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Bloom’s Taxonomy and Primary Source Interpretation in High School
History

Charles Longshore
The University of Alabama and
Cleveland High School
Blount County, Alabama Schools

Introduction
Secondary social studies classroom teachers, in my view, should incorporate primary source documents into their lessons often. Many teachers regularly use primary sources, but they do not utilize the documents to their full educational value (Kithinji, Lucas, & Patterson, 2012). Instead of using primary sources to teach context, comparisons, and analysis, teachers use them for simple, objective questions and answers. Therefore, my action research question for this problem is: “How does the introduction of higher order thinking skills affect student interpretation of selected primary source documents?”
Primary sources are an excellent tool for students to gain insight into the lives of people from the past. Teachers, however, often present them to students without much examination and interpretation from the students. Primary sources have become a reading activity in which the students read the document and then respond to a couple of short answer objective questions. For example, my current World History classroom textbook provides Czar Alexander II’s 1861 “Imperial Decree to Free the Serfs.” The only question the textbook presents in the “analyzing primary source” box is “what reason does Czar Alexander II give for freeing the serfs?” (Spielvogel, 2005) This is not an “analysis” question, but a simple right or wrong objective question. This type of primary source document question feeds the current state of primary source usage in the secondary social studies classroom.

In Alabama, state decision makers and educators have spent a great deal of time and money revamping the science and mathematics classroom curriculum and instruction. Programs like the Alabama Mathematics, Science, and Technology Initiative (AMSTI) and Alabama Science in Motion (ASIM) provide lots of innovative ideas and resources to these classrooms. Students are able to get a great deal of hands-on experience, while using higher order thinking skills. Students are presented problems for which they have to analyze, compare, and hypothesize solutions. As a result, students are enjoying these classrooms and are learning and retaining more information than in social studies.

As a secondary social studies teacher, I do not see the state spending a great deal of money on the social studies in order to provide the same conveniences and experiences as students have in mathematics and science classrooms. But, using primary sources can be a way for social studies teachers to create personal, hands-on experiences for our students and introduce higher order thinking skills. I would also like to see Bloom’s Taxonomy introduced to students so that a deeper understanding of “thinking” can start to take root.

**Review of Literature**

In reviewing the literature, I did not find much research on the subject of primary sources and higher order thinking skills in students. The majority of the research in this field focuses on training pre-service teachers on how to use primary sources. Some of the research focused on in-service teacher usage and the widening database of online primary sources. Again, very little research existed on how introducing higher order thinking skills affected student interpretation of primary sources. However, all of the research on training teachers how to incorporate higher order thinking skills into primary source usage shows the importance of my research topic to the social studies classroom.

“Rather than relying on others to interpret history for them, findings indicate that engaging students with primary source documents exercises the critical-thinking skills needed to analyze and interpret historical document” (Dutt-Doner, Cook-Cottone, & Allen 2007). The work of Donet et al is right on point with my interests for several reasons:

1) The study shows that prior knowledge of the information, and of critical thinking skills, lends to higher/better analysis of primary source documents.

2) Age may play a significant factor.
3) Students will look for “correct” answers in the document, not necessarily his/her own analysis.
4) To be effective, the teacher must model the desired behaviors and use primary sources regularly.

The study also confirmed that little research exists in the area of connecting primary source usage and higher order thinking skills in students. As I have found, most related inquiry is concerned with training the teachers on primary source usage, not the desired outcomes with students. I can take some of the information in this study to set up my action research plan. For example, after reading the results of their research question one (what skills are necessary?), I can take the results and introduce one or two of those skills after an initial document review to see the increase in analysis, etc.

By linking the framework to Bloom's original taxonomy and the revised taxonomy, we provide a familiar foundation from which teachers can begin the processes of understanding and developing activities for integrating primary sources into their lessons. The framework provides a common language teachers can use when discussing primary source integration to meet learning objectives. The framework also provides a means of connecting the primary source to specific cognitive domains or cognitive processing levels (Ensminger & Fry, 2012).

