might have made clothes out of?] I can't think of anything.

Kay: They probably had clothes in bags that they carried with them, and if they needed to, they probably got leather from the animals for the fur.

Rita: They had like summer clothes from England. [What about when it got cold?] They had to use skin--not skin, but fur from the animals they killed.

Post-Question #10. What kind of clothes did they wear, and how did they get them?

Postunit responses to this question were only marginally better than preunit responses, because little or nothing had been said about how the

pioneers made their own clothes. Five students suggested that the pioneers wore clothes bought from stores, either clothes that they brought with them from the east or clothes that they purchased from frontier forts or trading posts. In addition or instead, five students indicated that the pioneers made their own clothes from animal skins or fur, and Helen once again advanced and then dropped the suggestion that they made clothes from bark. Finally, Jason indicated that they made their own clothes but did not explain how, and Brad indicated that they made clothes "out of a kind of cloth."

No one said anything, either before or after the unit, about pioneers spinning yarn from wool or cotton or about them weaving cloth from yarn. Brad was the only one to mention cloth (as distinguished from animal skins), and he did not say where the pioneers might have gotten this cloth.

Jason: They made them or they bought them. [Where would they buy them?] In stores before they left.

Tim: They bought clothes at the forts and stuff--the stores. [What kind of clothes did they have?] It was sort of like ragged clothes. Stuff that would last, not real fancy clothes, but stuff that would last for a long time.

Mark: Mostly probably deerskin or buffalo skin.

Brad: They got clothes from animal skins and they could use some things from nature, but most of it came from animal skins. I think there was a way they could make other clothes too out of a kind of cloth.

Sue: They had deerskins from hunting the deer maybe, and maybe the clothes they brought from home.

Helen: They made them out of nature. [For example?] Tree bark. [They made clothes out of tree bark?] No, I don't know.

Kay: They bought some too, from the colonies. Like from the deer, they used the deerskin, or bearskin to help them make the clothes.

Rita: They got their clothes from the buffalo or deer or whatever. Then they bought them from the fort.

Pre-Question #10. What kind of homes did they live in and how did they get them?

Two students could not respond to this preunit question. The other eight students all understood that the pioneers made their own homes from natural materials (wood, straw, mud) and that these homes were relatively small and simple ones. Helen included two types of shelter developed by different Native American tribes in her response, along with log houses. Perhaps the similarity of the term "log houses" to the term "longhouses" that she had learned earlier in the unit on Native Americans had encouraged her to associate to the term "tepees."

Tim: They built houses from trees and stuff. They were sort of cabins.

Mark: They had log houses.

Brad: I think they were kind of like a lodge. Something kind of long and skinny like a ranch house. They'd use dry mulch and brick-like materials in building houses and they'd use wood and things.

Ned: They probably had grass huts or wood houses.

Sue: I don't know, maybe wood. [Any other building materials?] Mud.

Helen: Log houses, tepees. [Did the settlers live in tepees?] No. They lived in log houses, pueblo houses.

Kay: They probably had straw or stick houses. [Any other kinds?] Rock.

Rita: They lived in houses that were wood like log cabins, but they were houses to them. They could live in the mountains with the Indians. In the last unit, we were talking about Indians and they would like carve houses in there way up high. Probably when the harvest was in, they'd probably have the straw and they'd make straw houses, but it wouldn't be very warm. Probably out of mud too.

Post-Question #11. What kind of homes did they live in, and how did they get them?

Ned said only that "I don't think we studied that" in response to this postunit question. The other nine students all once again said that the

settlers made their own houses out of natural materials, although this time they explained in more detail. All nine of them mentioned log cabins, and several mentioned other types of housing as well.

Jason: Cabins made out of wood.

Tim: Log cabins. [Any other kinds of houses?] Some clay houses, if they were just homesteading for awhile. Then they'd leave and go build a bigger house.

Mark: Mostly I think they built log cabins. [Any other kinds of houses?] Not that I can think of.

Brad: They could make them out of wood and they can be like log cabins except they wouldn't have nails and stuff. They would make joints for the wood. They could make brick but it wouldn't be the brick we use now. They would use like a rock brick and they would use mud to stick the rocks together.

Teri: Log houses and they got them from chopping down trees. [Any other kinds of houses?] Not that I can think of.

Sue: Log cabins. [How did they build them?] They took wood and put it together to make a log cabin. [Any other kinds of homes that they had?] Maybe adobe with mud and stuff. [Where would they build the adobe homes?] In the side of cliffs--not on cliffs, they could build it on flat land.

Helen: Log cabins, log houses. They didn't live in tepees because those were for the Indians.

Kay: They had log cabins. [Any other kinds?] I think adobe. [How did they get this stuff?] They cut trees down where they wanted their house to be, so they could use the trees for their house. And adobe, I think is just mud and rock.

Rita: They had log cabins. [What else?] Like on a hill, they'd cut inside the hill and they'd put their house with sod on top and wood sides and inside would be their stuff and like there's no door or anything. [How did they heat it?] They would get buffalo chips and burn that. Sometimes, where there was trees, they would take them along with them.

Although Helen corrected her earlier idea about the pioneers living in tepees, Sue and especially Kay began to conflate information that they had learned about hogans and pueblos in their earlier Native Americans unit, once the topic of adobe houses had been raised.

Questions About Pioneer Travel and Wagon Trains

Pre-Question #11. How did they travel westward?

Even prior to the unit, eight students understood that the pioneers traveled in wagons drawn by horses or oxen, although none of them mentioned the term or the concept of wagon trains. Sue thought that they had to walk or perhaps ride horses (but she did not mention wagons), and Helen thought that they had to either walk or paddle themselves in boats. Like several of Helen's responses during this interview, the activities that she envisioned were more typical of the Native Americans than of the European-American pioneers.

Tim: I'm pretty sure they had horses, but they had to do a lot of walking. That's pretty much all they had was horses and walking. [They had to take some supplies out there. Did they carry it on their backs or what?] No. They'd put it in a wagon.

Mark: Probably by horseback. [Any other ways?] Maybe they had covered wagons.

Teri: Wagons with some kind of canvas covering them. They would put their furniture inside of them and the children and maybe the wife would sit inside the wagon and there was a donkey or a horse pulling it.

Sue: Maybe boats to cross the river or something. [Did they carry their supplies on their backs, or what?] Maybe a horse would carry them.

Helen: They either walked on foot or they went by boat, but not speedboat. They had to paddle and they didn't have shoes. They had to walk on bare feet. [Did they have horses?] No.

Post-Question #12. How did they travel westward?

Following the unit, all 10 students confidently explained that the pioneers traveled in wagons drawn by horses or oxen. In addition, three students mentioned the term or described the concept of a wagon train.

Tim: Wagons. They had big wooden wheels and sort of like a tent thing over the top of it so they could sleep on it and then the oxen were connected to the front.

