A Test of High-Order Thinking

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I work in New York, a state that administers an elementary social studies test, constructed by teachers, that relies on the use of documents in the majority of its questions. Since the imposition of the test in 2001, I have been heartened to find teachers who are actually grateful for a test that introduced them to document-based instruction.² They and their students find such assessments, and the instruction such assessments engender, to be thoughtful and interesting. Staff development in the district has improved in some ways, apparently in response to the challenges of preparing students for document-based test questions.

End-of-Year Test

On the first day of the fifth grade New York State social studies test, students answer thirty-five multiple-choice questions and four or five constructedresponse items. In the latter items, students analyze a document such as a chart, graph, brief reading passage, picture, or map, and answer two or more open-ended questions about the document. On the second day, students are given a document-based question (DBQ), where they read and analyze six primary or secondary source documents, answering one or two open-ended questions about the documents as they read. Students then write an essay, using a majority of the documents as supporting evidence.

A close reading of the test reveals that the preponderance of the test consists of skills exercises. Before the essay is factored in, 59 percent of the exam can be classified as "skills"; and the essay, based entirely on documents students read during the test, is a section that can be identified as "skills" as well. Content questions comprise less than one third of the test thus an emphasis on memorization as a teaching strategy for doing well on the test; would be a misplaced one.3 Clearly, the New York State elementary social studies assessment is a test that, through its document-based questions, emphasizes critical thinking and analysis skills over content. I think that this emphasis on skills is crucial for fourth grade teachers who strive to be effective within the challenges of statewide testing mandates.

Effective Teachers and Staff Development

The three fourth grade teachers [Dana, Ellen and Lila] whom I observed over the course of one school year in a middle class suburban district retained their wise practices,4 such as modeling intellectual curiosity, promoting critical thinking and student intellectual responsibility, and attending to their students' academic skills while engaging them in social studies content, even as they prepared students for the fourth grade tests. These three teachers appreciated a test that supported document-based instruction that they saw as promoting critical thinking. As Dana observed, "The test has been a catalyst for high-order thinking for students and, of course, for us." Lila echoed Dana's satisfaction with tests that ask students to think. "The tests emphasize critical thinking over memorization which is great since we live in the gray, not the black and white." The teachers also appreciated the increased staff development that the tests engendered.

The staff development in the district primarily takes the form of lead teachers in each major discipline at the elementary level. Lead teachers are content specialists, coaches who work with teachers to help them deliver the curriculum. They engage in many activities, including modeling lessons, conferencing with teachers about lesson design, engaging in joint planning and teaching with teachers, observing and giving teachers feedback, and facilitating curricular discussion at grade level meetings. Thus, the district under study has made a commitment to daily, ongoing staff development by teachers who are already on staff and have been designated as experts, as opposed to the oft-chosen staff development method of bringing in an outside expert for a single session.5

Throughout the 2002-2003 school year, the three teachers were observed during every unit of social studies and all of their social studies staff development sessions, including test-grading and curriculum-mapping. Formal and informal interviews were conducted with the teachers, their principal, and the K-12 director for social studies. Over the course of the year, I found that the three teachers' instruction emphasized concepts and Big Ideas; modeled and gave opportunities for critical thinking processes; and encouraged students to construct meaning and raise questions.

Emphasizing Concepts and Big Ideas

The three teachers' greatest emphasis in their social studies curricula was on the essential question, "Has the history of New York been one of progress for all?," and related questions; for example, "Did the American Revolution result in progress for all?" These questions introduced the upper-level issue of history as seen from different perspectives, as students grappled with the meaning of "for all."

Throughout the year, the three fourth grade teachers focused on five units as their social studies curriculum: Geography, Native Americans, Exploration and Encounter, Colonial New York, and Revolution and Government. Because they did not "cover" all of American or New York history, the teachers had the time to go into depth, with each unit averaging six weeks. Many lessons ended with students trying to put their newly acquired information into some sort of larger context; for example, at the end of a lesson on the Woodland Indians, students wrote and shared with the class their responses to this statement, "The important thing about life in the longhouse is that" The teachers then asked students to justify their choices. In addition, all three teachers moved students to evaluate life in the longhouse: "What would you miss most about your life here?" "What do you think you would enjoy most about life with the Woodland Indians?"

