## Project Report

### Product URL: \_\_\_\_\_\_\_\_https://sites.google.com/site/whittingtonwebquest1/home\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### Analysis

In the Analysis section you examine the context of the learning environment, the learners themselves, and establish learning objectives for the project. The analysis should provide you with clear statement of learning objectives and a sense of the constraints you will need to consider as you design and implement the project (for instance, if the classroom only has one computer that is hooked up to the internet, then this will need to be developed as a part of station rotation or perhaps an entire class WebQuest as opposed to individual or small group work).

Questions you’ll want to address in the analysis include, but may not be limited to:

Learner Analysis

* Diverse learner characteristics and needs – age, reading level, language ability, technical capabilities, previous experience with project-based learning or small group learning. (PSC 2.5, 2.6)

Context Analysis

* Class characteristics – number of students, organization of the class schedule (how much time do you have with them, how flexible is it, etc.) (PSC 2.5)
* Technical considerations – access to technology, special accommodations that need to be made to do a project that is web-based (PSC 2.5). Is any adaptive or assistive technology necessary for students with special needs? (PSC 3.4)
* Teacher characteristics – technology proficiency, comfort in using technology
* Standards – State or local content and technology standards (NETS-S)

Task Analysis

* Learning Objectives – both cognitive objectives (what Essential Questions are you addressing, what do you want them to walk away knowing and being able to do) and dispositional objectives (i.e. work in small groups). (PSC 2.1)

Learner Analysis:

My students are all ninth graders enrolled in either the Accelerated Coordinate Algebra Course or the regular Coordinate Algebra Course. Students in both of the courses have had experience working with partners and small groups to complete tasks in the classroom. My students range from gifted learners to special education students. Some are reading above their grade level and some students have come to the ninth grade having failed all of their CRCT tests from the 8th grade.

Context Analysis:

The Accelerated Coordinate Algebra classes have anywhere from 18 to 24 students in a class. The regular Coordinate Algebra classes have between 29 to 31 students in a class. The class periods are only 50 minutes long but I am able to use the time with the students as I see fit in order for them to learn. I only have one computer in my classroom with a projector so the WebQuest will have to be done as a class and then split off. My school is making another computer lab but I have no idea when it will be ready. We are also probably going to implement “Bring Your Own Technology” but again with no definite timetable. I am very comfortable using technology in my classroom and use it everyday with my students. Standards addressed include:

**MCC9-12.S.ID.2** Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation-Advanced Algebra) of two or more different data sets. Include review of Mean Absolute Deviation as a measure of variation.

**Task Analysis:**

**EQ:** How do I summarize, represent, and interpret data on a single count or measurement variable? I want the students to be able to calculate the mean, median, mode, and mean absolute deviation by hand and by using a calculator for larger sets of data. I also want the students to be able to work better in groups and use each other to help figure out the next step when they get stuck instead of automatically coming to me for help or sitting there and doing nothing.

*For the Project Report – incorporate any feedback from the Pre-Plan and update this section to reflect your actual audience. Provide a link to the final product.*

### Design

**Overview**

In the Design phase, you actually design the instructional element. For WebQuests, the design phase entails sketching out the introduction or storyline that couches the WebQuest, the task students will have to complete, and an outline of the process they will undertake to complete the task. The instructional activities of the WebQuest should be authentic and appropriate for the content and student technology standards. (PSC 2.1, 2.3, 2.6) The tone, vocabulary, and style of WebQuest should be appropriate for the age and grade level of student. (PSC 2.6) What online resources will you purposefully select and evaluate to deliver the content for the WebQuest? (PSC 3.6) Please include citations for all resources used in the WebQuest. (PSC 4.2)

I will use resources that I have checked out to make sure that they work and that they are correct.

# Bibliography

Baker, T. (2010). *Mean Absolute Deviation*. Retrieved 2012, from You Tube: https://www.youtube.com/watch?feature=player\_embedded&v=z9AJk7TvdpQ

Easy Calculation. (2012). *Mean Absolute Deviation Calculator*. Retrieved 2012, from Easy Calculation : http://easycalculation.com/statistics/mean-absolute-deviation.php

Easy Calculation. (2012). *Mean, Median, Mode Calculator*. Retrieved 2012, from Easy Calculation: http://easycalculation.com/statistics/mean-median-mode.php

Kids Math Games Online. (2012). *Mean, Median, and Mode Game*. Retrieved 2012, from Kids Math Games Online: http://www.kidsmathgamesonline.com/numbers/meanmedianmode.html