Mark: They went in covered wagons or just riding bareback on horses. [Tell me about the covered wagons.] They were just wagons with round cloth over them.

Brad: By horseback and wagon trains. [Tell me about the wagons.] The bottom was made out of wood and they had wooden wheels attached to the wagon. The wheels were pretty big. For a top, they'd use stretched-out animal skins for a cover on it. [What did they carry?] It would carry their belongings that they would take with them--the important things. It was kind of like their trunk, and you could sit in them. There were seats up front to steer the horses. The back was pretty much to haul--kind of like a trunk--a huge trunk.

Teri: With covered wagons . . . horses pulled them . . . they kept their furniture, their children, and maybe a wife, if they had any, in the wagon. It was a box with four wheels and a big tarp thing around it.

Sue: Wagons and by foot and by oxen. The wagons had wooden wheels with wooden spokes, and it was like a wooden platform with wheels on it and cloth over the top like a roof.

Helen: Horses. They had carriages. They were in the carriages with horses pulling them.

Rita: Wagons pulled by horses and oxen and yoke. The wagons would catch on fire and they'd tip over. The axles would break and the wheels would break. [What would they put in the wagon?] Their kids, their bullets, their meat, their belongings. You could only take one wagon and they could only take one book and that would be like the family Bible.

Pre-Question #12. Have you ever heard of wagon trains?

Prior to the unit, only four of the students could explain the concept of a wagon train as a line of wagons traveling together for mutual assistance and protection. Two students (Kay, who could explain the concept of a wagon train, and Brad, who could not) thought that the wagons were literally hooked together.

Jason: Where a bunch of people go west in a big group of wagons. [Why did they go in these big groups?] If they needed help.

Mark: They're a group of covered wagons traveling together. [Why did they travel together?] Like if one wagon broke down, then they could just go and travel with somebody else that had room in their wagon.

Brad: No. It might be wagons hooked together, but I'm not sure what it is.

Kay: I think the wagons are hooked together, and they were pulled by horses. [Why do you think they traveled like that?] So they would be together and they wouldn't get lost. And what one family knew, they could teach the other.

Rita: It's a whole bunch of wagons in a row. [Why did they use wagon trains?] They were easy and you wouldn't have to walk. [Why did they want to go in a big group like that?] Mean Indians and the French. It was for protection. I learned this on TV.

Post-Question #13. What are wagon trains?

Following the unit, all of the students except Helen could explain the basic concept of a wagon train. Some of the more interesting responses were the following.

Tim: It's like a bunch of wagons just staying together and keep going in a chain. They'd stay together because there was Indians. If there was one wagon, they wouldn't have a chance, but if there was more people, they'd have a better chance to survive.

Teri: I guess when a whole bunch of families traveled together. [Why would they want to do that?] So they would have help in case any dangerous animals or Indians came . . . in case there was a doctor in one group and someone else got hurt in the different group, then the doctor could help that person.

Sue: It was all the wagons moving out west. [Why would they want to travel by wagon trains? Why didn't they just go alone?] Because if somebody got hurt, somebody could take care of them instead of just being there by yourself and hurt. [Any other reasons?] To carry their supplies so they wouldn't have to carry it themselves. [Was it safer to go by wagon trains?] Not really, because wild animals could still get them. Indians could, just like on foot.

Kay: They traveled in groups of 15 to 20 families, and that was called the wagon train. [Why did they want to go by wagon train instead of just alone?] They wanted to go by wagon train just in case something happened. Say you had a family, and your husband died, you would just be all alone in the middle of the forest or something and you didn't know what to do. This way, there was other families to help you.

Rita: It's a whole bunch of wagons going along the trail. [Why did they have a whole bunch of wagons together like that?] For protection from Indians and thieves. [Any other reasons?] Animals.

Questions About the Native Americans

Pre-Question #13. As the pioneers moved westward, did they run into any difficulties with other people? (If student says yes, ask what people and what kinds of difficulties).

This question was asked only on the preunit interview, as an indirect way to shift attention from the pioneers to the Native Americans that they encountered along the frontier. The question mentioned "other people" generically, rather than Native Americans specifically, because we wanted to see what categories of people the students would mention on their own.

Most of the students were hesitant or tentative in responding to this preunit question, attempting to reason from information they remembered from their units on the colonies and the American Revolution. At this point, most of them thought about pioneers moving westward only in terms of initial movements over the Appalachians. They did not yet possess a more comprehensive concept of western movement across the entire continent that occurred during much of the 19th century. All 10 students stated or guessed that the pioneers ran into difficulties with Native Americans. In addition, 3 suggested that they ran into difficulties with the French and/or the British.

Jason: Indians. [Any other people?] Armies. [Whose armies?] Ours. [How so?] I don't know.

Tim: French, I think, some Indians. I know there was Indians up here and some down here (pointing to areas in the west and midwest). The French thought they had all this land and they kept getting more land and there's French and Indians still there--I think some.

Mark: Maybe the Indians. They might have had trouble with the Indians.

Brad: They ran into difficulties with enemies and they'd have to fight for the land. [Who were the enemies?] I'm not sure. I forgot what the people were who lived in the colonies. They'd run into the French, the Indians, and the British. [Do you know anything about the battles?] The battles weren't like we have now. They'd be like 24 feet away from each other and charge at each other shooting.

Ned: They ran into Indians and the Indians didn't like them invading their land.

Teri: I don't know, maybe Native Americans.

Sue: I don't know. [Were there people living out here?] Maybe some Indian tribes, I'm not sure.

Helen: I remember that the teacher said that the pioneers were going and they saw these Indians and they made friends with them. The Indians were telling legends, and their legend said that if you shook this thing that was like a pumpkin, if you shook it to an Indian, that means you come in peace. But two pioneers went up to this other Indian tribe and shook it, and it meant to them that they wanted war. (This incident involving shaking a gourd was part of a story about the adventures of Esteban and DeVaca that the students had heard in the explorers unit). [Did the pioneers get along with the Indians or did they have fights?] Well, not a lot of Indians were nice back then, but not a lot of them were mean. [If there were fights, who usually won?] It would depend on how many people you have in your army.

Kay: They probably ran into Indians.

Rita: Yeah, the French and Indian War. [What about the French?] They had to go back to France. [What about the Indians?] They died. The English killed them--not the English, but the Americans.

Pre-Question #14. Many groups of Native American Indians lived along the frontier. As the pioneers moved farther west and settled there, how did they get along with these Native Americans? What happened?