When studying geography, the emphasis was on Big Ideas, not on memorizing specific places on maps. Ellen began a lesson on settlement of North America by Native Americans with the essential question, "How does geography or the environment affect life?" Showing her students pictures of grasslands, desert, mountains, and ice fields, Ellen asked about the type of climate and natural resources in each place, working up to the Big Idea, "Which environment is most favorable?" Different students defended their reasons for choosing an area as the most favorable. After they read and summarized information about different environments, Ellen returned to the Big Idea with respect to the settlement of Native Americans that students could now answer with data.

A lesson on deciphering and analyzing a product map ended with Dana raising the level of students' thinking. "So the product map tells me about dairy and poultry and all those other products. Big Deal. So what? Why should fourth grade kids and adults care about how to understand a product map? This is a really a Big Idea question: How does a product map help us find out more about an area?"

In a post-observation interview, Dana explained why she uses Essential Ouestions in this unit and in other subject areas:

"The Who Cares/Big Deal questions I use make the kids into thinkers, looking intensively at what we're studying. The essential questions are the easiest way to weave in critical thinking and get students to think about why any of this matters. Ultimately, we're getting to a question comparing upstate and downstate and asking why so many more people live downstate. We're taking the information we get from the product map to talk about employment opportunities. We're also doing interviews and analyzing statistics on who lives where. And we've already looked at climate and weather information."

Dana connected this kind of overarching question into the state-mandated social studies test, "It's really kind of an upper level DBQ. But it's really about getting them to think."

Modeling and Giving Opportunities for Critical Thinking Processes

Lila, Ellen, and Dana all allowed their students time to think during the course of their lessons. Students have learned that thinking first requires silence, and then, perhaps, discussion with the students next to them. "Take a super silent minute to think and then write down what might be democratic or undemocratic about document one," instructed Lila in a lesson on the extent of democracy in colonial America.

Students have also become practiced in backing up what they say with data. In a lesson in Lila's class, where students were examining a data base comparing geography, climate, attractions, jobs, and population density of downstate and upstate New York, Lila had a chart with the headings, "Data" and "What I can infer from the data," and was constantly asking students to "Tell me the data you used" to justify their inferences. This emphasis on using data to support thinking becomes second nature to the students. Further along in the lesson, Lila asked students why so many people would choose to live in such a crowded area as New York City. When a few hands went up, Lila decided to give everyone "more thinking time." A student then asked, "Can we write each reason on a post-it note and use information from the chart to support the reason?" To which Lila replied, "You're way ahead of me."

All three teachers praised students for their thinking processes. In Ellen's class, students discussed the events leading to the American Revolution. In response to a discussion question ("Do you think the Americans who protested were practicing good citizenship?"), one student brought up John Peter Zenger from an earlier lesson. "He spoke out against what the government was doing. Good citizenship is when you tell others what you don't like about what's happening." Ellen praised the student for using his prior knowledge, and making a connection to a past discussion to think about this new issue.

In Dana's class on the Zenger trial, the students knew that they were going to re-create the trial, but they began by receiving some background information. Dana explained the importance of reading information such as this by making a connection to previous times when background information had aided in the students' understanding: "This reminds me of a DBQ. When we start a new story, we figure out what we already know, what prior information we have to help us."

All three teachers emphasized the importance of research to aid in the thinking process, and asked students to "take out your research notebooks" when they were taking notes on documents. When the teachers were, themselves, stumped about a topic, they used the occasion as an opportunity to stress the importance of doing research to clear up any confusion. When teaching a lesson on a product map of New York that had a symbol of a duck in Nassau County, Dana and her students were mystified because poultry is not a big Nassau County product today. Dana challenged herself and her students, "We'll have to become researchers and find out if this map is correct." When she introduced her students to their first DBO, she indicated that this was not an idle exercise by asking, "Why is it important to us as people growing in the world to analyze documents?" (It turned out that the duck was a map).

Encouraging Students to Construct Meaning and Raise Questions

A regular feature of the three teachers' lessons is the use of charts that ask students to record "information" in the left-hand column, and "questions/wonderments" in the right-hand column. All three teachers praise students who say, "I'm wondering..." or "I'm noticing ..."

Through asking questions, students often uncover complex issues worthy of discussion. During a lesson in Lila's class on the extent of democracy in colonial America, the students charted democratic and undemocratic features of various documents, including excerpts from a description of the requirements for being elected to the House of Burgesses, the Mayflower Compact, the Fundamental Orders of Connecticut, and others. When the students charted the democratic features of the Maryland Toleration Act, they wrote, "religious freedom for Protestants and Catholics"; in the undemocratic column, they wrote, "discrimination against Jews and atheists." The questions and discussion that followed revealed sophisticated thinking. One student asked, "If they left [Europe] for religious freedom, how come they made laws against religion?" Another student responded, "I think if only some have religious freedom, we have to call it undemocratic." When many students were inclined to write off the act as entirely undemocratic, the teacher encouraged them to examine whether any degree of religious freedom was "a step in the right direction." The documents prompted thoughtful student questioning and rich discussion, where students used the documents and the data in the service of making thoughtful judgments.

