Exploring the Explorers Using Internet Resources

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"Let's share this with the rest of the class!" "That's wrong, Vespucci was NOT born in the United States." "Were there women explorers?" "I didn't know that she helped Cortes." "Add this to our question list..."

The voices of sixth graders were full of excitement as they engaged in the lesson with queries and exclamations. We had just begun the final three weeks of a six-week unit of study on European explorers of Central/South America. The teacher had assigned small groups (of two or three students each) to develop questions of interest about a specific explorer, find answers to these questions, locate other information of interest to their group, and design a PowerPoint presentation to share their learning with classmates. Teachers aligned the components of these tasks with grade-level state and district social studies and technology standards. Our larger goal was to have students engaging in inquiry while using technology as a tool so as to continue developing their historical understanding. Attending to multiple perspectives in historical thinking was part of the challenge for students.

The topic of explorers and exploration is commonly taught in the upper elementary grades. Depending on state and local social studies content standards, teachers will develop a curriculum unit on Explorers of Our State for fourth grade students, a unit on Explorers of the United States for fifth graders, and one on World Explorers for sixth graders. In the unit described below, we integrated technology into the required curriculum, aligned lessons with state and local standards, and kept activities within time limits.

The "innovative use of online tools and resources can greatly facilitate generative inquiry."¹ Yet for many elementary teachers, finding the time to teach social studies while integrating technology into the curriculum can be challenging. This project, "Exploring the Explorers," can be used as a guide for upper elementary teachers when designing a similar curriculum unit. The use of technology is not "tacked onto" other activities; rather, students use technology in purposeful and engaging ways.

Three Sets of Standards

The school district curriculum and standards require that world studies in the Western Hemisphere be taught in the sixth grade with a focus on ancient cultures and exploration. The curriculum and required textbook² address the district and state standards as well as national recommendations³ that studying culture and multiple perspectives are key components of an ideal social studies program.

Student inquiry is a key component of the local and national standards. The local standards call for instruction in which students formulate historical questions, gather and evaluate evidence, and reach conclusions based on that evidence.⁴ District technology standards focus on integrating technology literacy into other course content. In fact, the technology standards are embedded within district curriculum standards.

So how did we integrate these three requirements: for social studies content knowledge, for inquiry and critical thinking, and for technical literacy? Two questions guided the way we have students use a variety of technologies during this activity:

- Will this use of the Internet enable students to do something that they couldn't do before? (Or to do it in a better way?)⁵
- Will use of the Internet involve critical thinking, and not just "the gathering of data"?

The Internet and Technical Skills

This sixth grade classroom (within a K-6 elementary school) has four student computers and one printer for student use. The teacher's computer is connected to a projection system; this is a common setup in our district.

Throughout the school year, students had learned tips for Internet safety, how to search the Web accurately and efficiently, how to locate and validate primary and secondary online and offline sources, and how to use various programs such as word processing, PowerPoint, spreadsheets, and databases. These skills, required by the local standards, are learned and practiced during weekly computer lab time, within the context of the sixth grade curriculum. It is vital for elementary students to know how to use the Internet safely, smartly, and politely.⁶

Students learned how to use search engines such as Google⁷ and Ask for Kids⁸ in the fall of sixth grade; although many students had acquired these skills much earlier. For example, students have practiced entering key words into a search box, locating the webmaster and author of a site, and cross checking or validating information found on websites.

Students create and share PowerPoint presentations throughout the school year. Students learn how to make a slideshow easily, but often become heavy handed in using animation and graphics. We reminded them to choose colors, backgrounds, and animations that didn't distract from the content of their slideshows. Using index cards to draft slideshows, one index card representing one digital slide, greatly helps students organize their slides and presentations. In so doing, precious computer time isn't consumed while students try to decide the content and layout of each slide.

Examining Sources

Being able to distinguish between primary and secondary sources is important when engaging in social studies inquiry. National History Day defines "primary sources" as materials directly related to a topic by time or participation. These materials include letters, speeches, diaries, newspaper articles, oral history interviews, official documents, photographs, artifacts, or anything else that provides first-hand accounts about a person or event.⁹ We help students ask the question, "Was this item created when the explorer lived, or was it created at a later time?" as they examine the image of an artifact online.

