Social Studies WebQuest: An Action Research Project

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Abstract: Presently, a large majority of the nation has adopted the Common Core State Standards (CCSS), which has led to a drastic shift of focus in elementary-level academics. The CCSS aims to educate the whole child through collaboration, communication, and critical thinking skills to prepare students for success in college and career endeavors. To meet the goals of CCSS, 21st century educators need to be able to create and utilize engaging, effective, technology-integrated instructional resources. An action research project was conducted to study the use of a standards-based WebQuest on the topic of the Federal Government that was designed and developed for second grade students at a public school in Honolulu. A WebQuest is an inquiry-oriented activity, supported by the constructivist and cognitivist learning theories, which integrates technology as an instructional strategy (Dodge, 2001; Halat, 2013; Zheng, Stucky, McAlack, Menchana, and Stoddart, 2005). This WebQuest was developed using Google Sites and designed to be developmentally appropriate for young students to work in small groups. The WebQuest contains the pretest, introduction, task, process, evaluation, conclusion, and resources. Lessons learned include the importance of roles and responsibilities in small groups, scaffolding and debriefing for young students, and the importance of effective data collection tools. Overall, as an instructional strategy the WebQuest was found to be moderately effective for content delivery and effective for increasing student engagement.

Introduction

Teachers have the daunting task of creating time to sufficiently accommodate all subject areas. An educator’s intent is to mold well-rounded students who are prepared for college and beyond. I strive to tailor instruction to meet the needs of 21st Century learners who are growing up in a world where technology is ever-present. Though I am fairly new to the teaching profession, I have been working to uncover exciting ways to teach Social Studies that will promote student engagement and boost interest in the
subject. One instructional method that appeared versatile and effective is the WebQuest. A WebQuest is an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Web. WebQuests are designed to use learners’ time well, to focus on using information rather than looking for it, and to support learners’ thinking at the levels of analysis, synthesis, and evaluation (Dodge, 2001, p. 1). The purpose of this action research project was to evaluate how the implementation of a Social Studies WebQuest, on the topic of the Federal Government, would affect curriculum retention and engagement for second grade students at a public elementary school in Honolulu. This teacher-created WebQuest was designed to present the curriculum aligned to the Hawaii Content and Performance Standards III (HCPS III).

**Literature Review**

**Action Research**

Action research is an iterative process involving action, reflection, theory, and practice (Brydon-Miller, Greenwood, & Maguire, 2003). Action research projects are unique and valuable to education because “research informs practice and practice informs research” (Avison, Lau, Myers, & Nielsen, 1999, p. 94). The intent behind this action research project is to improve personal practice as an elementary school teacher. More specifically, the objective is to provide richer, more engaging Social Studies lessons that incorporate educational technology. Rhynard (2002) claims that the days of lecture and note-taking are over. The students of the 21st Century excel when instruction is highly interactive and entertaining. He suggests strategies such as cooperative group work and internet research. Internet research includes the use of WebQuests- guided research activities that are inquiry-oriented and promote higher-order thinking skills. WebQuests require high levels of student involvement and provide purposeful learning experiences. Therefore, not only do they fulfill the need for engaging instruction, but also result in greater levels of student achievement.

**Constructivism and Cognitivism**

Several modern learning theories, including constructivism and cognitivism, support the concept of WebQuests in elementary-level classrooms. Constructivism is more learner-centered than earlier theories, since learning occurs as the learner interacts with content in an authentic environment and builds connections related to previous personal experiences (Jia, 2010). WebQuests follow along with constructivist ideals by being student-centered and project-based (Halat, 2013). Further, they evoke creative, critical thinking, and cooperative, engaging learning. Additionally, a study by Zheng, Stucky,
McAlack, Menchana, and Stoddart (2005), explained that a WebQuest was successful for strengthening constructivist problem solving skills, social interaction, and scaffolded instruction among college-level participants. According to Yilmaz (2011), cognitivism focuses on what learning is and how it occurs. The belief is that learners should be active participants by making meaningful connections between new information and prior knowledge. Furthermore, instructors should consider individual differences in prior knowledge when providing rich learning environments with multiple opportunities for learners to practice higher-order thinking. Kurt (2012) cautions, in order to be effective a WebQuest must include significant design considerations, such as the elimination of unnecessary graphics, colors, and videos.