Because one of my first thoughts was to use Bloom’s Taxonomy in my action research study, this investigation by Ensminger and Fry was of interest to me. While the focus is on the teacher, it directly shows the methods in which I would introduce primary sources and higher order thinking skills. I contend that when teachers and students both understand Bloom’s Taxonomy, the way teacher’s teach using primary sources is transformed, but, students also are encouraged to think outside the box and get “hands-on” with these documents.

There is a tacit understanding among social studies teachers and educators that incorporating primary source documents in planning and teaching is desirable for many reasons, most prominent among them the ways in which it challenges students to think at higher levels (Kithinji, Lucas, & Patterson, 2012).

The use of primary source documents is something that has interested me on a personal level and a professional level, as a teacher. The secondary curriculum coordinator for my school district and I have had several conversations on the topic of primary source documents and the potential professional development implementation in our district. However, other district priorities have reduced opportunities for such implementation. The work of Kithinji et al was of great interest because it concerns one of the issues I have witnessed with using primary documents. The authors are not only concerned with using more primary source documents in the history classroom, but with why teachers are not using them properly. In other words, why is it so difficult to find teachers using primary source documents to teach higher order thinking skills? Using primary source documents can open up all sorts of higher order thinking skill activities. Bloom’s Taxonomy should be instrumental in these documents and should be required for all students to know and understand, in my view. When the taxonomy is understood, then it seems teachers and students can take primary source documents to experience higher order thinking.
skills and situations. The article shows that elementary and middle school teachers do not use higher order thinking questioning, but high school teachers do although not to the extent that I think is acceptable.

“The added significance to the social studies has been the ways in which access to digital primary resources can also contribute to teachers’ abilities to develop an informed and, thus, engaged citizenry through the use of “digital civic resources” (Salinas, Bellows, & Liaw, 2011).

...students' comments about their resource-rich history classrooms echo what we have long known about "hands-on" learning in other parts of the curriculum, notably science and mathematics: When students have structured opportunities to construct meaning from primary materials, and critically examine those meanings, they feel more invested in the results (Tally & Goldenberg, 2005)

The conclusions of Tally and Goldenberg are right on board with hoped results that I have discussed with my secondary curriculum coordinators. Their first conclusion was:

First, it appears that students can apply historical thinking behaviors to primary sources even without prior direct teaching about the historical era or context. In this case, students approached images about turn of the 20th century American life simply as "historical detectives," apart from any curricular unit they were studying.

In my view, students will naturally “see” primary source usage as something unique or different because we rarely use them in our high schools. I always think about the movie National Treasure as they are analyzing the back of the Declaration of Independence. If I can find digital images or tangible reproductions of primary sources, I think the “detective” in students will naturally want to come out. Then, with some guidance, we can really move into higher order thinking skills.

The second conclusion by Tally and Goldenberg (2005) was:

When students have structured opportunities to construct meaning from primary materials, and critically examine those meanings, they feel more invested in the results. This suggests that as artifacts in multiple media enter into the history classroom we may see shifts in learning and motivation associated with the rise of "hands-on" learning in science and math.

This point made by Tally and Goldenberg is a “stickler” with me because so much attention is paid to the mathematics and science classrooms (testing, scores, etc) that the social studies are “left behind.” Hands-on, tangible resources like primary sources can be a tremendous motivator for our students to get engaged in the classroom. When this occurs, we can introduce higher order thinking skills and authentic learning can occur. Furthermore, the authors discuss the role of technology. Databases are growing with the amount of primary sources stored digitally providing easier accessibility for teachers and students.
Method

As the research literature suggests, much can be done at the pre-service or in-service professional development levels to train teachers to use primary source documents and higher order thinking skills with students. The literature in this area shows the importance of teacher knowledge in the use of primary source documents and higher order thinking skills, which correlates to my area of focus: the student and higher order thinking skills in conjunction with primary source documents.

To begin my course of action, I took five pre-selected primary source documents pertaining to a major event (the U.S. Civil War) and gave them to the students. The students read all of the documents and responded to basic objective questions for each. The final questions were “personal reaction,” “evaluate,” or “inference” types so that I could see where my students are (providing a baseline) or if any of them may be more inclined to higher order thinking prior to the next step. After this step, I introduced Bloom’s Taxonomy to my students. I explained the framework and some skill words that may be confusing or infrequently used by students. Finally, I had students re-read the documents and begin answering questions using higher order thinking skills from Bloom’s Taxonomy (such as compare, judge, hypothesize). I built up to the higher levels of Bloom’s Taxonomy as the number of questions grew.