The use of artifacts in elementary social studies is commonplace. One website we used was Historical Treasure Chests, which has activities that engage students in analyses of photographs, letters, maps, and books.¹⁰ The Learning Page at the Library of Congress also has great resources for elementary teachers and students.¹¹ We used these websites with students during their time in the computer lab, one-hour-per-week over the course of three weeks.

Exploring the Explorers

After two weeks of reading and discussing the required textbook sections on explorers, it was time for students to engage in more authentic inquiry. One essential question that historians ask about the world explorers is, "How did these explorers change the lives of indigenous people?" We placed students in groups of two or three, and described the project: students would work collaboratively, investigate their assigned explorer, substantiate their conclusions with evidence, and create a PowerPoint show of 5-8 slides including a map. Their final presentation should tell about the explorer's country of origin, the goals of exploration, areas that were explored, and the impact of the exploration on indigenous people. The explorers that student groups investigated were Columbus, Vespucci, Cabral, Ponce de Leon, Balboa, Magellan, Cortes, Pizzaro. Students also learned about other contemporary figures such as the Aztec ruler Montezuma and Cortes's translator, Doña Marina. These individuals were described briefly in the textbook, and the students were encouraged to revisit it as an entry point.

Students quickly organized themselves, plopped books and binders on the floor, and began to record their wonderings and questions about their specific explorers. Two groups of students used a KWL graphic organizer to record what they already "Knew," what they "Want to Know," and later to record what they "Learned." Much discussion occurred about what might be worth learning and sharing with the rest of the class. The students took their responsibilities of becoming investigators and slideshow creators seriously.

We kept this planning activity short so that students would stay focused. After 15 minutes, each group had developed a list of questions they wanted to answer and a list of sources they intended to use in seeking answers. Initial questions addressed the explorers' reasons for exploration, distances traveled, and impact on others. Students had several questions concerning the explorer's childhood and family. No student group listed the textbook as a source; however, several did note the library as a place to find useful information, and all groups listed the Internet.

We spent the next several class periods using the website All About Explorers, which was designed by teachers as a means of teaching students about the Internet as well as about explorers themselves. Some information at the site is purposefully inaccurate! Its creators state, "We set out to develop a series of lessons for elementary age students in which we would demonstrate that just because it is out there for the searching does not mean it is worthwhile."¹²

Validating Information

Even with all of the background the students had received about the wise use of websites, several groups included false information from the All About Explorers website in their presentations. (False information might be that Ponce de Leon was hired by the Revlon Corporation in 1513 C.E. to find the Fountain of Youth, or that Balboa had longed to be an Olympic fencing champion.) Although the site clearly states that some of the information is inaccurate, not all of the students read this caveat. Rather than telling them not to use a specific website, we opted to show the students the site and engage in discussion

Lessons about Evaluating Websites from "All About Explorers"

www.allaboutexplorers.com/teachers/#lessons

Lesson 1: Just Because It's Out There Doesn't Mean It's Good

Students go on an Internet treasure hunt to find information about a famous world explorer. They compare information from two different sites to come to a conclusion about whether they can trust all Internet sources.

Lesson 2: So How Do You Find the Good Stuff?

Students are taught about the difference between publishing a book and posting a web site, emphasizing the selectivity of the publishing process. The "1 - 2 - 3" approach to researching on the Internet is introduced. Students then get a chance to try out the first two steps.

Lesson 3: Google, What?

In this lesson, search engines are introduced in more detail. Emphasis is placed on the fact that these are *collections* rather than *selections* and that there are no humans involved in the collection process. Students explore some search engines to see the differences in results.

Lesson 4: Where Exactly Am I, Anyway?

Students learn about how to decode a URL and that it is the *address* for locating a web page. They also learn how to begin evaluating a site based on the top level domain (e.g. .com, .org, or .edu), as well as a few other tricks for determining the quality of the site.

Lesson 5: How Could They Be So Wrong?

Students research the correct facts and draft an email to the AllAboutExplorers site webmaster to fix the mistakes they discovered in Lesson 1.

Explorer WebQuest

Students will apply what they've learned about Internet research to a real world project. (Still under construction! <u>Send</u><u>us your feedback!</u>)



about checking authorship and the "about this site" section of all websites. After some students presented erroneous information, we used the mistake as an opportunity to review how to read with a critical eye and cross check "facts."

