

Main Ideas & Supporting Details: A WebQuest Approach

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Abstract: The rationale for this project is to use technology to address the Hawaii Content and Performance Standards in the area of Language Arts. In Hawaii, identifying main ideas and supporting details while reading is a state mandated skill for 8th grade students to have. The purpose of this action research project was to develop and evaluate the effectiveness of a WebQuest for 8th grade Language Arts students on how to identify main ideas and supporting details while reading. The study produced positive results for the incorporation of WebQuests into standard educational curricula. The data also suggests that a majority of the students had a favorable attitude towards the use of WebQuests for learning.

Introduction

Technology is an increasingly influential factor in education. Technology offers many powerful learning tools and provides new ways to engage students. With the emergence of technology in education, come many different educational models suited for online learning. One such model was created in 1995 by Bernie Dodge and Tom March (webquest.org). Their model is inquiry-based and most, if not all the information that the learners work with is found on the World Wide Web. This model, otherwise known as WebQuests, has been embraced by educators as a way to effectively and efficiently integrate technology into their curricula, while at the same time engaging their students in the kind of thinking and learning that is required in the 21st century.

Background

In education, many theories and models of learning exist. In its infancy, education and learning consisted of an instructor spewing out vast amounts of knowledge and bestowing it upon students. Instructors then became the facilitators of knowledge transfer. They facilitated a student's quest for knowledge acquisition. In more current educational models, instructors facilitate a student's quest for knowledge by effectively integrating technology into their curriculum and staying up to date with the latest technology-based teaching and learning models. According to Halat (2008), a WebQuest is a computer-based teaching and learning model in which learners are actively involved in an activity or situation and use the internet as a resource. Likewise, Lamb and Teclehaimanot (2004) claim that WebQuests are a student-centered and project-based approach to teaching and learning, which a variety of theories, such as constructivist philosophy, critical and

creative thinking, situated learning environments, cooperative learning, and engaged learning, support.

According to Dodge (2001) and March (2000), well-designed WebQuests consist of the following critical attributes: Introduction, Task, Process, Resources, Evaluation, and Conclusion. The introduction introduces the students to what they will learn and do during the WebQuest. The task section is made up of smaller tasks or subtasks that will help a learner to accomplish the ultimate task of the WebQuest. The process section clearly explains and outlines for the learners what steps need to be taken in order for them to complete the ultimate task. The resource section will house the appropriate, teacher-selected web resources that learners will need to accomplish all of the tasks within the WebQuest. The evaluation section should include a rubric for students to self-evaluate what they have learned. Lastly, the conclusion section reminds the learners of what they just learned.

Action Research Methodology

The purpose of this action research project was to develop and evaluate the effectiveness of a WebQuest for 8th grade language arts students on how to identify main ideas and supporting details while reading. The rationale for this project was to address the Hawaii Content and Performance Standards (HCPS III) per the No Child Left Behind (NCLB) Act of 2001. In Hawaii, identifying main ideas and supporting details while reading is a state mandated skill for 8th grade students to have.

As a regular education teacher, the area of expertise of the researcher is Language Arts. The researcher is a tenured teacher who is dually certified for middle and high school instruction. The study was done as a part of regular classroom curriculum and educational practice. The student's grades and academic standing were not affected by the outcome of this study. The study took place over the course of two 72 minute class periods. Lastly, qualitative and quantitative data were collected, and analyzed through the use of the constant comparative method.

The target audience for this action research project was twenty 8th grade language arts students ranging in age from 13 and 14 years of age. The students were heterogeneously grouped and made up of both male and female participants. A majority of the students were quite comfortable with the use of technology as it has been integrated regularly at the school. The school is located in the rural town of Hilo, Hawaii.

