

Exploration of the Yellowstone National Park – Inquiry Lesson Plan LIBM 461

Created By: Kristy Wiley- Dallaserra

Kristy Dallaserra- Position Title: Library Technology Teacher 15 years of Elementary Education teaching experience. Mrs. Dallaserra has Masters in Technology and is currently working toward her endorsement in Library Media. Collaboration with Mrs. Teri Daily 30 years teaching. Teaching instructor for NGSS Next Generation Science Standards.

Curriculum/Subject of Lesson:

This Lesson is a cross curricular lesson that focuses on Literacy skills that are critical to building knowledge in science. The lesson will also teach the history of Yellowstone National Park. The LMS will be responsible for constructing the research of the National Park. Technology will be used as visual for the students. Videos and Websites will be provided to students to give them the virtual tour though the Park while still be in the classroom.

Grade Level of Lesson:

This Lesson will be introduce to our 6th Grade students at the Kennedy Elementary School in Butte MT.

Lesson Duration:

This Lesson will take 8 weeks. Students are in schedule in Technology/Library classes for 2 hours and 15 minutes per week. Classroom Teacher will do her own lesson planning in her classroom

Lesson Materials/Resources:

Computers
Internet
Video- Continental Drift and Plate Tectonics
Websites
Microsoft Publisher
Funding for the end of the Year Field Trip

Lesson Overview/Rational:

This unit is designed for sixth-grade students in the content area of science, social studies, language arts, and technology and library research skills. The unit is titled “Exploration of the Yellowstone” because at the end of this unit students will create a brochure to be used as a guide for when they actually take the on-site field tour through Yellowstone Park. It is our goal that the 6th students will gain a lifetime knowledge of the Yellowstone National Park. Students will gain an understanding of Plate Tectonics, Wolves’ History in the park, Geography of the park, popular sites to visit. Students will be able to express their knowledge gained through written, verbal and digital presentations.

Essential Questions/Focusing Questions of Lesson

Digital Bloom suggests Promote Fat (essential) Questions over Skinny (fact based) Questions. These questions called also called inquiry questions.

Goals:

Students will be able to:

- Understand the basic concepts of Plate Tectonics and geothermal hot spots of Yellowstone National Park
- Introduction of Wolves and the basic food chain. Visualization through Wolf Quest online game.
- Identify the location of Yellowstone Park within the three states : Montana, Wyoming, Idaho
- Experience popular visited site at Yellowstone National Park.
- Effectively communicate of the knowledge gain through research on the topic of Yellowstone National Park.
- Create a brochure using Microsoft word to share with classmates and parents on their knowledge and research about Yellowstone National Park.

Objectives:

Student will demonstrate the ability to brainstorm experience or questions they have about Yellowstone National Park. Then students will be able to explore through various web quests. This will allow students to experience the inquiry process with exploring independent and peer collaboration. Students will earn points for completion of web quests. Students will brain storm what their brochures should look like and what important information should be added to their final project that they will present to peers. Teacher will lead students through the Big 6 process when going over the process and requirements for the project. Students will be asked to take part in the designing the rubric and giving feedback of what important highlights should be added in order for the brochure to be informational to the general public.

Standards:

ISTE:

Creativity and innovation

- Students will demonstrate creative thinking , construct knowledge, and develop innovative products and processes using technology

- **Research and information fluency**

Students apply digital tools to gather, evaluate, and use information

- **Communication and collaboration**

Students use digital media and environmental to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the leaning of others.

- **Critical thinking, problem solving and decision making**
Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decision using appropriate digital tools and resources
- **Digital Citizenship**
Students understand human, cultural and societal issues related to technology and practice legal and ethical behavior
- **Technology operations and concepts**
Students demonstrate a sound understanding of technology concepts, systems, and operations

State—Library, Technology and Subject Content Standards
Montana Instructional Alignment

Technology

Content Standard 3

A student must apply digital tools and skill with creativity and innovation to express her/himself, construct knowledge and develop products and processes.

Informational literacy/ Library

Standard 2

Students Locate sources, use information and present findings.

- **Locate multiple resources using search tools**
- **Locate information within multiple resources**
- **Create a product that presents findings**

BIG 6	3.1 3.2 5.2
AASL	1.1.8 1.3.2 2.1.4 3.1.4
ISTE	3b 2a, 2b

Standard 3

- **Students evaluated their product and learning process.**
- **Assess the quality and effectiveness of the product**
- **Evaluate how the process met the need for information**

BIG 6	6.1 6.2
AASL	3.4.1
ISTE	1a, 5b

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Technology Used:

Computers, Internet Access, Wolf Quest, Microsoft Publisher, DVD, Edmodo, Prezi

Collaboration:

Homerom Teacher Mrs. Daily, Special Ed Teacher Ms. Vaugh and myself will be responsible for conducting this with our 6th Grade Students. Mrs. Daily will be responsible for teaching the students on the topic of science and social studies according to the 6th Grade State Standards in the content area of science and social studies. Mrs. Dallaserra will be conducting the research and technology skills with the students according to the expected to the State Standards listed above. Mrs. Daily will also assist on helping students with the writing in Communication Arts to help with construction of Microsoft Publisher Brochure. Ms. Vaugh will be responsible for working with individual students who have an IEP or are struggling with concepts of the unit. All three teachers will be on the field trip with the students. Parent Volunteers will also be asked to participate as well.