During the next several class periods, students searched the Internet and books to answer their queries—and to validate facts. Teachers helped when students voiced frustration over various dilemmas that arose. For example, sixth graders were denied access to some informational websites due to blocking software required by the school district. As a result, many students used home or public library computers outside of class. Most of the students used Google and Ask for Kids as their primary search sites. Common reference sites included the Library of Congress and Social Studies for Kids.¹³

Most of the student groups used secondary sources in their investigations, which troubled many students because, as one sighed, "The guy who wrote this might be wrong." Several groups located webpages with "really old and ancient" maps, sketches, and paintings that they deemed primary sources. Deciphering and understanding the information from these primary sources took students much longer, but it was well worth the extra effort. During this process, most of the student generated questions were answered, refined (often due to lack of evidence to answer a specific question), or put on a "questions for another time" list. An important lesson for students was that not all questions can be easily answered using the sources they located. For example, a student might want to know whether Cabral had a pet during childhood, but it may not be a question that can be easily answered.

Given the allotment of two one-hour periods for social studies each week, three weeks was a brief amount of time to develop questions, locate answers to questions, and prepare a digital presentation. The teacher circulated among the students during these periods, assessing their progress, keeping them



working at a steady pace, and assisting with challenges such as decoding a primary document.

Student Inquiries and Discourse

Although each student group developed different questions and different strategies for their investigations, several commonalities emerged. Nearly all of the students deemed it necessary to identify the date of birth for their individual. (When questioned during class discussion time, no group could clearly articulate why a birth date seemed so essential.) We also made sure to discuss reasons for including the required components (country of origin, goals, and impact on indigenous peoples). One student indicated that the country supporting the exploration was important because "it could make a difference why they explored." Other students developed questions including, "What were the explorer's accomplishments?" "Did he have children?" "How far did he travel?" "Did anyone die?" "Was anyone hurt by this person?"

As educators, we hoped that the students would easily align their investigations with the overarching essential question, "How did explorers change the lives of indigenous people?" In reality, the teacher needed to lead a discussion on this topic at the end of regular class sessions. We asked this essential question repeatedly over the course of the three weeks to help students make connections between their inquiries and the larger question. This focus of attention on the essential question resulted in many students concluding that that aside from "putting the new countries and places on the map" and the resulting immigrations and settlements over the next centuries, the majority of exploration was "not a good thing" for indigenous people because "they died or became slaves; they lost their stuff." Several students agreed that they didn't know enough about what happened after the explorers to decide. A few students concluded that the explorations were "good for

the countries paying the explorer," but "bad for everyone else." These varying perspectives resulted from student inquiries, and it was vital that both teachers and students respected and discussed the multiple perspectives that students generated on this topic.

These discussion times allow teachers to assess student learning and progress, to determine what we needed to do next for our students, to help students learn from one another, and to redirect students if necessary. It was during this discourse that students grew confident in asking each other to state or show evidence supporting their conclusions. For example, one group stated, "There were not women explorers because women back then didn't like water." Several of their classmates asked for the evidence with a resounding, "Prove it!" Having no evidence, the study group decided to reexamine its conclusion.

Students began developing their digital slideshow presentations at different times during the three weeks. Some groups began right away by putting their initial questions in slides, while others waited until the entire inquiry was completed. Most of the groups had one member working on the slideshow by the end of the second week of the project. Most students had the skills needed to develop a slideshow of 5-8 slides, and we offered assistance when asked. Oftentimes, students would rather try to figure out the software on their own before asking for help. We gave the students time to problem solve, but intervened if this caused too great a delay.

Final Projects

"Remember, I share the first three slides, then you do the rest,"

"We'll both answer questions."

Student whispers could be heard as groups rehearsed their presentations. The unveiling of the projects was a day of excitement.

The presentations were informative, well designed, and well presented. The typical show included an introductory slide with the topic, the students' names, and a map or graphic relating to their topic followed by findings from the students' inquiries: interesting facts, country of birth or representation, accomplishments, and impact on indigenous people (Figure 1, page 16). Each group included a date of birth in their presentation even though these dates were sometimes hard to substantiate, as students often found conflicting dates. By this point, students had answers to the question, "Why does a birth date that occurred 400 or 500 years ago really matter?" Their responses consisted of "We can tell how old he was when he explored." "We know how old he was when he died."