The goal was that once students understand higher order thinking skills (i.e. Bloom’s) then they can become their own investigators, using primary source documents to search for clues to an unsolved puzzle. As the students continue to study primary sources, they will continue to use the higher order thinking skills they have learned to make history more hands-on and interesting for them.

I gathered data from student results prior to the introduction of higher order thinking skills. All of the responses for student understanding were recorded, but careful attention was paid to the “reaction” or “inference” questions. After I introduced Bloom’s Taxonomy, I recorded all of the student responses to those questions. I then was able to compare student responses prior to the introduction of higher order thinking skills and after the introduction of higher order thinking skills. I rated all responses by a predetermined scoring rubric (1- poor through 5- excellent). The difference in interpretation was of interest because most of the students have not been introduced to these thinking skills, especially when using primary source documents. I expected to see mostly scores of 1 and 2 prior to the introduction of higher order thinking skills and primarily scores of 3 or greater post-introduction. If the results were positive, my intention was to show my school district the need to integrate higher order thinking skills with primary sources and that this, in turn, could lead to funding for professional development of current teachers in the proper usage of primary sources.

The population tested was the entire 9th grade population of SCHOOL X. The school is predominately white, with a small, but growing, percentage of Hispanic students. The tested population consists of 65 students, all of whom participated in the study, thereby also forming my sample.
Prior to beginning the research study, I sent home a consent letter to be signed by each parent. If the letter was not returned, I did not use that student’s results in the study. I made it very clear that all of the results will be completely confidential. Student papers were seen only by me, the classroom teacher. In compiling and reporting the results no names were used. The only identifier used was the grade of the students, because age is a potential factor in the results of the study. Race, ethnicity, and gender were not be used in the results of the study, so they were be ethical concerns.

The introduction period lasted approximately two class periods (hour long). Students were given examples and definitions of the action verbs, and explanations were provided, as necessary. After the introduction to Bloom’s Taxonomy, students were given the primary sources again. This time the same questions were given and in addition to two more higher order questions. After the study, I provided two more primary sources in which connections could be made and hypothesized

Results

The results of my action research study were pretty astounding to me. In the pre-exposure to Bloom’s Taxonomy testing period, 65% of the students scored at levels 1 or 2 of the scoring rubric (see Table 1). From personal review, the students had very little understanding of how to respond to questions with higher order Bloom’s Taxonomy words. Words like “evaluate,” “infer,” and “justify” were not attempted or students did not have a complete understanding with which to attempt to answer the questions completely.

As students were introduced to Bloom’s Taxonomy and the individual action verbs, I witnessed a greater understanding and even motivation grow within some of the students. The students faired significantly better when given the primary resources again. This time, 82% scored level 3 or above. I deemed the responses to be well-thought out. The explanations displayed much higher levels of understanding.

From a qualitative standpoint, the students began showing signs of being able to investigate and make connections on their own without my guidance. After the study, when I provided two more primary sources in which connections could be made and hypothesized, the vast majority of students were able to evaluate and connect key issues we had discussed. The majority of the class turned into a student-led debate session.

Table 1

**Results and Rubric**

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<th>Pre Score</th>
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<td>11</td>
</tr>
</tbody>
</table>

Rubric Scoring:

1- No relative answer given. Potentially left blank.
2- A very elementary response. No true understanding.
3- A surface understanding. An average response.
4- A very good understanding and explanation. Solid description.
5- An excellent description. Excellence in understanding and explanation.

Conclusions

From my action research study data, I conclude that the introduction and explanation of the components of Bloom’s Taxonomy significantly raised the ability of many of my students to use higher order thinking skills in the analysis of primary source documents. Quantitatively, the numbers show the tremendous growth in ability to interpret primary sources, although as statistical tests were not run, no significance can be reported. From a practitioner’s view, however, the positive increase in scoring showed the potential of this approach. Qualitatively, I witnessed students begin to investigate and connect information while actually enjoying themselves. These results lead me to conclude that this approach needs to be tried again in the next school year and should be considered by teachers in their professional development program.

References