Here and in Table 1, descriptions of students' responses to Prequestion #14 also take into consideration their responses to Prequestion #13, where those responses included specific statements about the Native Americans. Given traditional stereotypes, we expected that responses to these questions would emphasize conflict between the pioneers and the Native Americans, with the latter group pictured as cruel and savage attackers. Refreshingly, we found that this was not the case. Eight students did mention wars or conflict between the pioneers and the Native Americans, but in addition or instead, five mentioned friendship and mutual assistance. Furthermore, several of the students who mentioned wars or conflict expressed sympathy with the Native Americans and none pictured them as cruel savages. Vestiges of the latter

stereotype have been observed in interview responses of kindergarten and first-grade students in this same school (Thornburg & Brophy, 1992), but most of these have disappeared by third grade. In fourth and fifth grade, after students experience curriculum units on Native Americans (on Michigan tribes in fourth grade and on five major tribal groups that spanned the continent in fifth grade), their interview responses indicate a good deal of not only knowledge about but empathy with Native Americans (VanSledright, Brophy, & Bredin, 1992a).

Jason: They made friends. [Did some of the pioneers have trouble with the Indians?] Yeah, fights.

Tim: They probably had problems with the Indians because they were pretty much having a war against the Indians not very long ago. So they'd probably have some problems with the Indians, but I'm not sure.

Mark: The pioneers might have given the Indians wood for shelter and the Indians might have gave the picneers food. [Did they battle each other and fight?] Sometimes, probably.

Brad: The Indians were the kind of people where, if you go and push them, they're going to pull their bow and arrow and shoot you. They're kind of nice people and they'd get along with you and they'd share, but you'd have to do your share. If you wanted food, you'd have to farm. If you wanted skins for clothes and stuff, you'd have to work. They share their stuff as long as you share your stuff. They'd get in some wars, but not too many. [Do you know who won those wars?] I guess the pioneers, because that's how the United States got here.

Kay: Some of them had problems, but most of the Indians compromised. [What do you mean?] They helped them gather food. They might have had a couple of arguments. [So they didn't have any wars?] Later they did. The pioneers wanted to take over their land because they wanted more land, and I know about this one war that happened by New Mexico and Texas.

Rita: At first, they were OK, but then they wanted too much and . . . [Who wanted too much?] The English--the pioneers, and they started fighting with the Indians and they won.

Post-Question #14. Many groups of Native American Indians lived along the frontier. As the pioneers moved farther west and settled there, how did they get along with these Native Americans? What happened?

Following the unit, the students expressed the same general themes, although now they elaborated them in more detail. Nine spoke of wars or conflict between the pioneers and the Native Americans, and five spoke of friendship and assistance.

Jason: Some were nice and so they made friends and some were mean so they had wars.

Tim: They went out and taught the Indians for 11 years how to read and write, and so they helped them with that kind of stuff. Eventually they tried to live with the white people. [You said it was dangerous as a pioneer?] In the beginning, they would attack you, but eventually I don't think they would.

Mark: Sometimes they got along with them and sometimes they didn't. [Then what happened?] The Indians would usually get mad and take some hostages or kill them. [Did the pioneers kill any of the Indians?] Probably, yeah.

Brad: They didn't always get along with them, but when they did, the Indians would mostly be friendly. [What if they weren't friendly?] They could shoot at the wagons and it would be kind of like a little fight between the colonies and the Indians.

Ned: The Americans and Mexicans had a war. [What about the Indians--did they have a war too?] No [So how did they get along?] OK.

Teri: Well, the pioneers would force them out of that land, so the Indians would have to go somewhere else. [Did the Native Americans ever try to chase away the pioneers?] I don't know.

Sue: Well, they could have had an agreement that they would just live together on the same land. [Did they do that?] Probably not. I guess the colonists lived with the Indians and they taught the Indians writing and reading and stuff, but the Indians didn't like it because they didn't really like the white men because they used every part of the deer and they were teaching them how to hunt, and the white men didn't. They just threw away most of the parts. [Did they get in battles and kill each other off?] I don't know.

Helen: Some of them didn't get along, some of them did. Some Indians were mean and some were nice. Some helped them grow crops and learn about the things of nature and stuff, and some Indians just wanted to kill them and fight with them. [Did they have big battles?] Yeah. [Who would win?] Probably most of the time the Native Americans, because they had more experience of the outside world and stuff, and they'd been living out there and they'd fight animals and stuff like that.

Kay: Some wanted to be friends with the Native Americans but the Native Americans didn't like being friends with the white man because they had silver sticks or knives and stuff. [So what happened?] The white man shot the Indians and they didn't like it, so they'd attack at night while they were sleeping. [Who won in this running battle?] The white man because they had the rifles or the silver sticks--that's what the Indians called them.

Rita: At first they did good, but as more and more people came, the Indians noticed that they weren't treating the land right. They got madder and madder and finally the Americans killed off the Indians and they died or probably moved up into Canada.

Some of these responses reflected stories that the students had heard during the unit (white people teaching Indians to read and write, Indians referring to rifles as "silver sticks"). Other responses were based in part on inferences drawn from what students had learned earlier about Native Americans, especially the notion that Native Americans had a praiseworthy ecological consciousness that included reverence for nature and avoidance of waste (e.g., using every part of the deer).

A potential cause for concern here is that many of the students appeared to have lost sight of the fact that the pioneers had taken land away from the Native Americans. When they talked about reasons for conflict between the two groups, the students tended to picture the Native Americans either as variable and vaguely unpredictable (some were friendly and some were mean, and the mean ones would attack you) or as disgusted with the pioneers' values or lifestyles (wasting usable animal parts, not treating the land right). Only Teri clearly stated that the root problem was that the pioneers were forcing Native Americans off of the land. This may have been another place where a focus on stories had mixed rather than wholly desirable effects. Several differences between the students' responses to preunit questions and their responses to postunit questions suggest that, as the unit progressed and students experienced gripping stories about the pioneers' challenges and adventures, they

began to identify with them. The formerly inexplicably greedy Europeans had become the heroic American pioneers--us. To the extent that the students identified with these pioneers and focused on their immediate problems (difficult travel, illness, attacks), they lost sight of the fact that these pioneers were taking land away from the Native Americans.

Pre-Question #15. What was the Trail of Tears?

Post-Question #16. What was the Trail of Tears?

We asked about the Trail of Tears because it is frequently emphasized as a concrete example of how westward expansion of the United States eventually affected the Native Americans, even though the teacher had not intended to (and did not) include this episode in her westward movement unit. Both before and after the unit, nine students said that they had never heard of the Trail of Tears and Kay said that she had heard of it but did not know anything about it.

Post-Question #15. There were hundreds of thousands of Native Americans when the colonists expanded westward. What happened to them?

Eight of the students said that most of these Native Americans died or were killed by whites. Teri was not sure what happened to them, and Ned thought that they all had moved to Mexico. Several other students also suggested that the Native Americans kept moving westward or up into Canada or down into Mexico as the frontier advanced. Only Rita mentioned anything about reservations. In an earlier interview, she explained that she had learned about reservations from her mother, who had lived near one in the past.

