How Physical Systems Affect Human Systems:
A Comparative Analysis of the River Cities of Grants Pass, Oregon and Seville, Spain

Grants Pass, Oregon
Seville, Spain

Overview: In this lesson, students will develop and practice essential skills (see "Objectives" section below) that will further enhance their understanding of the importance of geography in social studies (see "Lesson Learning Target" below). Using Oregon Common Core State Standards (OCCSS) as the performance tasks for students to prove their understanding of both National Geography Standards and Oregon Geography Content Standards, students will complete both formative and summative assessment(s) to demonstrate comprehension and skill development relative to their grade level (7th grade in this model lesson). The primary purpose of this lesson is to introduce and define key geographical terms/concepts while simultaneously addressing content pertaining to the essential question of the unit and learning target of the individual lesson:

Unit Title: The Geography & Settlement of Ancient Rome

Essential Question: How did geography affect the settlement and development of ancient Rome?

Lesson Learning Target ("I Can" Statement): I can describe how the development of a city/settlement is influenced by its geography.

National Geography Standards:

- **Standard 15**: How physical systems affect human systems
  - 15.1B: Explain how the characteristics of different physical environments place constraints on human activities, as exemplified by being able to explain how the development of a city can be influenced by the physical environmental characteristics of the area.
Oregon Geography Content Standards:

- 7.10. Interpret maps and other geographic tools to find patterns in human and physical systems in the Eastern Hemisphere.
- 7.11. Describe the physical environment of places in the Eastern Hemisphere and how it influences trade, culture, and the economy.

Connections to Common Core:

- 6-8.RH.2. Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.
- 6-8.WHST.2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
- 6-8.WHST.9. Draw evidence from informational texts to support analysis, reflection, and research.

Lesson Objectives:

In completing this exercise, students will be able to:

- Define key geographical terms: natural resources, physical location, relative location, and cultural diffusion.
- Analyze the geographic similarities and differences between Grants Pass, Oregon and Seville, Spain.
- Describe how the development of a city/settlement is influenced by its geography.

Grade Levels: 7th Grade Social Studies  Time: 70-80 Minutes (1-2 Class Periods)

Materials:

- Pen/pencil for each student
- Access to aerial image(s) of Grants Pass, Oregon and Seville, Spain (Click on names in this bullet point or images above to see examples from this lesson)
- Access to Google Earth and ability to display physical maps to students to see (or a physical copy that can be displayed and/or distributed to students) (Appendix A)
- Venn Diagram graphic organizer (or blank/lined paper for students to make their own) (Appendix B)
Model Lesson: Iberia

- Library of Congress Image Analysis Tool (LOC) either displayed or distributed to students (Appendix C)
- Paper to take notes/participate in class activities/define terms
- Entrance/Exit Ticket handout (or students can create their own ticket) (Appendix D)

Background:

Though this lesson is designed to ideally be delivered at the beginning of the school year to introduce geography vocabulary, students should know/be able to do the following before this lesson is delivered:

Basic geography concepts learned in 6th grade, such as the subsequent Oregon State Standards:

- 6.12 Collect and analyze data to describe regions of the Western Hemisphere.
- 6.14. Identify physical features of the Western Hemisphere and explain their effects on people and events.
- 6.15. Explain how people have adapted to or changed the physical environment in the Western Hemisphere.
- 6.16. Explain how technological developments, societal decisions, and personal practices influence sustainability in the Western Hemisphere.

This lesson can be used/modified to address the following (but not limited to) History Alive! chapters of study, the adopted curriculum of Grants Pass School District No. 7:

- The Geography & Settlement of Ancient Rome (focus for this particular model lesson)
- The Geography & Settlement of Ancient Greece
- The Age of Discovery

Procedures:

1. Opening Activity (Anticipatory Set): 5-10 Minutes

   - Display aerial images of Grants Pass and Seville side by side (if there are no projectors etc., print out handouts if possible) and have the class verbally read aloud the “I Can” statement of the day:
     - I can describe how the development of a city/settlement is influenced by its geography.
   - Make sure students understand that the terms defined today while comparing Grants Pass and Seville will be essential to proving they can describe how the development of a
city/settlement is influenced by its geography, and therefore will be setting themselves up for success when it comes time to assess the essential question:

- How did geography affect the settlement and development of ancient Rome?

