Project Report Template

Product URL: http://zunal.com/WebQuest.php?w=204918

Analysis

Learner Analysis

The WebQuest was developed for students in the third grade. However, students in second grade could complete the WebQuest near the end of the school year. The age range appropriate for the WebQuest would be eight to nine years old. Students should go through the WebQuest with a partner. However, the WebQuest may be completed individually. Students do not have to be proficient readers in order to be successful on the WebQuest. The majority of the WebQuest is recorded using Voki. The vocabulary is not extensive.

Since the WebQuest has bars along the left side of the paper, students can simply click the tab to proceed to the next task. Students can complete the WebQuest individually, with a partner, or even small group. However, the quiz would need to be completed individually to measure the knowledge of the student.

Context Analysis

This WebQuest is developed to be used in a third grade math classroom. The number of students in the classroom would range from 19 to 20. The WebQuest would need to be introduced at the beginning of the math period. The periods are sixty-five minutes each. The WebQuest would need to be discussed with students step by step. It could be introduced using the Smartboard so each student could see what to do. When choosing partners for the WebQuest, I would partner students based on ability. I would want to ensure one of the partners was a strong reader for areas in which there is no recordings.

The WebQuest is designed to take a sixty-five minute class period to complete. Therefore, introduction of the WebQuest would need to be the day before, and a quick review the day of the WebQuest. If the WebQuest wasn't completed in the class period, it could be completed the next day. There are no specific guidelines for what parts need to be completed at which times. However, the videos must be watched and the games must be played before completion of the quiz. Prior to introducing the WebQuest, safety guidelines for using the WebQuest need to be addressed. (PSC 2.5)

The Multiplication Safari WebQuest can be accessed from any desktop computer or laptop computer with internet access. The accommodation which would need to be made to complete this project is having an adequate amount of computers. Therefore, the mobile lab in the school would need to be placed in the classroom for at least two days to ensure student completion. For students with special needs, the project could be completed as a small group with the teacher facilitating the steps. Students could gather around the Smartboard while the teacher goes through the WebQuest with them. However, with the use of Voki, there is limited reading that needs to be completed. In addition to this, manipulatives may need to be provided to students because using virtual manipulatives may be a challenge for them.

The teacher implementing the Multiplication Safari in their classroom would need some technical skills. The teacher would need to be familiar with what a WebQuest is. The teacher would also need to be familiar with the various components of a WebQuest in order to use it to the benefit of students. Additionally, the teacher would need adequate skills in using the internet. I would recommend the teacher review several WebQuest so he or she was familiar with the content and format. The teacher would also need to determine how many computers would be needed in order for each student to complete the WebQuest. The teacher would also need to test the links before students began using the WebQuest.

Using a WebQuest as a technology tool can be extremely engaging for students. There are several student technology standards a WebQuest can address. Such standards include Creativity and Innovation, Communication and Collaboration, Critical Thinking, Problem Solving, and Decision Making, Digital Citizenship, and Technology Operations and Concepts.

- Creativity and Innovation includes students using models such as virtual manipulatives to explore building arrays.
- Communication and collaboration includes students collaborating with their peers to create a project or learn a new concept. Students are also developing global awareness because in addition to multiplication, students are learning about the African Savanna. They are also solving problems and creating word problems of their own.
- Critical Thinking, Problem Solving, and Decision Making includes students abilities to manage the project in order to create word problems at the end using the information they have learned throughout the WebQuest.
- Digital Citizenship is very important to every classroom. Digital citizenship includes students knowing safety protocols for using the internet. These protocols should be clearly communicated to students.
- Technology Operations and Concepts include students' abilities to use technology efficiently and productively.

Task Analysis

Essential Questions for the WebQuest are:

- What are arrays?
- How can arrays help to solve multiplication problems?
- What is repeated addition?

• What is the relationship between multiplication and addition?

Learning Objectives:

Students will solve multiplication word problems using arrays with 80% accuracy.