During the presentations, the student audience had been asked to keep notes about each topic, what they liked about each presentation, and to develop "test questions" regarding each topic based on the information presented. We later turned these audience questions into a Jeopardy-type game. **Figure 1.** Students' list of accomplishments of Ponce de Leon and the impact of his activities on Native Peoples. The list refers to the city of Higüey, or Salvaleón de Higüey, which is the capital of the eastern province of La Altagracia, in the Dominican Republic.

Ponce de Leon

- Didn't accomplish goal of finding fountain of youth
- Explored Cuba, Caribbean Islands, Puerto Rico and near Florida
- Appointed the governor of Higuey and later searched for gold in Puerto Rico
- Claimed Florida for Spain
- A lot of native people died because of diseases he brought
- He was brutal to the native people and died as a result of fighting them
- · Discovered the Gulf Stream by accident

Student Learning/Assessment

As stated previously, assessment through the three weeks was ongoing. Engaging in an inquiry activity such as this is not easy for students, and the newly developed skills and understandings are often fragile. Frequent whole-class discourse at the end or beginning of each class period helped us gain much insight into students' understandings, questions, and findings. As students worked in small groups, teachers were busy observing, interacting with, and questioning the small groups to track individual and group participation and progress and to redirect students who veered too far off course.

It was important that the students were assessed on what they knew and accomplished rather than what they didn't do or accomplish, and that each student participated robustly in the inquiry and in the development of presentations. Therefore, in addition to being assessed on the initial teacher-generated criteria, groups were evaluated on whether they had sound conclusions based upon evidence. We knew from our ongoing assessment and from the content of the presentations whether students had learned about their topic, developed their historical understandings, and continued to see the importance of attending to multiple perspectives.

We did not require each student to speak during the final PowerPoint presentations. However, upon completion of each presentation, the audience was able to ask questions. In order to ensure that the presenter(s) was not put on the spot, the entire group was expected to respond to the audience queries. Finally, each student completed a simple self-assessment of his or her work that addressed their participation within the group, whether they checked new evidence against already validated information, what they felt they learned, and what they would do differently next time they engaged in inquiry. All of these assessment pieces provided us with ample information upon which to base a more formal evaluative grade.



Reflections

These sixth graders learned the intended social studies content and developed their technology skills during this activity; in fact, they learned more content than expected because they engaged in inquiry. Naturally, educators are delighted when students meet and supersede standards and expectations. However, in order to achieve a successful outcome, it is imperative that teachers attend to the work of the students and hold frequent class and group discussions. Without such oversight, students tend to lose track of time and to lose focus. With the time, technological tools, and resources to investigate questions of interest to them, students were able to develop a historical understanding and reach their own conclusions based on evidence.

Notes

- Judi Harris, "Telecommunication: Mining the Internet-Generative Connections. An Internet-Supported Response to Standards Schizophrenia," *Learning and Leading* with *Technology* 30, no. 7 (2003): 46-49.
- James A. Banks et al., *Latin America and Canada: Adventures in Time and Place* (New York: Macmillan McGraw Hill, 1998).
- National Council for the Social Studies, Expectations of Excellence: Curriculum Standards for Social Studies. (Washington, DC: NCSS, 1994).
- Kara Dawson and Judi Harris, "Reaching Out: Telecollaboration and Social Studies," Social Studies and the Young Learner 12, no. 1 (1999): 5-8.
- Keith C. Barton and Linda S. Levstik, *Teaching History for the Common Good* (Mahwah, NJ: Lawrence Erlbaum, 2004).
- Ilene R. Berson and Michael J. Berson, "Digital Literacy for Effective Citizenship," Social Education 67, no. 3 (2003): 164-168.
- 7. "Google," www.google.com.
- 8. "Ask for Kids," www.askforkids.com.
- 9. "Primary Source Material," www.nhd.org/PrimarySourceMaterial.htm
- 10. "Historical Treasure Chests," www.k12science.org/curriulum/treasure/student_activities.html.
- 11. "American Memory: The Learning Page," memory.loc.gov/learn/start/prim_sources. html.
- 12. "All About Explorers," www.allaboutexplorers.com.
- 13. "Social Studies for Kids," www.socialstudiesforkids.com.

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