WebQuests

The WebQuest model was developed by Bernie Dodge with Tom March of San Diego State University in 1995 (Dodge, 2001). Since then, numerous action research projects have been conducted to study the effectiveness of WebQuests. Participants, ranging from elementary to college-level, were divided into groups. One group received instruction with supplemental WebQuest and the other was the control group. One particular study suggested that college students who received traditional teaching with supplemental WebQuest displayed greater performance in reading comprehension and reported being more motivated (Tuan, 2011). An additional study conducted by Alshumaimeri and Almasri (2012), found that college-age English Language Learners demonstrated greater reading comprehension performance. A third study determined that sixth-grade students acquired more knowledge and experiences, as well as, greater enthusiasm for the curriculum when given the opportunity to use a WebQuest to supplement traditional instruction (Chang, Chen, & Hsu, 2011).

Project Design and Development

The intent behind this action research project was for participants to be able to meet HCPS III SS.2.4.1 by accurately describing the characteristics and responsibilities of the Three Branches of the Federal Government. However, the overarching end goal was improved teaching practices. As a 21st Century educator, I hope to be able to create engaging, effective, technology-integrated instructional resources. The WebQuest, as an instructional strategy, provides a virtual tool which is versatile enough to be modified for even the youngest audience.
I began to develop this action research project by pinpointing an area of need within my locus of control, Social Studies instruction, and formulating two specific research questions. The next step involved research over the course of two semesters.

To prepare students this school year, I assigned countless pair and group projects in all subject areas. Students learned how to communicate effectively, work cooperatively in teams, and solve problems creatively. Students were also given opportunities to use Google Chromebooks on a regular basis. This helped ensure that all students would be familiar with this technology when it came time to begin the WebQuest.

Utilizing WebQuest-building concepts found through research, I started to construct the Social Studies WebQuest. The WebQuest was created using Google products because of the user-friendly features and easy access from all devices. Further, Google products are customizable, available free of charge, and without large advertisements nor page limits.

A WebQuest is built upon six essential components: introduction, task, process, resources, evaluation, and conclusion. The purpose of the introduction, in Figure 1, is to capture student interest. The introduction captured interest by explaining the project’s relevance to student lives and posing two essential, guiding questions. The task portion, Figure 2, describes the final product. In this case, the final product was a newscast performance, which allowed students to report their findings in front of their peers. Figure 3 shows the process, which guides students through to the completion of the task. This page contained a YouTube video, informational graphics, and the links to students’ individual resources dependent on their role in the group. Normally, the resources page includes all of the websites that students will utilize to accomplish the task. However, in an effort to simplify the WebQuest, there were three separate pages, one per group member, containing only websites specific to their role. In Figure 4 below, is another picture from the “Process” page showing the links students used to access their specific resources. Figure 5 shows a sample of the information students received by clicking one of the links. The actual “Resources” page of this WebQuest held other general reference material, such as, related HCPS III standards and sample newscast videos (see Figure 6.) The evaluation section typically displays a rubric or similar grading criteria. Figure 7 shows the rubric and grading scale that was used to assess student newscasts. The conclusion summarizes the activity and promotes student reflection. The “Conclusion” page, Figure 8, brought the project to a close with a simple summary and gave thanks to the students for their hard work.
We live in the United States of America. As citizens, we have the responsibility to follow laws and the right to vote. The Federal Government is in charge of protecting all of its citizens.

Essential Questions—
Can you name the Three Branches of the Federal Government?
Do you know what each branch of the government is in charge of?

You will learn the answers to these questions and many more as you go through this WebQuest.

Figure 1. Introduction Page. This figure shows the Introduction page which captures student interest by explaining the connection between the Federal government and the participants.
Congratulations!
You and your team have been chosen to create and film a newscast informing the citizens about the federal government. In teams of three, you will need to learn all about the important pieces that make up the federal government.

You have three important goals:
First, you will discover the Three Branches of the Federal Government.
Then, you will learn what each branch of the government is in charge of.
Last, you will present what you have learned in a newscast.

Each team member will have an important role. Go to the Process page to learn about the roles.

Figure 2. Task Page. This figure depicts the Task page which describes the final product, a newscast, where students will be required to present their findings.

Figure 3. Process Page. The purpose of the Process page is to guide students through the completion of the task.
Figure 4. Links to specified resources. This figure shows another portion of the Process page with the links to each of the three resource pages frequented by participants.