Procedures

Webpage hosting by vincevencion.weebly.com was used to create and house the main idea and supporting details WebQuest. Within the WebQuest, pertinent educational resources were located and linked from the World Wide Web to use. The first task that the students were required to go through was to watch a short educational cartoon about main ideas and supporting details. The Flash video was provided by <http://www.brainpop.com>, an educational website that specializes in video-on-demand. The video clip provided an introduction to the concepts of main ideas and supporting

details, while at the same time giving examples of how to identify main ideas and supporting details in short passages. The second, third, and fourth tasks required students to read some literature on identifying topics (which is a vital step in understand what a main idea is), identifying main ideas, and identifying supporting details. Most of the literature was created simply by digitizing regular classroom resources, most of which is primarily made up of examples. After reading through the literature, students were tasked with participating in the “Unimportant Details” game provided by <http://www.quia.com>. The format of the online game is similar to that of the popular “Who Wants To Be A Millionaire” television game show. Each question is equated to a particular monetary amount and when a student provides a correct answer, they are rewarded with “pseudo-cash”. The students keep answering questions until they win the \$1 Million of “pseudo-cash”. By playing this game, students learned to be able to discern supporting details from unimportant details in a passage. The format of the game fueled student engagement and learning. Once the students won the \$1 Million, they were required to show the researcher their screen, and then allowed to advance on to the next task.

The next task asked students to download a form-fillable Microsoft Word document. Within the document, students were given a main idea and supporting details graphic organizer. They were asked to use what they had learned from the WebQuest to fill in the graphic organizer and then create their own main idea and supporting details paragraph. When the students were done filling in the graphic organizer and creating their paragraphs, they were asked to post their main idea paragraphs to the WebQuest’s posting section. Weebly’s blog function was used for this. Upon posting their paragraphs, the students were able to then see their classmate’s paragraphs. Students were also asked to submit electronic copies of their graphic organizer and main idea paragraph by attaching it and emailing it to me using their <http://www.teenbiz3000.com> student email accounts.

After submitting their assignments, students were then able to move on to the next task of the WebQuest, which was a review game. Open source software from <http://www.contentgenerator.net> was used to create a game called “Fling the Teacher”. Information found within the WebQuest was used to generate multiple choice review questions for the game. For every question that a student got correct, they were supplied with one piece of a trebuchet. Once all of the questions were answered correctly, and the trebuchet built, a final question appeared. If the student answered correctly, they were rewarded with the site of a cartoon teacher being loaded into their trebuchet and then flung across their screens. If the student answered incorrectly, they were prompted to start over. In keeping with the “Who Wants To Be A Millionaire” theme, “Lifelines” that the students could access if a question was deemed “too hard” were built in. The combination of the “Lifelines” with the site of the cartoon teacher being flung across the screen provided the students with high levels of motivation and engagement.

The last task of the WebQuest involved three parts. The first part tasked students with reading a short conclusion, which summed up everything and highlighted the main points that the students learned in the WebQuest. The second part tasked the students with examining their own learning and using the provided three point rubric to assess

themselves. The final portion of the WebQuest was the feedback. The students were moved back to the classroom and a discussion was held. There were six questions that were presented to the group. The questions were asked to gauge the effectiveness of the WebQuest. As the discussion took place, notes on the students' responses were taken.

Results

The study originally was planned to take place over the course of one 72 minute class period, but had to be extended to two 72 minute class periods. Data from the teacher observation notes, a class discussion, and student reflections were analyzed to determine the overall effectiveness of the WebQuest. The results from the class discussion and student reflections were unanticipated.

Based on the teacher observation notes, the students were actively engaged with the WebQuest. Students were absolutely silent and concentrating on the content. They were eager to show that they had won the \$1 million dollars during the unimportant details game. They were also proud to show that they were able to successfully fling the teacher during the WebQuest review game.

During the class discussion, the students were asked five questions:

1. What are some good/bad things about the WebQuest you just went through?
2. What are your feelings about his WebQuest? (For example: I really liked this WebQuest because... OR I didn't really like this thing called a WebQuest because...)
3. How might students learn more/better using WebQuests?
4. On a scale of 1-10 (1 being the lowest and 10 being the highest), what would you give this WebQuest?
5. Could you see yourself using WebQuests in the future? Why?