Some of the responses to Postquestion #15 make it appear that the students thought that all Native Americans had died (i.e., that none survive today). In fact, several students had been under this impression at the beginning of the school year. However, as responses to Postquestion #17 will indicate, the students now understood that some Native Americans survived.

Jason: I don't know. [What do you think happened to them?] They died. [In those wars you were talking about?] Yeah.

Tim: They might have all been eventually killed. I don't really know. There still is quite a few, isn't there? [Yeah, but not near as many as there used to be.] Did they go down to Mexico? [You're not sure about any of this?] No.

Mark: Some of them went to Oregon and California. Some probably died because they were killed by the white man or they got sick or ran out of food and water. They could have died for many different reasons.

Brad: They kind of came distinct. [Extinct?] Yeah. [Why was that?] They didn't reproduce and they fought many wars with the pioneers and a lot of them lost.

Ned: They moved, to Mexico.

Teri: I don't know. [You said in the last question that they chased them off. Chased them off where?] Maybe to Canada or Mexico.

Sue: They probably died. We still have Indians that live in America right now. [How did they die?] Probably of old age.

Helen: They died. [Why did they die?] People came in and killed them. When more Americans came out and there were more Americans to fight the Indians, eventually the Americans won. A lot of the Indians were killed and a lot of them just died of old age.

Kay: The white man finally started killing them because they were attacking and then they just had to be friends with them because they were there. [There aren't as many as there used to be, so where did they all go?] I think they died. [Did the white man kill a lot of them--is that why they died?] Yeah.

Rita: They died and they moved up to Canada. [Did any of them stay in this country?] Yeah, they did. They put them on Indian reserve things. They said they could live there the way they lived before. A reservation is a piece of land just for the Indians that the government set out.

Post-Question #17. What about the Native Americans today? Tell me what you know about them.

This question was asked only on the postunit interviews. Nine students (all but Ned) were able to respond to the question, and all nine indicated in one way or another that contemporary Native Americans now live pretty much like other Americans. However, Jason, Tim, Brad, and Rita also mentioned ways in

which either some or all Native Americans attempt to keep certain aspects of their traditions alive.

The interviewer asked a few of the students about Indian reservations in the process of probing their responses. Only two of these students understood that the reservations were lands assigned to Native Americans by the government.

Jason: There are still some left . . . they live like us now and they have to buy things. [Do any of them still live a little bit the way they used to live?] Yeah. [Where do they live?] In the middle of the country. [What is an Indian reservation?] It's where Indians still live. It's a piece of land for the Indians.

Tim: There's a lot of them in Arizona and New Mexico and they live like normal people. [Have you ever heard of Indian reservations?] (Tim had heard of them but couldn't explain about them. The interviewer explains about reservations, then asks how Tim thinks Indians live on these reservations.) Some live like they used to.

Mark: They live just as normal as we do. [Have you ever heard of Indian reservations?] It's a piece of land set out that the Indians live on.

Brad: Well, they're just like us. They live in normal houses. I have a friend who's in my class and he's partially Indian. They're just like us. They have normal houses. When I go to my friend's house, he has things that kind of have to do with Indians, but it's not like you go in and there's bowls on the walls. It's just a normal house. They might have some antiques or Indian things, but it's pretty much just normal. [Do any of them live anywhere else like they used to live?] I'm not too sure, but like the Amish people, they kind of live in their own little country. They kind of live in their own group and they live differently than us, and I imagine there might possibly be like a group of Indians that are trying to keep their religion and just might live in their own group and they probably live kind of modern but they'd still live kind of like they did back with the colonies.

Teri: Mexico. [Do some still live in this country?] Yeah. [Do you know where they live?] No. [Do you think they live like they used to or do they live like you and I?] They live more like us.

Sue: They live in houses just like us and eat the same food we do. [Have you ever heard of Indian reservations?] Sort of, but I don't know much about them.

Helen: Some moved on and some didn't. Native Americans didn't have to live only 100,000 years ago. They could live today or tomorrow or whenever. [So where do they live?] Anywhere. It doesn't matter. [Well, how come we don't see them around much anymore?] Not a lot lived. [Have you ever heard of reservations?] Yeah, it's where you make plans for something.

Kay: The Native Americans just live like white people, but you can tell they're Native Americans because they have darker skin and black hair. We have one in fifth grade. [What else about them today?] They're exactly the same as the white man. [Have you ever heard of Indian reservations?] No.

Rita: Some of them live as Americans. In Midland (a Michigan city located near a reservation). Some people, if their dad was an Indian and their mom was an American, if they had a baby, they'd make the kid live with the Indians. Then the mom would have to go too, because it would ruin something--their religion or something like that.

Questions About Events that Occurred in the West

Pre-Question #16. Have you heard of the Alamo, Davy Crockett, or the Mexican-American War? Tell me what you know about them.

Post-Question #18. Have you heard of the Alamo, Davy Crockett, or the Mexican-American War? Tell me what you know about them.

This question addressed three separate issues. The interviewer first stated the entire question and then went back over its parts, allowing the student to respond to each issue separately. To facilitate data presentation and analysis, the three parts of the question are treated here and in Table 1 as if they were three separate questions. Question A concerns the Alamo, Question B concerns Davy Crockett, and Question C concerns the Mexican-American War generally.

Question #16A/18A. What do you know about the Alamo?

Prior to the unit, only three students could say anything specific about the Alamo. Jason knew that Davy Crockett had been involved in a battle there, but he was not sure who was fighting whom. Teri knew that the Alamo was a building in Texas, but could not say anything else about it. Finally, Tim knew

that the Alamo was located in Texas and that it had been the site of a battle between the Americans and the Mexicans (although he thought that the Americans had won).

Following the unit, Brad could not respond to this or any other question about the Mexican-American War (apparently he had been absent during these lessons). The other nine students all responded confidently, indicating that the Alamo had been the site of a battle. Six of these students added that the Alamo was located in Texas, and four (all girls) related aspects of a story that they had heard about a survivor named Susanna entitled Susanna of the Alamo (by John Jakes, published in 1986 by Harcourt, San Diego).

Although the students knew that the Alamo had been a battle site, they were not always clear about who was involved in the battle. Nor were they clear about the distinction between the Texans' war for independence and the later conflict between the U.S. and Mexico over border disputes (these distinctions were not introduced into the unit).

Jason: The Mexican-American War was in the Alamo.

Tim: The Alamo was a fort that the Texans built. Davy Crockett was part of the fort and there was like 188 people, but one day the Mexican messenger came and said that they should give up the fort or they'd attack. The next morning they attacked and there was like 2,000 to 188 white men or Americans. [Who was fighting whom?] The Americans were fighting the Mexicans. The Mexicans took over the fort, but eventually the war ended and the Americans eventually won, but the first battle, they got blown away pretty much.

Mark: They built the Alamo as a battle station to fight the Mexicans for the Mexicans' land reaching from Texas to California. [What happened there?] A lot of people got killed, some were taken as hostage and had to work for the Mexicans as slaves.