- Have students create (or distribute) a Venn Diagram graphic organizer and respond to the following questions individually and quietly:

  - Observe these two images of Grants Pass and Seville. What physical features do you see?
  - What are the geographic features/components that you notice in each image?
  - What are similarities (intersecting section of Venn Diagram) of both cities and what are distinct differences (non-intersecting sections of the Venn Diagram)?

- After about 3-5 minutes (or when it appears all/most students are done responding), call on students to create a class Venn Diagram to utilize during the remainder of the lesson leading to the summative assessment. Complete the class-constructed Venn Diagram on the class whiteboard/chalkboard or smartboard.*

* Recommended Strategy to Elicit Responses – “No Hands Up: Name Cards” (KLT Strategy)

- KLT “No Hands Up: Name Cards” Description: Teacher places students’ names on index cards. Teachers asks a question(s), waits an appropriate amount of time, and then pulls a name or names at random to answer. The teacher continues in this fashion during class Q and A sessions. As a result, more students are engaged, not just the typical handful who tend to answer the majority of questions.

2. Mini-Lesson (Direct Instruction): 5-10 Minutes

- Using the Library of Congress (LOC) “observe” questions as a guide (Appendix C), teacher adds to/reaffirms class Venn Diagram list (modeling how to use the LOC for remainder of lesson). The teacher should place an emphasis on the natural resources and geographical features that can be clearly seen in the images. The teacher defines the term natural resources; creates a vocabulary sentence for students to use as an example (students take notes, creating a vocabulary page). Keep the LOC displayed in the room until the summative assessment performance task.
Natural Resources Definition: Natural resources are materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain and/or sustain human settlements.

- Tell students they will need to be able to incorporate the definition and significance of natural resources in the proceeding summative assessment performance task.


- Using Google Earth (see examples from Appendix A), display the physical maps of Grants Pass and Seville. Zoom in close to the cities and then zoom out to the point where you can see the entirety of Oregon when observing Grants Pass and the entirety of Spain when observing Seville.

- Prompt the students (individually at first) to utilize the LOC questions to analyze the images of Grants Pass and Seville. This would be the point in the lesson to encourage students to make inferences, hypothesize, and access prior knowledge. Be sure students address the following questions as they work (questions should be answered in a class notebook or a provided graphic organizer – up to the teacher):
  - Based on what you see, how are Grants Pass and Seville similar located on their respective maps?
  - Why do you think these cities are located where they are? Were these places chosen for a purpose?
  - How do you think their physical and relative location influenced way of life? (At this point in time students are unlikely to know what “physical location” and “relative location” mean, but they will be defining soon after in this point in the lesson)

- Have students “Think-Pair-Share” for the abovementioned questions.

- Teacher should facilitate a class discussion and summation of the student responses, culminating with the definitions of physical location and relative location for students to note-take, connecting these definitions to the geography of Grants Pass and Seville:
  - Physical Location Definition: Physical location refers to the natural features and phenomena of the earth's surface, as landforms, drainage features, climates, soils, and vegetation.
  - Relative Location Definition: Relative location is the position of a place in relation to another location on earth.
- Deliver brief mini-lecture on the cultural history of Seville (click here to get the necessary basic information, if needed). Be sure to highlight the fact that Seville was at various times, occupied by the Romans, Moors, Visigoths, Christians, and Jews and became the epicenter of Age of Discovery in later centuries. Make sure students understand that Seville’s geography was essential in bringing other cultures in to its city and was the primary reason why it became so important during the Age of Discovery. And because this lesson is designed to be delivered in the unit, *The Geography & Settlement of Ancient Rome*, be sure to note that it was in the outskirts of Seville (called Italica) where future Emperors Hadrian and Trajan were born.

  - If you are ahead of the approximate schedule of this lesson, feel free to show pictures of the Alcazar Palace, Cathedral of Seville, Columbus’s tomb, Ruins of Italica, etc.
  - If planned on delivering this lesson over two class periods, a similar discussion on Grants Pass would definitely be appropriate.

- At the conclusion of the mini-lecture, define cultural diffusion for the students:

  - **Cultural Diffusion Definition**: Cultural diffusion is the spreading of cultural traits, or “ways of life” (e.g., material objects, ideas, or behavior patterns) from one society to another.

- Via class discussion or direct instruction, make sure students understand that cultural diffusion is primarily dictated by geography, especially in the ancient period. Settlements and cities bring their culture with them and spread it to other societies when they colonize, settle, and trade with others. Colonization and trade was typically influenced by a surplus or lack of natural resources, goods, fertile lands etc. needed to survive and/or be economically/politically successful.