Student responses were group using the constant comparative method and fell into three basic categories: the games, pacing of learning, and student understanding. The games were mentioned by almost every student during the discussion. One student mentioned that, "The games were pretty hard, but it helped me to learn about main ideas." While another student claimed that, "A bad thing about this WebQuest was the games because they were frustrating, but fun when I got to fling the teacher."

Pacing of learning was another constant in the discussion. "They [students] might learn better [from WebQuests] because they [students] can work on their own and not wait for other students to catch up" one girl commented. She was commenting on a WebQuests ability to pace learning for students individually. A male student said, "Another good thing [about the WebQuest] was you [students] move at your own pace not stopping to wait for others in class." Another male student was noted as saying, "I never feel rushed for keep up with everybody."

Student understanding was the final constant during the class discussion. A male student commented on student understanding by stating, "I really liked the WebQuest because it

had many ways of getting its point across and just listening to the teacher all period could get boring and that’s how the WebQuest made me understand better.” A female student noted that, “It [WebQuests] is a better and fun way to learn than listening to the teacher and getting bored the whole class. It [using WebQuests] just makes me understand better.” While another male student said, “I think that this [using WebQuests] helps students because they like using computers and technology is a common connection and connections are the best way to learn.”

Students were asked to reflect on their learning. They were tasked with using a self evaluation rubric (Table 1) to self-assess their understanding of main ideas and supporting details.

Table 1. Self-Evaluation Rubric

3	2	1	0
<ul style="list-style-type: none"> • I fully understand what a main idea is. • I fully understand what a supporting detail is. • I was able to easily create a paragraph that had a main idea and supporting details. 	<ul style="list-style-type: none"> • I only partially understand what a main idea is. • I only partially understand what a supporting detail is. • It was a little difficult for me to create a paragraph that had a main idea and supporting details. 	<ul style="list-style-type: none"> • I kind of understand what a main idea is, and I don't understand what a supporting detail is. • I don't understand what a main idea is, and I kind of understand what a supporting detail is. • Writing the main idea and supporting details paragraph was very difficult for me, but I still did it. 	<ul style="list-style-type: none"> • I don't understand what a main idea is. • I don't understand what a supporting detail is. • I was not able to do the paragraph.

Student engagement was unmistakably high, a point best made by the students’ own assessment of their learning. 17 students self-assessed at a 3 (85%), while 3 students self-assessed at a 2 (15%). The high level of success, experienced by the students, as made evident by the student commentary and self-evaluations was quite unexpected.

Implications

With the latest educational theories and models out there, it is vital that classroom teachers and school administrators are aware of which ones are most effective for engaging their students in learning. A WebQuest has proven itself to be quite a valuable technological tool for learning in this situation. With proper planning, time, and professional development, other teachers should be able to successfully and effectively integrate technology-based educational models, like WebQuests, into their curricula and ultimately into their classrooms.

Conclusion

Based on the data collected, the WebQuest was shown to be successful at engaging the students with the content and to be a highly effective delivery method. The way it presented itself to the students was in a fun, non-traditional way. The students were asked for the first time to learn grade-level content through the use of highly interactive games and other web-based content. Many of the students indicated in the classroom discussion that they enjoyed taking part in the WebQuest as it did not lend itself to the boredom that may sometimes occur within traditional learning environments. As a result of this study, using a WebQuests to address the Hawaii Content and Performance Standards as mandated by the No Child Left Behind Act, has proven to be highly effective.

At the conclusion of this study, the students went in for monthly benchmark testing as provided through the Edison Alliance. Prior to taking part in the WebQuest, the class average for the skill of identifying main ideas and supporting details was at 54%. After going through the WebQuest, the following month's class average for the skill of identifying main ideas and supporting details jumped from 54% to 72%, an increase of 18 percent points. Although it is unclear how much of that increase can directly be attributed to the WebQuest, it is an astonishing figure. Further studies could be done on direct correlations between effective WebQuests and student scores on standardized tests.

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