Ned: There was a war there and it was the Mexicans and the Americans. The Mexicans won the first time, but they lost the second time. [What was the Alamo? Was it a country?] It was a fort.

Teri: The Alamo was this one building, it got ambushed and that's all I can remember. [There was a war fought at the Alamo but you

don't know who were the fighters?] No. [Do you know where the Alamo is?] Somewhere in Texas.

Sue: There was this lady named Susanna and there's a book called Susanna of the Alamo and they killed all the men. [Who's they?] Davy Crockett and General Travis. [Were they at the Alamo?] Yeah, all the men were killed and burned and Susanna got mad and she went back and told the people and they started getting mad.

Helen: The Alamo was a place in Mexico and there was a girl and her name was Sacramento. She had a baby and then this king or ruler or whatever you want to call it, his name was Santa Ana . . . does that sound familiar? [I think you're in the ball park, yes.] Anyway Santa Ana killed all these people and he saved this girl with her baby and the king wanted the girl to be a slave and she refused to become one. She went back with the baby to tell the people that their husbands had died in this war, and the little girl started crying.

Kay: Susanna was one of the wives in the Alamo. The Alamo was a fort that all the women and children stayed in during the Mexican and white man war. All the American men died in that war at the Alamo.

Rita: The Alamo is like a fort and the Texans fled to that because the Mexicans wanted the Alamo and the land. The president of Mexico, he went to the Alamo. He killed all the guys--burned them. The mother and children were left. He took Santa Ana and her baby, brought back to the capital of Mexico and offered her money, food, and all this stuff. She refused, so he said, "Let me see the baby." She let him see the baby because she didn't want her baby to be killed and her to be killed. She let him see it and so he offered to give the baby a home, money, and a good education, but she refused again, so he made her go to the colonies' president, Thomas Jefferson, and made her tell him that they're not going to surrender and they're going to have to fight. He made Santa Ana tell the whole story, and he just said, "Let's run." [How do you remember this whole story so well?] It's like interesting. The teacher reads stories and tells us stuff. [Which part of the story was most interesting to you?] The Alamo.

Once again we see the power of stories to engage students' interest and help them to remember details, but at the same time, to focus them on details that may not be the most important ones from social scientists' or historians' perspectives. Furthermore, in the hands of Helen and Rita, the story becomes the basis for creating fanciful elaborations that include confusion of Sacramento with Susanna, Susanna with Santa Ana, Santa Ana with the ruler of

Mexico, Davy Crockett with Daniel Boone, and Sam Houston with Thomas Jefferson. For discussion of such fanciful elaborations, see VanSledright and Brophy (1991, in press).

Question #16B/18B. What do you know about Davy Crockett?

Prior to the unit, all 10 students had heard of Davy Crockett and were able to say at least one thing about him. Six students, including all five girls, had encountered a song, television show, or movie about Crockett. In the case of Sue and Helen, this was all that they could say about him. Other students suggested that he was a pioneer (4), a famous fighter, hunter, or cowboy (5), or one of the men who fought at the Alamo or fought against the Mexicans (2). Tim thought that he was "sort of a spy for the Americans" in the Mexican-American War.

Jason: He was a good fighter. [Where did he fight?] In the Alamo. [Who was he fighting against?] I'm not sure.

Tim: He was sort of a pioneer that was in the Mexican-American War and he was sort of a spy for the Americans.

Mark: He was one of the pioneers that played an important part and that's really all I know.

Brad: He was a cowboy and he was a pretty good fighter. He's someone you find on TV a lot and it makes sense for him to be a cowboy.

Ned: He was a pioneer. [What else?] I don't know.

Teri: I know him because I had a song in my keyboard book and I play it on the keyboard all the time. [What does it say about Davy Crockett?] Something like, "He killed a bear when he was two and he was the wild man of the frontier."

Sue: I've heard of him but I don't know anything about him. My dad talked about him. My dad said there was a show about him and he used to watch it.

Helen: Well, my friends make poems up about him. Davy Crockett had a movie about him that I seen on the Disney channel. [What did you learn?] Nothing. It was sort of like a cartoon. It had real people in it, but it was like a cartoon. It really had no moral.

Kay: I think he fought in a war. I heard about him on TV.

Rita: Yup--he's king of the wild west. I know that from television. [What do you know about him?] He killed animals and it was easy for him. He was friends with the Indians and he made peace with them, and he had a wife, two wives.

In many of these responses, especially those based on the song or the Disney movie on television, Crockett comes off more as a cartoon superhero than as a real person. These stereotyped responses did not appear in the postunit interviews. Three students could not remember what they had learned about Crockett, but the other seven described him as a participant in the Mexican-American War, and six of these stated that he died at the Alamo.

Jason: The Mexican-American War was in the Alamo and Davy Crockett was in the war. He died. [Where?] At the chapel.

Tim: The Alamo was a fort that the Texans built. Davy Crockett was part of the fort. He fought on the American side and he died there.

Mark: Davy Crockett was killed at the Alamo.

Teri: He was one of the people that were trying to save the Alamo. [From?] From the other people who were trying to ambush it. [Was Davy Crockett an American or an Indian or what?] I think he was Indian and American.

Sue: He died at the Alamo.

Helen: (couldn't remember) How come I know more about the Alamo than Davy Crockett? The Alamo was a real lesson that we had and Davy Crockett was only one day, so I sort of got the Alamo stuck in my brain and pushed Davy Crockett out.

Kay: Davy Crockett was killed at that war. All the American men died in that war at the Alamo.

Rita: A TV star. Oh, yeah, Boonesboro. [Are you thinking of Daniel Boone?] Yeah, yeah. [How about Davy Crockett?] He fought in the Alamo too.

Question #16C/18C. What do you know about the Mexican-American War?

Prior to the unit, only Tim, Brad, and Kay offered substantive responses to this question. All of them inferred that it was a war between the Mexicans and the Americans over land. Tim mentioned that this war had been discussed

briefly in a unit on the southwest in their geography class (one teacher taught U.S. history to these fifth graders throughout the school year, and another teacher taught them U.S. geography during the second semester). Brad initially suggested that gold was the motivation for the war, and Kay stated that the Americans were determined to extend the country "sea to sea."

Brad: I'm pretty sure it was over gold. They believed in the Seven Cities of Gold and they were trying to get there before the others. [Who's they?] The Americans and the Mexicans were kind of competing to get to the Seven Cities of Gold. [How do you know about this?] When we studied Indians. It might have been somewhat over land and the Mexicans won some land and the Americans won a lot. I'm kind of guessing, but you can look at Mexico and the United States and it looks like Mexico got some land.

Kay: The pioneers or the settlers wanted all the land from sea to sea and the Mexican had this area. The pioneers wanted this land, so they fought a war over it to get sea to sea. [Did the pioneers win this war?] Yeah, but they let the Mexicans have Mexico.