4. **Debrief Activity (Formative Assessment): Final 15-20 Minutes***

   - See "Assessment" section below for details on formative assessment activity.

   - Make sure students understand there will be a summative assessment at the start of the following class period, so participating and putting effort in to the formative assessment activity to finish the class period will be essential to their success.

5. **Summative Assessment (Start of the class period the following day): 15-20 Minutes**

   - See "Assessment" section below for details on summative assessment activity.

   - Students should complete the summative assessment performance task independently and quietly in order for the teacher to get a truly accurate assessment of student learning/understanding of learning target (“I Can”).
- Students cannot use their notes/class text for the summative assessment. Working area should be clear (except writing utensil and entrance/exit ticket paper).

[All visuals/class Venn Diagram should be covered/removed begins the assessment.]

Assessment: OCCSS Performance Tasks

Formative Assessment: Best Composite Paper (BCP) - KLT Strategy

1. Each student will individually attempt to construct a vocabulary paragraph (see example below), underlining each geographical term as it is first mentioned in the paragraph (Students can have access to student notes, class lists constructed in the lesson, etc.). Prompt students to define each term by integrating geographical examples from class, especially that of Grants Pass and Seville. While defining these terms, students should be focusing on answering/addressing the learning target “I can” statement: *I can describe how the development of a city/settlement is influenced by its geography.*

2. After about 8-10 minutes, put the students in to small groups (3-4). Prompt the students to share each individual paragraph with one another.

3. After about 2 minutes, tell the groups they need to construct a new vocabulary paragraph as a group, comprising the best aspects/components of each of the group members. Each group member needs to make sure they are writing down the final product of their group, because the teacher will call on a random group member to share the group paragraph with the class (this will also be used to study for the summative assessment).

4. If there is time, all groups should share their paragraphs with the class. The teacher could also share the mastery example below as a model for the upcoming summative assessment.

5. If there is extra time in the class period(s), the teacher could facilitate a class BCP statement – incorporating the best components of all group statements to create a “class vocabulary paragraph.”

- KLT Best Composite Paper (BCP) Description: *Students in a small group build a composite paper that takes the best features of their individual papers, in order to help them recognize quality and the micro and macro levels. The students create a composite paper by being able to determine strengths and weaknesses, based on the success criteria, across the original, individual papers.*
Summative Assessment: "Entrance Ticket" Short Essay*

Students are writing a short essay (similar to step #1 for the formative assessment above):

Each student will individually attempt to construct a vocabulary paragraph, underlining each geographical term as it is first mentioned in the paragraph (Students CANNOT have access to student notes, class lists constructed in the lesson, etc.). Students must attempt define each term by integrating geographical examples from class, especially that of Grants Pass and Seville. While defining these terms, students should be focusing on answering/addressing the learning target “I can” statement: *I can describe how the development of a city/settlement is influenced by its geography.*

- Display and briefly discuss the rubric being used to grade the summative assessment (See “Summative Assessment Rubric” below).

- The entrance ticket can become an "exit ticket" if the lesson is complete 15-20 minutes before the first (or second class period if the lesson runs long) class period is over; students will turn the exit ticket in to the teacher as they exit the room at the end of the class period.**

- **Alternative Summative Assessment (for visual learners): Concept Map Graphic Organizer** (Appendix E)

* Complete the summative assessment in class; students should not complete it at home.

** The exit ticket example in *Appendix D* is likely to small for students to use for this particular summative assessment. It may make more sense to have students complete on a sheet of lined paper.

Extensions and/or Adaptations:

*Grants Pass & Seville in the 21st Century:* Have students conduct research to analyze/compare how geography impacts human systems in Grants Pass and Seville in the 21st century.

*Rogue River vs. Guadalquivir:* Have students conduct research to analyze/compare how both river systems have impacted their local/global histories. Have students write an argumentative essay or speech to make the case for the overall importance/impact of the Rogue River or Guadalquivir.

*The Age of Discovery and Seville:* Seville was the epicenter for Spanish exploration – in fact, Christopher Columbus was buried in Seville and the General Archives of the Indies is also located there. Have students research the history of Seville and determine why Seville became so important, focusing on the geographical advantages of Seville.