Students will solve multiplication word problems using repeated addition with 80% accuracy.

Students will provide the teacher with solutions to words problems which meet or exceeds standards for math expression.

Dispositional Objectives:

Students will work in pairs determined by ability.

Design

Overview

I determined the design for my WebQuest based on the theme we are using in third grade. Our theme is the safari; therefore, I chose to tie a portion of my multiplication unit in with the safari theme. I also chose to use Voki in order to guide students throughout the WebQuest and give helpful facts which cause them to think and relate real life to multiplication.

Students will work with their partner to complete various learning objectives in order to complete the safari. The beginning of the WebQuest is an introduction to multiplication. The introduction includes giving students the information about what they will be learning which two new strategies for solving multiplication problems are: repeated addition and arrays. As the students continue on the journey, they receive Fun Facts which relate animals of the Savanna to multiplication. Students will use Teacher Tube to view two segments on arrays and repeated addition. Also included on the same page as the videos is a link to virtual manipulatives so students can model what they are learning. After this, students can play two math games. One is for arrays and the other is using repeated addition.

After students feel comfortable with what they have learned, they will then take a quiz. The quiz has five multiplication problems which direct students to use either arrays or repeated addition. Students are also directed to work the problems out on scratch paper which is to be turned into the teacher. There is a rubric included with what the students need to do to meet the standards for showing work. These standards are accuracy, correctness, and detailed descriptions of what they did to get the solution.

The final activity is an extension to what was learned. Students will have the opportunity to come up with their own multiplication word problems. Students must also show work in this portion of the WebQuest. Students also have the choice to use the animals they learned about during the WebQuest, or they can research animals that live in

the African Savanna and write about them. The project has animals which often pique the interest of children. Also, using Voki sets a fun animated tone.

Details

In order to differentiate, I have decided to pair students up based on ability. I am doing this to increase relationships among students, increase the confidence of students, and provide peer mentoring opportunities. I feel by incorporating these strategies into the WebQuest, the students will all benefit.

My WebQuest is built around the Universal Design strategies. The WebQuest contains a variety of tools such as Voki, samples from Teacher Tube, and virtual manipulatives. These elements will provide multiple ways for understanding the knowledge as well as presentation of the content. Students are also given the opportunity to reflect what they have learned in three different ways. These three ways are a short quiz, creating word problems on their own, and a reflection about the lesson for the day.

This assignment has been designed for students to work in pairs. If necessary, students could work in small groups. There are several multimedia elements. These elements are voice, animation, and video. Voice and animation are provided by using Voki. Video has been taken from Teacher Tube to be used as a tutorial. I feel these elements keep the WebQuest more engaging.

The elements also serve as assistive technology. Students would be able to listen to the Voki's to give instruction. As far as the videos, they could be paused if students needed a break. Also, the WebQuest can be played on a laptop to accommodate some learners.

Development

When I initially began developing my project, it was important for me to take content which I use daily in my classroom and incorporate it in my WebQuest. I wanted to create a project I could actually use in my classroom. I spent two days developing my WebQuest. I wanted to use a theme students would be interested in. Since the third grade team has chosen a safari theme, I thought it would be appropriate to include in the WebQuest. I used the website Zunal to create my WebQuest on. I used Zunal during my gifted certification so I was familiar with it. I reviewed several WebQuest what were already created by various authors to determine the format. Zunal is a great website to create WebQuest on because it gives a detailed description of what information needs to be put into each tab on the WebQuest. In addition to Zunal, I used Google to search for photos to incorporate into my WebQuest. I also used Google to find the facts I used about the Savanna.

Implementation

In order to successfully implement the WebQuest into my classroom, it is imperative I have a plan. Since I'm certain my students will not be familiar with WebQuest, I will need to explain the steps in great detail.