Following the unit, four students still could not supply any correct information about the Mexican-American War beyond talking about the Alamo. Jason got mixed up and started guessing, eventually stating that the Mexicans won this war. Brad could not remember anything, and Teri and Helen could not remember anything beyond the Alamo story.

The other six students all described the war as one that the Americans eventually won, and four of these noted that Mexico ended up ceding land to the U.S. The details that they added in filling out the story varied in specificity and historical accuracy.

Tim: The Americans were fighting the Mexicans at the Alamo. The Mexicans took over the fort, but eventually the war ended and the Americans eventually won . . . [What did they win?] Texas, Arizona, I think part of California and New Mexico, and maybe Utah.

Mark: They built the Alamo as a battle station to fight the Mexicans for the Mexican's land reaching from Texas to California . . . [Who won the Mexican-American War?] Americans. [So what did that mean?] We won their land.

Ned: The Americans wanted the land and the Mexicans didn't want to give it up. [What land?] Texas. [Did the Americans get the land?] Yeah.

Sue: The people that moved out west fought the Mexicans. [Where did they fight?] Probably in the Mexico land. . . . The Mexicans won at the Alamo, but then they had another war and the Americans won. [What happened because the Americans won?] I can't remember. [Did we get more land?] Yeah, we got the Louisiana Purchase and all this land right here (points to the southwest). And Spain was so scared that they just gave us Florida.

Kay: All the American men died in that war at the Alamo. Then General Sam Houston brought more men over and attacked them when they didn't know, so we could win this land, and we won it.

Rita: The Alamo is like a fort and the Texans fled to that because the Mexicans wanted the Alamo and the land. Then the Texans won that and then we won against the Texans.

Taking together the students' responses up to this point in each interview, it is clear that the unit was successful in helping the students to understand how the United States expanded its borders westward through a combination of the Louisiana Purchase from France and warfare against Mexico. However, their learning was focused on relatively concrete and specific details that they learned through stories about the hardships faced by the pioneers and the events at the Alamo. They had not yet acquired a coherent big picture that included the political aspects of westward expansion of the nation as a nation.

Pre-Question #17. Have you ever heard of the Gold Rush?

Prior to the unit, four students could not say anything specific about the Gold Rush. Among the other six students, only Jason, Teri, and Rita clearly stated that the Gold Rush involved large numbers of people coming west to look for gold. Jason and Teri located the Gold Rush in California, whereas Rita spoke less specifically of "the west." Tim spoke of gold being discovered in California and Kay spoke of gold being discovered in Colorado, but they did not explain that the Gold Rush involved large numbers of people coming west to

seek their fortunes. Finally, Mark knew that the Gold Rush had something to do with California, but he could not say anything more.

Jason: It was in California. [Tell me more.] A lot people went there.

Tim: It was in San Francisco. Not just in San Francisco, but all over California, and there was a lot of gold. [So what happened?] I think the French, maybe the Spanish, came down and tried to get this land too and there was another war.

Mark: The one I've heard about a lot is the California Gold Rush in school from other kids. I don't know anything else about it.

Teri: I think so, on the cartoons. I don't really know all that much, but I guess someone struck gold and all these people were going to that place where they struck gold. Somebody would strike gold someplace else and everybody would run over there to strike some gold. [Do you know where this was?] All I can remember is California.

Kay: Its was the pioneers and they found a lot of gold in a river--I think in Colorado, but I'm not sure. [What happened?] They got rich.

Rita: Everybody found that gold was very precious and they said, "Oh my gosh, gold!" and they wanted to get more people way out here in the west and then they said, "If you are first to this, then you will get some land," or something. So everybody was getting gold and that's how they got money.

Post-Question #19. What was the Gold Rush?

Responses to this question were much more complete and correct following the unit. Brad explained that he was absent during these lessons and could not respond, but the other nine students all noted that the Gold Rush referred to large numbers of people coming west to look for gold after its discovery had been publicized. Eight of these located the Gold Rush in California; Ned said that it was in Oregon. In addition, five students mentioned William Marshall or stated that the gold was initially discovered at Sutter's Mill, and three students gave 1849 as the date. Except for Rita, who added a bit of social commentary, the students rendered more or less straightforward versions of the story they had been taught.

Jason: People moved west for gold in California.

Tim: William Marshall worked at Sutter's Mill and he found a gold pebble and then he told everybody about it and some people came and found gold. Then more and more people came and eventually there was a lot of people in California to find gold and living in California. [Did they find a lot of gold and make a lot of people rich?] Some, but a lot of them just stayed the same. They found some, but it wasn't enough to make them rich.

Mark: There was one in 1849. Somebody worked at Sutter's Mill in California and he was panning something and he saw a piece of shiny rock and he told everybody about it. That was a bad idea because then everybody came and took the gold.

Ned: Someone found gold in Oregon and it got over to the colonies and the people started moving west so they could find gold. [Why did they call it the Gold Rush?] Because they wanted to get the gold in a rush.

Teri: This one guy, he struck gold in California and then all these other people went to California so they could get some gold.

Sue: This man named . . . I can't remember his name, but he worked at Sutter's Mill and he was out and he found gold. Then he told a store person, then everybody started hearing about it and everyone started moving over to California for gold.

Helen: This guy, something Marshall, came over and it was 1849 in California, and he found gold and he told other people and they came over and started getting gold. It was called the Gold Rush because so many people came over and found gold in California.

Kay: This man at Sutter's Mill was mining and he found some gold in the river. [Where was this?] In California, in 1849. He found gold and told everybody and everybody started settling in California for all the gold. The man who found the gold really didn't get much because he found it, but everybody came. After about five years of finding all this gold, the gold was all gone.

Rita: I can't remember who discovered it, but he opened his mouth and everybody went over there to California and he lost a whole bunch of gold. He could have kept it to himself and got all the gold and if people asked him where he got it, he could say, "Nowhere." [So all the people who heard about it quickly moved out to California?] Not quite. They heard of schemes to get people over there. Some people fled and then went back and showed people and then they went back and like over here, it was so dull, you didn't have a neighbor until like 10 miles, it was so dull. All the stores were closed.

Pre-Question #18. Have you ever heard of the Transcontinental Railroad?

Post-Question #20. What was the Transcontinental Railroad?

None of the students could provide any accurate information about the Transcontinental Railroad prior to the unit. Following the unit, three students described it accurately but the other seven could not say anything at all about it.

Jason: It was a railroad built across the U.S.

Tim: It started in the east and started in the west and met at a point and it became a railroad and made traveling a lot easier for the pioneers and stuff. Then they didn't have to take a six-month trip. They could get there a lot quicker.

Rita: I think that's where everybody helped the railroad to get from here to here (points on the map). [Did you study about this at all?] No. I watched TV and they showed people doing the railroad. It was on Disney. I think it was "I've been working on the railroad," but I don't know.