Now, your team is ready for your first assignment!
Each news team will have 3 members.
You have been chosen to report on the Executive Branch.

Visit the links below to learn about the Executive Branch.

http://www.congressforkids.net/Executivebranch_index.htm

http://www.ducksters.com/history/us_executive_branch.php


Figure 5. Reporter 1 Resource Page. This figure shows the resource page specific to Reporter 1. Each reporter was provided three websites and various images to research.
Figure 6. Resources Page. This figure shows the “Resources” page which contains other reference materials, such as related standards and newscast samples.
Figure 7. Evaluation Page. This figure shows the Evaluation page which housed the rubric and grading scale used to assess students’ newscast performances.

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<tr>
<td><strong>Three Branches of Federal Government</strong></td>
<td>All of the Branches were discussed with many details in the newscast.</td>
<td>All of the Branches were discussed in the newscast.</td>
<td>Two of the Branches were discussed in the newscast.</td>
<td>One or none of the Branches were discussed in the newscast.</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>All of the information was correct.</td>
<td>Most of the information was correct.</td>
<td>Some of the information was correct.</td>
<td>Very few or none of the information was correct.</td>
</tr>
<tr>
<td><strong>Creativity</strong></td>
<td>The newscast and props were very creative.</td>
<td>Most of the newscast and props were creative.</td>
<td>Some of the newscast and props were creative.</td>
<td>Very few or none of the newscast and props were very creative.</td>
</tr>
<tr>
<td><strong>Teamwork</strong></td>
<td>Your team always worked well together.</td>
<td>Your team worked well together most of the time.</td>
<td>Your team worked well together sometimes.</td>
<td>Your team did not work very well together.</td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td>The newscast is between 3 and 5 minutes.</td>
<td>The newscast is between 3 and 5 minutes.</td>
<td>The newscast is not between 3 and 5 minutes.</td>
<td>The newscast is not between 3 and 5 minutes.</td>
</tr>
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Total __________

ME = 19 – 20
MP = 16 – 18
DP = 14 – 15
WII = 13 or below

Figure 8. Conclusion Page. This figure displays the Conclusion page which summarized the WebQuest and brought the project to a close.
Discussion

Based on feedback provided, modifications were made to the WebQuest and instruments. Modifications include the addition of the “Next” link at the bottom of each page for smoother transition (see Figure 9) and more informational graphics (see Figure 10).

![Figure 9. Government WebQuest Homepage. This figure illustrates the Homepage after the addition of the “Next” link.](image-url)
Figure 10. Informative graphic. This figure shows one of the informative graphics that was added to the WebQuest.

Ultimately, the WebQuest has been constructed to be developmentally-appropriate and visually-appealing for second-grade students, while eliminating unnecessary graphics, colors, and videos that may negatively affect the efficiency of the WebQuest. The finalized version of this WebQuest has been formally implemented with a second-grade class in Spring 2016.

Lessons learned

I learned that there is a lack of free, developmentally-appropriate Federal government resources for lower levels. Many of the resources available were too advanced for my students, in terms of vocabulary and overall reading level. Two out of the three resources that I thought would be acceptable, were ultimately too difficult for most students to interpret independently. While researching, I found that the majority of ready-made WebQuests available are outdated and had been created around the time that WebQuests were created in the late 1990’s. I also learned that it is difficult to balance simple website design with a visually-appealing design. It was a challenge to design a website that was
simple enough for seven- and eight-year-olds to navigate, yet still exciting enough to be engaging.

The next time I choose to implement a WebQuest, there are a few changes I would like to make. I would secure educational grant money to support the creation of digital Social Studies resources for students at the lower elementary school level. I hope to incorporate more informative videos and educational songs.

**Conclusion**

This action research project, implemented in the Spring of 2016, has been designed to determine how the implementation of a Social Studies WebQuest, on the topic of Federal Government, affects curriculum retention and engagement for second grade students at a public elementary school in Honolulu. As the researcher, I hoped to improve personal teaching practices by creating effective, engaging, technology-integrated instructional tools for use within my locus of control. The success of this action research project means that I have a cost-effective tool in my repertoire that can be edited, updated, and reused very simply. The results of this project may also appeal to others in the education field, like teachers, curriculum coordinators, instructional designers, and administrators who are looking to enhance their 21st Century teaching practices.
References