My plan will start with creating a WebQuest we can complete as a whole class. Since my first unit in math is place value, this will be a great place to start. I plan on using WebQuest the entire year in my classroom. I plan on creating a WebQuest for each unit.

To begin implementation, I will display the first WebQuest on my Smartboard. The students and I will go through the WebQuest tab by tab. We will complete each tab in the WebQuest together. I will give students whiteboards to work any problems out. As far as time for the first WebQuest, I feel it will take approximately sixty-five minutes to ensure student understanding. This will allow for all of my math classes to have equal time in the process. (PSC 6.3)

At my school, we have a mobile lab which can be brought into the classroom. My intentions would be to have the mobile lab brought into the classroom. By doing this, each student would have their own computer with internet access so they could follow along with the first WebQuest and complete any on their own from that point on.

Evaluation

Student Learning -

In order to assess student learning, I have imbedded a quiz. The quiz has five questions which are structured around the skill students should have learned. In addition to using the quiz, students are instructed to turn in their scratch paper. The scratch paper will be graded based on a rubric which is also imbedded in the WebQuest. This will help the teacher assess student understanding. Finally, students will be expected to produce word problems using the skills they have learned.

As a self assessment, students will write a short summary discussing what they have learned in the class. This will be used as an exit slip or ticket out the door. Throughout the project, I will be assessing students by walking around the classroom while they are completing tasks.

Product Design –

Since I have been unable to implement this project with my classroom due to summer break, upon returning to school, I plan to test the WebQuest with a small group of four students. I will randomly choose one student from each of my four math classrooms. I have included a short quiz which will show a reflection of understanding. I have also included a rubric which will be used to evaluate student scratch paper. On the scratch paper, students are directed to work all of the five problems out according to the strategy listed in the question. This will also help to determine if students have a firm understanding of the strategies produced.

In terms of testing the WebQuest, I would like to do this immediately upon return to school. I plan to use my school Ipad to video the students while they are using the WebQuest. This will help to determine any difficulties, misunderstanding, or unclear directions. In addition, I will also be taking notes throughout the pilot to see where there are issues.

I plan to give the students a short three question slip of paper to get other feedback about the WebQuest. The questions which will be listed on the paper are below.

- What did you like about the WebQuest?
- What did you learn from the WebQuest?
- What could be added to the WebQuest to make it more interesting?

Reflection

As a result of developing this project, I feel I have learned about an engaging technology tool for my classroom. By using WebQuest in the classroom, students are engaged in critical thinking, problem solving, and higher order thinking skills. All three of these components are very important. In addition, a WebQuest is a great way to reinforce concepts to students.

I feel WebQuest are a great way to enhance student learning. WebQuest are a neatly organized framework which should be used as an addition to instruction. WebQuest contain various options and can be built around any concept. Therefore, they can be used as an extension to a lesson, an intervention for a struggling student, or as a center during workshop.

I am excited that I have created my first WebQuest. They are tools which will be great to enhance learning in my classroom. While the WebQuest took quite a bit of time and planning, I am very proud of my accomplishment. In the future, I feel it would not take this much time to develop a WebQuest. I have plans to use a WebQuest with each of my units in math.

I would suggest to any of my colleagues to use WebQuest as tools in their classroom. I feel WebQuest are excellent accessories to lessons. I feel it would be beneficial for teachers to have a professional learning meeting to learn how WebQuest are structured and the benefits they can bring to the classroom. I feel most teachers are not aware of this great tool.

Resources

Voki Classroom. (2013). Voki classroom. Retrieved from http://www.voki.com/

Google Images. (2013). *African savanna animals*. Retrieved from <u>http://www.google.com/search?q=images of African Savanna</u> <u>Animals&tbm=isch&tbo=u&source=univ&sa=X&ei=513tUeBph-</u> <u>rzBM7kgOgN&ved=0CEUQsAQ&biw=1548&bih=717</u>

Zunal. (2013). Zunal webquest maker. Retrieved from http://www.zunal.com/