Mathisfun.com. (2012). *The Mean Machine*. Retrieved 2012, from Math Is Fun: http://www.mathsisfun.com/data/mean-machine.html

**Details**

Describe how will you differentiate content, process, product or learning environment to meet the diverse needs of all students? (PSC 2.5) Your WebQuest should adhere to Universal Design principles. Universal Design (UD) is an approach to the design of all products and environments to be as usable as possible by as many people as possible regardless of age, ability, or situation. Please include at least two UD strategies in your WebQuest. (PSC 2.6)

Identify if this is an individual assignment or designed for small or large groups. The more detailed you can be about the design of the WebQuest, the better and more detailed feedback I can provide. Include ideas for incorporation of video and audio into the WebQuest. The multimedia elements should be appropriate to the curriculum, support the instruction, and produce an overall effective learning experience. (PSC 2.6)

Also, describe how you could use adaptive or assistive technologies as a resource to support students with visual, auditory, or physical disabilities. (PSC 3.4)

Include ideas for incorporation of video and audio into the WebQuest

I will have my collaborative teacher pull students into his classroom across the hall in order to differentiate learning environment for my students who need to be in a smaller group to focus. I will use equitable use and simple and intuitive from the principles of universal design to make my WebQuest accessible for all students.

This WebQuest will most likely be a large group project because I only have one computer in my classroom. I will have the students take notes and watch videos to help them understand the concepts. I will also have a few students come to the board with some of the interactive features available.

Students will visual disabilities could have a reader program read the material to them straight from the webpages. Auditory disabilities could require the use of closed captioning on any videos associated with the WebQuest. Any student with a physical disability who is already using another means to access the Internet should not have an issue accessing the WebQuest through their normal means of accessing the Internet.

I am incorporating videos from YouTube that show how to do a certain concept so that the students can start to see how they can use the internet to find other sources of help if they are struggling. I have also included audio of me reading the pages in order to accommodate students with reading disabilities.

*For the Project Report – incorporate any feedback from the Pre-Plan and update this section to reflect your final product. Provide a link to the final product.*

### Development

The Development section describes how you plan on going about developing the project. What is your timeline for getting it done? What tools will you use (and perhaps have to learn) in order to complete the development of the WebQuest? (HTML, LMS, Wiki, Blog, Google Pages, etc.) (PSC 3.3, 6.1) During the development process, double-check to ensure the Internet links work, documents download properly, and video and audio is embedded correctly. (PSC 3.5)

I have already found some great resources on the web. One is an interactive way to show mean, median, and mode using buildings. One is an interactive way to show how to find the mean where the students can input their own numbers. I found a video showing how to calculate the mean absolute deviation. I want the students to complete some kind of journal as their product for the WebQuest so I need to make that for them to use as a guide and a place to put their notes/work. I am using Google sites to house the WebQuest.

*For the Project Report – incorporate any feedback from the Pre-Plan and update this section to describe your actual development process*

### Implementation

The Implementation section describes how you propose to implement this in a real classroom (a reminder that full implementation is not a requirement for this project, though it’s great if you can do it). (PSC 6.3) What resources will you need? What will you need to arrange in advance (lab time, access to websites, switching class times with other teachers, technical support, etc.)? (PSC 3.1, 3.2, 3.5) What classroom management strategies will you use for managing students and the use of digital tools and resources? (PSC 3.2) What’s the timeline for the WebQuest? Will students work on it daily or over a long stretch of time? What will students do at school vs. do at home? Describe strategies for how you will ensure equitable access to the Internet while implementing the WebQuest? (PSC 4.1) Will you work with or collaborate with other teachers? (PSC 3.7) If so, what will be their roles?

In the Teacher Notes page of the WebQuest, please describe possible implementation and differentiation strategies that other teachers might implement when using the WebQuest. (PSC 2.5)

I will need to make sure that I have access to the internet the day of the WebQuest and I also need a backup plan incase that internet is down during one or more of my classes. I will use my normal classroom procedures to prepare the students for using the Internet. They are well aware of what behaviors are expected of them and they will also be told of what behaviors will not be accepted when using the Internet. We will work on the WebQuest in class and it will also be available to the students if they do have Internet access at home. I will give all students a chance to use the tools available on the Internet in class. I am not collaborating with other teachers on this project, however I will share the final product with them.