Post-Question #21. (To be asked only if student gives generally correct answer to Post-Question #20) How did the Transcontinental Railroad change the westward growth of the United States?

The three students who had been able to say something about the Transcontinental Railroad on the previous question also were able to say something about how the railroad increased travel to the west or speeded up the growth of the west.

Jason: Relatives could go see their families. [Did it bring more people out to the west or more people to the east?] More people to the west. [Did it do anything to the Indians?] It made them move out. [Why?] Because more people came out.

Tim: It changed it because a lot of people didn't want to go because it was too long and they might have been killed, but with the railroad they could get there a lot easier. [How do you think the railroad affected the Native Americans?] I don't think it bothered them.

Rita: Like now it was populated all over the place. People could go wherever they wanted.

Post-Question #22. Eventually the land to the west was surveyed and divided into states, and so there was no more unclaimed land. How was the country different after that?

This question was intended to see if the students had acquired any knowledge about the role that the frontier played in the United States in the 19th century as a symbol of opportunity and a magnet for emigrants or people unhappy with their prospects in the more settled states. Students provided a variety of responses to this question, drawing inferences from their general knowledge rather than recounting anything specific that they had been taught about the frontier. Some of these inferences did not address the idea of the frontier as a romantic symbol or a social safety valve. Thus, three students noted that, once there was no more land to claim, there was no further reason for wars over disputed claims. Two other students noted that once expansion was completed, more and more people began to settle in these areas and started building cities.

In addition or instead, some students did show at least intuitive glimmerings of the "end of the frontier" idea. Two of them mentioned that this meant the end of opportunities for adventure or exploration, and four mentioned some version of the notion that people living in the west would now have to adjust to rules, restrictions, and more regulated lives.

Jason: People stopped coming over because there wasn't any land left.

Tim: They just went on and discovered more things and built cities and just lived out there. [Do you think the people felt bad because there was no land anymore?] They got land, so they were happy. They all had land, didn't they?

Mark: After all of that area had been settled and claimed, the white man divided it up into different sections and named them the states. Then every so often, they'd make a new state and think of name. The last two states were Alaska and Hawaii, because Alaska's out in the ocean and Hawaii's up farther. [Any other changes that took place?] The land was settled and more and more people went to the west.

Brad: People wouldn't be traveling. There'd be less wars over the land and it would be a country instead of colonies . . . the people here (in the east) were probably going to have to stay because there isn't any more land to explore and a lot of explorers wouldn't have anything to explore. It would be like there wasn't a job. They probably had it on their minds, "No more hard work. We're done. We're finished."

Ned: They didn't have to fight any more wars against anyone. [Anything else different?] They started building more stuff out there like towns and cities. They built forts. [Any other ways things changed?] They had to obey laws.

Teri: It had more states. [How else was it different?] More people came.

Sue: They were different because instead of just living anywhere, you could only have just so much land, because other people needed to live there too.

Helen: There wasn't a lot of gold left because people had their share of gold and wanted more. They went out and got part of their land and they went and looked for it. They found it, and there was so many people that some people didn't get any gold because other people got it. [How else did things change?] There wasn't a lot of room to roam around in. [How did that make things different?] You couldn't go out and roam where you wanted, because people owned land and they would have killed you if you went into their land, because they would have thought you wanted to steal their gold.

Kay: There were more settlers on it and not many fights or wars. [Any other changes?] More trees being cut down. There wasn't much wildlife anymore and all the animals were dying.

Rita: There was different rules for different states. [But now that all the land had been claimed, how did that make things different?] It was like no adventures anymore. [How do you think people felt about that?] Kind of weird. They probably wanted it to go back the way it was.

Discussion

Prior to this unit, the students' knowledge about U.S. history was focused mostly on events that occurred east of the Appalachian Mountains. They had learned a little of Michigan history, including aspects of the French and Indian War, in their fourth-grade Michigan history unit. Some of them remembered bits and pieces of this information. Earlier in the fifth grade, they

had studied Native American tribes living all over what is now the United States, but this unit had an anthropological rather than a historical focus, so it did not consider the Native Americans' interactions with the early colonists or the later pioneers. The next unit on European exploration of the New World did include some information about the explorations, land claims, and colonization activities of the French and especially the Spanish, but it did not go into any detail about what was occurring in these parts of the continent between 1492 and 1776. Finally, although the debts that England accumulated as a result of the French and Indian War were emphasized as the ultimate reason for many of the British policies that angered the colonists and ultimately led to the American Revolution, the French and Indian War itself was not studied in any detail during the American Revolution unit. Thus, as these fifth graders began the westward movement unit, they had not acquired much information about who was living west of the Appalachian Mountains and what had been occurring there between 1492 and 1776.

Some of them remembered from their American Revolution unit that another bone of contention between Britain and the colonies was the British policy forbidding westward expansion. And, by virtue of general knowledge about the modern United States, all of the students realized that this westward expansion had eventually occurred. Most of them also at least implicitly assumed that this westward expansion involved additional forceful taking of lands away from Native Americans who lived on them, although most were vague about the degree to which this occurred (because they were vague about how many Native Americans there were and how densely they had populated the continent). The students also implicitly assumed that westward expansion was accomplished little by little along the frontier by individual families or small groups of pioneers acting on their own initiative, rather than as a result of governmental

actions. No one mentioned the Louisiana Purchase, the Lewis and Clark Expedition, or other government-sponsored activities that contributed to the westward expansion, except for vague mention of "wars." Not yet aware of the many other reasons that fueled the westward expansion, many students assumed that continued immigration and high birth rates had created overcrowded conditions in the east, so that pioneers were seeking to escape this.

During the unit, the students learned a great deal of information about the westward expansion, and especially about major elements or factors such as the Wilderness Trail, the Louisiana Purchase, the Lewis and Clark Expedition, the war against Mexico, the California Gold Rush, and the Transcontinental Railroad. Informed by selections from children's literature, the students' knowledge about the Wilderness Trail and the initial migration over the Appalachians was focused on the logistic difficulties and hardships involved in travel over the mountains in wagons.

As we have noted in analyzing the students' responses to several of our interviews, the use of children's literature in teaching history embodies some important advantages but also some potential disadvantages. Well-written stories, especially stories of adventure or heroism that capture the imagination, tend to stick in the children's minds. Compared to more analytic approaches, the story approach is more interesting to students and offers them a narrative format that makes it easier for them to remember connected elements of information. However, it also focuses their attention on particular incidents or examples instead of on more powerful concepts or generalizations, and some of the incidents or examples are lacking in historical accuracy or even completely fictional. In this unit, for example, several students did not remember much more about the Oregon Trail expedition than that it involved people named Flaming Hair, Long Knife, and Bird Woman. Similarly, much of what

several of them remembered about the Alamo was focused on the story of Susanna. These and similar literature-based learnings can be viewed either as effective development of interest and initial ideas about U.S. history or as undesirable development of distorted knowledge, depending on what one views as desirable and feasible to accomplish when one first introduces elementary students to chronologically organized U.S. history.