Beyond the Required Answer

Although the test does not require students to engage in the higher-level tasks of using the data to formulate their own positions, the test's format does not preclude that possibility. Fitting the data students select into the prompt provided on the test is a floor, not a ceiling for student achievement, as a student response from one of the tests reveals.

The DBQ on the 2001 New York State elementary social studies test gave students the following prompt, "Tell how the Iroquois (Haudenosaunee) have used nature and the natural resources around them to meet their needs and wants."6 One student's essay contrasted the Iroquois use of natural resources to facilitate transportation (the making of canoes from trees) with our present-day use of cars, and ended the essay with a kind of thesis that exhibited obvious admiration for the Iroquois achieve-

"It's amazing how they got so many products they couldn't live without, pluse (sic) some extra to get their wants. But the biggest thing is they got the supplies from things in the forest. That's the Iroquois for you. You gotta love them." Although the fifth grade social studies test does not ask students to develop their own thesis, students who had Dana and Ellen as their fourth grade teachers thought to do so, and were able to do

Staff Development

The tests have generated more staff development in the district, including several all-day sessions during school hours. One session involved learning how to create document-based questions. A second session pulled one or two fourth grade teachers from each school to discuss curriculum mapping across the disciplines. A third session lasted several days and pulled different teachers each day to score the fifth grade social studies tests.

At these sessions, fourth grade teachers were delighted to be "sharing for the first time ever during the school day." They knew it had come about because of the tests, and one teacher was glad that there were, at least "some perks to being a fourth grade teacher." Dana talked about the effects of the test on curricular instructional planning. "We don't just do crafts when we study colonial times; we ask, "Was it harder to live then than now?" And we ask questions about the sources we examine, "What can we infer from the pictures of a longhouse?" Overall, the test has raised standards, and made people teach writing better."

The scoring session turned out to be an opportunity for staff development. The K-12 social studies director built in time for teachers to talk about standards, good instruction, and good writing. Teachers who ordinarily had no time to discuss instruction with their

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colleagues from other buildings had the opportunity to consider a range of topics: best practices, pacing the curriculum, the test being a floor-not a ceiling. This last topic sparked the most conversation. One teacher at the session suggested that while "in the rubric, they give credit for listing an idea, they should give credit for developing an idea." Another teacher noted that, on the test, "the students get credit for lifting the line of evidence directly from the document, but I want them to put it in their own words." Another teacher said, "They get credit for using the document without citing it, but in my class, I want them to cite the document and get in the habit of citing sources of evidence." These rich discussions about standards and practice were unlikely to have occurred without the catalyst of the test.

The K-12 director was the most effusive about the possibility that the tests could give teachers inspiration for making effective curricular instructional choices. He commented, "Exceptional teachers have used this test to have students use evidence to build their own thesis at the secondary levels, but now [this can] also [happen] at the elementary level."

An Opportunity

As a result of my study of Dana, Ellen and Lila, I found that the imposition of a state social studies test that emphasizes documents-based instruction did not stifle any of these teachers' wise practices. Rather, these teachers extended their wise practices, translating their improved grasp of content knowledge and primary sources into effective and interesting activities for students. For them, the testing "crisis" has produced opportunities, or teachable moments, for improving social studies instruction.

In addition, all of the teachers under study commented on how important it had been for their professional growth to have access to a content and pedagogy expert available to conduct model lessons, to observe them and offer advice (without the tension of being the teachers' supervisor), to make them aware of social studies resources, and to work with them as they sought to understand and interpret essential questions, document-based questions, and translate them into effective, engaging classroom instruction.

This case study for New York suggests that mandated, thoughtful state elementary social studies assessments, combined with a concerted effort by professional development programs to deconstruct the tests, and ongoing staff development along the lines of the lead teacher model, could foster upper-level social studies instruction and effective, inspired teaching.

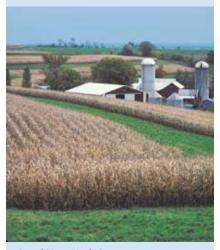
Notes

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Urban New York State



Rural New York State



Forested New York State