*For the Project Report – if you actually implement the project, then describe what you actually did. If not, you will likely go a little more in depth and detail in this report than in the Pre-Plan.*

### Evaluation

The Evaluation section describes how you will know if this WebQuest/project actually helps students learn and if it is a well-designed project from the student perspective. It is anticipated that for the Pre-Plan, this will be initial thoughts, and not anything fully fleshed out.

**Student Learning –**

What product will students be expected to produce to demonstrate their learning? How will you assess if students learned what you wanted them to learn? Pre-test / post-test? Rubric (usually included as part of the WebQuest)? Will students do any self-assessment or peer-assessment? If so, what would that look like (walk-bys, rubric completion, “I like …, “Things that could be improved….”)? Will you be taking notes or assessing throughout the project or just upon completion? (PSC 2.7)

Students will be expected to produce a notes/journal of notes and worked examples. I will use a rubric to assess if students learned what I intended for them to learn. Students will not do peer assessment. I will be assessing their completed project at the end.

**Product Design –**

How will you know if the WebQuest itself is well designed? (PSC 2.6) Will you take notes as students us it? Video or audiotape students as they use it to see where they have difficulties or misunderstandings? Will you have them complete some sort of evaluation or feedback form? If you won’t be able to implement this project with your entire class during the semester, then this type of evaluation will need to be conducted with 3-4 students of the target audience and will be in the form of a usability test. For now, think about who might be that target audience and when you might conduct a usability or pilot test with them. What are some of the questions you might want addressed by a pilot or usability test (i.e. Is the task clear? Is the reading level appropriate? Do the multimedia elements enhance the WebQuest or are they just add-ons to have them there?)

If the students learn the concept then I will know that it is well designed. I will take notes during the WebQuest of what the students are struggling with and the comments that they are making about each of the parts of the project. I won’t have them complete an evaluation instrument just because we don’t really have time for that. I am thinking that I could implement this project with my students in my support class as a pilot test. I have a little more freedom to ask them what they think and more time to use in class.

*For the Project Report – incorporate any feedback from the Pre-Plan and describe what you actually did to assess student learning (if you were able to do that) along with the outcomes of that evaluation. For Product Design – describe the usability/pilot test and the outcomes of that. What changes did you make based on that feedback?*

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*Provide 1-2 images of students/pilot testers using the product.*

### Reflection

*For the Project Report only – reflect on this project around four aspects:*

*Project Development – What did you learn as a result of developing this project (technically, tools used, timeline, planning, etc.). What did you do that worked well? What didn’t? What would you do differently (in terms of building the WebQuest) if you were to do this again?*

*As I worked on this project, I used google sites to develop my website. I consider myself to be computer savvy but I was challenged at times with this project. The single most frustrating part was trying to embed audio onto the website. Google has made some changes in the past few years and it’s not as easy as it used to be. I almost considered switching and rebuilding the website on weebly but I figured it out in the end and I am so glad that I did. If I were to do this project again I would probably start in weebly because it seems to be a bit more user friendly as far as doing the things that I need it to.*

*Instructional Design – Discuss the WebQuest as a structure for student learning (or whatever project structure you ended up doing)? What worked well? What might have been improved? What influenced your choices as to how to incorporate the multimedia elements? Looking back, are there other or better choices you might have made?*

I was not able to actually implement this into my classroom, but I have found that the students tend to respond to lessons that are different from what we do on most days. Even listening to a video of someone who is not me teach the exact same thing works because it is different. I am sure that this and any WebQuest would be motivating to students because they are interacting with the elements and are learning by doing. I would like to find some more interactive websites for the students to use because those are the most fun. I looked for resources that were good in content and not boring. There is nothing worse than having students watch a 10 minute video that is boring. I could have found more interactive things for the students to use to help them learn the topics or extended the topics to include other things in the standard*.*

*Personal Growth – What did you learn about yourself as a result of this project? This can include skills, frustration level, ability to push your own envelope, yourself as a teacher and yourself as a technology facilitator.*

I learned that I am very resourceful at using the Internet to find out how to do something. I do get frustrated when I can’t do something and I am glad that I didn’t completely give up but continued until I found a solution to the problem.

*For Others – From this experience, what would you suggest to other teachers/colleagues who might want to consider doing something similar? What is important for them to know? What would help them succeed?*

I would suggest to other people who want to make a WebQuest that they need to leave plenty of time to design and test the project. You can’t make this in a night and be ready to use it tomorrow. They have to really plan and know going in that it is going to take a little work to get it up and running.