Our findings suggest that, if teachers and curriculum developers use historical narratives as a method for creating memorable images of historical events, they must do so cautiously. Care must be given to filling in gaps in students' understandings to establish a "bigger picture" perspective in which to situate the discrete occurrences depicted in historical fiction. This will be needed to enable students to leave the study of history with connected ideas about the movement of events across time. It appears to be especially crucial for elementary students who are encountering chronological U.S. history for the first time.

Perhaps inevitably, the students were somewhat unclear both before and after the unit concerning which tools, supplies, and other artifacts the pioneers were able to bring with them in their wagons and which they had to do without or make themselves. The students were clear about certain major aspects of pioneering such as the need to travel by horse and wagon and to build a home upon reaching one's destination, but they were less clear about clothes, tools, farm implements, and other artifacts used in everyday living. Lessons based on lists of the belongings that a typical pioneer family might take with them would be helpful in this regard, as would exercises calling for students to imagine themselves to be pioneer families deciding what to take with them and what must be left behind. Information about and opportunities to see

demonstrations of pioneer crafts such as spinning yarn, weaving cloth, or making soap or candles would be useful as well.

A useful addition to this unit would have been an update about what had been happening to the Native Americans as the United States expanded westward. At minimum, this would include reminders that the settlers were taking over lands occupied by the Native Americans, who were forced to keep retreating ahead of an advancing frontier if they wanted to maintain their traditional ways of living. A more complete version would inform students about how different tribal groups had responded to these pressures, about federal policies and the establishment of reservations, and about key events such as the Ghost Dance Movement and the Trail of Tears. It is not clear how much such information should be included in students' introduction to U.S. history in elementary school (versus saved for their 8th- or 11th-grade U.S. history courses), but at minimum, it seems important to keep students aware of the fact that Native Americans were resisting invasion of the lands they occupied, not just attacking settlers because they were unpredictable or hostile people.

Similarly, in addition to exposing students to tales of heroism at the Alamo, teachers should help keep the students aware that conflict between the United States and Mexico was rooted in disputed land claims, not in some unexplained tendency of Mexicans to attack Americans. Better yet, teachers could keep students aware that emphasis on western movement from an eastern seaboard base reflects U.S. history told primarily from the English point of view, and that the Spanish point of view produces a story emphasizing movement north and east from a southwestern base.

Finally, although it is a somewhat abstract concept, fifth graders could probably be introduced profitably to the notion of the frontier as a symbol of opportunity and a social safety valve in 19th-century America. As part of this

process, students could develop at least initial ideas about frontier-related themes of historical importance, such as America as the land of opportunity or "go west, young man!" Such an introduction might establish important groundwork for instruction in later grades that considers the ways in which historians have interpreted historical phenomena such as the "settling of the frontier" and the assumptions that they make in doing so.

References

- Berti, A., & Bombi, A. (1988). The child's construction of economics. Cambridge: Cambridge University Press.
- Brophy, J., VanSledright, B., & Bredin, N. (1991). Fifth-graders' ideas about history expressed before and after their introduction to the subject. (Elementary Subjects Center Series No. 50). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Learning and Teaching of Elementary Subjects.
- Brophy, J., VanSledright, B., & Bredin, N. (1992a). Fifth-graders' ideas about European exploration of the New World expressed before and after studying this topic within a U.S. history course (Elementary Subjects Center Series Report No. 78). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Teaching and Learning of Elementary Subjects.
- Brophy, J., VanSledright, B., & Bredin, N. (1992b). Fifth-graders' ideas about the English colonies in America expressed before and after studying them within a U.S. history course (Elementary Subjects Center Series No. 80). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Teaching and Learning of Elementary Subjects.
- Brophy, J., VanSledright, B., & Bredin, N. (in press). Fifth-graders' ideas about history expressed before and after their introduction to the subject. Theory and Research in Social Education.
- Dickinson, A., & Lee, P. (1984). Making sense of history. In A. Dickinson, P. Lee, & P. Rogers (Eds.), Learning history (pp. 117-153). London: Heinemann.
- Egan, K. (1988). Teaching as storytelling: An alternative approach to teaching and the curriculum. London: Routledge.
- Furnham, A., & Stacey, B. (1991). Young people's understanding of society. New York: Routledge.
- Furth, H. (1980). The world of grown-ups. New York: Elsevier.
- Guzzetta, C. (1969). Children's knowledge of historically important Americans. In W. Herman (Ed.), Current research in elementary school social studies (pp. 392-400). New York: Macmillan.
- Levstik, L., & Pappas, C. (1987). Exploring the development of historical understanding. Journal of Research and Development in Education, 21, 1-15.
- McKeown, M., & Beck, I. (1990). The assessment and characterization of young learners' knowledge of a topic in history. American Educational Research Journal, 27, 688-726.

- Moore, S., Lare, J., & Wagner, K. (1985). The child's political world: A longitudinal perspective. New York: Praeger.
- Naylor, D., & Diem, R. (1987). Elementary and middle school social studies. New York: Random House.
- Ramsey, P., Holbrook, H., Johnson, H., & O'Toole, C. (1992, April). The effects of a multicultural curriculum on children's perceptions of Native Americans. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Ravitch, D., & Finn, C. (1987). What do our 17-year-olds know? A report of the first national assessment of history and literature. New York: Harper & Row.
- Shemilt, D. (1984). Beauty and the philosopher: Empathy in history and classroom. In A. Dickinson, P. Lee, & P. Rogers (Eds.), Learning history (pp. 39-84). London: Heinemann.
- Thornburg, L., & Brophy, J. (1992, November) Elementary students' thinking about Native Americans and their encounters with Europeans. Paper presented at the annual meeting of the College and University Faculty Assembly of the National Council for the Social Studies, Detroit.
- VanSledright, B., & Brophy, J. (1991). Storytelling, imagination, and fanciful elaboration in children's historical reconstructions (Elementary Subjects Center Series No. 38). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Learning and Teaching of Elementary Subjects.
- VanSledright, B., & Brophy, J. (in press). Storytelling, imagination, and fanciful elaboration in children's historical reconstructions. American Educational Research Journal.
- VanSledright, B., Brophy, J., & Bredin, N. (1992a). Fifth-graders' ideas about Native Americans expressed before and after studying them within a U.S. history course (Elementary Subjects Center Series No. 77). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Learning and Teaching of Elementary Subjects.
- VanSledright, B., Brophy, J., & Bredin, N. (1992b). Fifth-graders' ideas about the American Revolution expressed before and after studying the topic within a U.S. history course (Elementary Subjects Center Series No. 81). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Learning and Teaching of Elementary Subjects.