Anticipatory Set:

Have students take an online survey using Edmodo of how many students have ever visited Yellowstone Park. Ask students to reflect on their experience. If they have not visited the park, ask students to come up with a list of questions or ideas of what they might see when they visit the park.

Process Model and Information and Technology Literacy Activities:

Select a process model appropriate for the lesson and grade level and list the lesson activates for each step.

Step by Step activities and Process Models:

Week 1: Anticipatory Set

- Survey on Edmodo Reflection Post- Start Inquiry Journal
<https://www.edmodo.com/>
- Big 6 Questioning
<http://big6.com/pages/lessons/lessons/big6-writing-process-organizer.php>
Students will start a unit Inquiry Journal to be keep throughout the 8 weeks.
Reflections will be done after every week

Week 2: Introduction to Yellowstone

- Welcome to Yellowstone Webquest
<http://zunal.com/webquest.php?w=125178>

Week 3: Plate Tectonics Part 1

- Overview
<http://pubs.usgs.gov/gip/dynamic/dynamic.html>

Week 4: Plate Tectonics Part2

- Worksheets
http://science-teachers.com/platetectonics_worksheets.htm

Week 5: Wolves-

- Webquest
<http://edtech2.boisestate.edu/evanouskil/502/webquest/process.html>

Week6: Discovering Yellowstone

- <http://zunal.com/introduction.php?w=184018>

Week 7: Designing Brochure – Microsoft Publisher**Week: 8 Study of the Yellowstone Field Trip Outline- Final Inquiry Journaling****Lesson Closure/Object Based Learning (Reflect Anticipatory Set):**

Students will share with in groups the brochure they designed. Students will be asked to also go back and reflect on the 1st Edmodo post they did as part as the Anticipatory Set. They will asked to do a reflection post of the knowledge they have gained during this 8 week unit and onsite field trip through Yellowstone National Park. The Inquiry Journal will be a place for j

Lesson Evaluation/Assignments/ Handouts/Teaching Materials:

Students will be evaluated on the completion of their web quests. Students will also be responsible for completion of the brochure in Microsoft Publisher according to the rubric provided by teacher. Students will receive points for pre and post reflections on Edmodo. Students will be also given points for Inquiry Journaling

Connection to Other Curricular Areas:

This unit has Science, Social Studies, Communication Arts, Researching Library Skills, and Technology Skills.

Adapted Learning:**Adaptations** (For Students with Learning Disabilities)

- Extra Time
- Partner work
- Assisting with organizing thoughts and scripting when needed

Extensions (For Gifted Students)

- Students will design a Prezi Presentation
- Research Interesting Facts to design did you know poster

Works Cited:

Continental Drift and Plate Tectonics [Motion picture on DVD]. (n.d.). The Phoenix Learning Group INC.

Kuhlthau, C., Manitoes, L., & Caspari, A. (n.d.). *Guided Inquiry Design: A Framework for Inquiry in Your School*. Santa Barbara, CA: Library Unlimited.

Retrieved April 17, 2015, from <http://www.nextgenscience.org/development-overview>

ISTE NETS for Students

http://www.iste.org/docs/pdfs/20-14_ISTE_Standards-S_PDF.pdf

Montana Curriculum: Library Media

<http://opi.mt.gov/Curriculum/libmedia/>

<http://opi.mt.gov/PDF/Standards/09TechELE.pdf>

Resources:

Free Online Social Networking for the Classroom

<https://www.edmodo.com/>

Web quests:

<http://edtech2.boisestate.edu/evanouskil/502/webquest/process.html>

<http://zunal.com/webquest.php?w=125178>

<http://zunal.com/introduction.php?w=184018>

Online Resources

<http://pubs.usgs.gov/gip/dynamic/dynamic.html>

http://science-teachers.com/platetectonics_worksheets.htm

Yellowstone National Park Website for Teachers and Kids

<http://www.nps.gov/history/teachers.htm>

<http://www.nps.gov/search/?utf8=%25E2%259C%2593&affiliate=nps&query=wolf+quest>

<http://www.nps.gov/yell/learn/kidsyouth/index.htm>

From Carol C. Kuhlthau, Lesile K. Manitoes, and Ann K. Caspari.. (2012) **Guided Inquiry Design: A Framework for Inquiry in Your School**. Santa Barbara, CA. Library Unlimited

Inquiry Journal Prompts. **Fig. 5.1, page 69**

Inquiry Journal Prompts	Interesting Ideas to Explore
Write three things you learned in today's session	I learned that...
Write About something that surprised you or was new to you	I was surprised that....
Write about something that you already knew about. Tell how you know.	I knew that...
List some ideas that seem interesting to you	Interesting ideas I have are..
List ideas that you want to more about	I would like to know more about...