*Change River Cities in the Lesson:* Substitute Grants Pass for any Oregon community (though a similar river city would be preferable and more appropriate to this particular lesson format). A city such as Portland, Oregon would substitute seamlessly for this lesson. Seville can also be substituted for an alternative city that fits the unit being taught more accurately.
### Summative Assessment Rubric:

<table>
<thead>
<tr>
<th></th>
<th>Mastery</th>
<th>Nearly Mastery</th>
<th>Proficient</th>
<th>Nearly Proficient</th>
<th>Not Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5</strong></td>
<td>In addition to nearly mastery:</td>
<td>In addition to proficiency:</td>
<td>Defines key geographical terms: natural resources, cultural diffusion, relative location, physical location</td>
<td>Attempts to define key geographical terms: natural resources, cultural diffusion, relative location, physical location</td>
<td>Did not attempt.</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Each definition and explanation of the learning target statement is accompanied by examples delivered/discussed in the lesson</td>
<td>Details are in a logical order.</td>
<td>Succinctly and accurately addresses the learning target statement of the lesson: <em>I can describe how the development of a city/settlement is influenced by its geography.</em></td>
<td>Attempts to address the learning target statement of the lesson: <em>I can describe how the development of a city/settlement is influenced by its geography.</em></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>All sentences are grammatically correct, show good sentence structure and correct spelling.</td>
<td>Each key geographical term is clearly underlined.</td>
<td>Attempts to infuse the geographical examples of Grants Pass and Seville in their writing.</td>
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**A Mastery-level Summative Assessment Example – “Entrance Ticket”**

The development of a settlement is influenced by its geography in several ways. A successful settlement needs to have access to natural resources such as water, fertile land, and forests – these natural-occurring products allow a settlement to survive and also have economic advantages – if a settlement lacks essential natural resources, the settlement will fail or they will have to look to colonize elsewhere or trade for what they need. When a society is forced to colonize and trade due to geographical factors, they naturally bring their culture with them and share it with others, such as language and traditions – this is called cultural diffusion. The development of a settlement is also influenced by its physical location, which can shape what a settlement is able to do. For example, a settlement that lack access to fertile land and/or has a climate that is not conducive to growing crops or raising animals, that settlement will have to move or go out and colonize/trade with other societies to get what they need. Lastly, the relative location of a settlement can hinder or help their development. A settlement with a positive relative location, such as Seville or Grants Pass, will develop and sustain itself for a long time. For example, Seville is located on a major river and is close to both the Atlantic Ocean and Mediterranean Sea (but not physically on those bodies of water). Because of Seville’s relative location to a major river and major bodies of water, Seville could be self-sustaining and a major economic power, drawing so many different cultures behind its city walls over the centuries.
Appendices:

Appendix A
Appendix B

VENN DIAGRAM

Different       Same       Different

Grants Pass     Seville

pg. 12
Appendix C

<table>
<thead>
<tr>
<th>Observe</th>
<th>Reflect</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the form of the image (painting, print, photograph, drawing)?</td>
<td>What languages do the words represent?</td>
<td>How do the clothing, buildings, transportation and/or landscape reflect the economic, political, or societal conditions for the time when the image was created?</td>
</tr>
<tr>
<td>Can you determine who created the image?</td>
<td>If there is no date, when do you think the image was made?</td>
<td>What was the likely motivation of the creator of the image?</td>
</tr>
<tr>
<td>What words are on the image?</td>
<td>What place or region does this image show?</td>
<td>What is the bias or point of view of this image?</td>
</tr>
<tr>
<td>What dates are on the image?</td>
<td>Can you identify a geographic theme (region, place, movement, physical system, human environment interaction, etc.) for this image?</td>
<td>How is this image connect to other documents, maps, recordings, images, or artifacts?</td>
</tr>
<tr>
<td>Is the image black and white or in color?</td>
<td>Describe the spatial patterns illustrated in this image. These patterns might be in the people, transportation, buildings, or landscape.</td>
<td>Why is this image significant?</td>
</tr>
<tr>
<td>Describe who is in the image.</td>
<td>What is the most likely purpose (audience) for this image?</td>
<td>Why would certain people or characteristics of the landscape be missing from this image?</td>
</tr>
<tr>
<td>What types of buildings are in the image?</td>
<td>How does this image compare to current image on the same topic?</td>
<td>What geographic questions would you like to ask the creator of this image?</td>
</tr>
<tr>
<td>What types of transportation are in the image?</td>
<td>What seems to be missing from the image?</td>
<td>Would it be difficult to find the location of this image? Explain why or why not.</td>
</tr>
<tr>
<td>Are there objects in the image? Do you recognize them? What are they used for?</td>
<td>What inferences or connections can you make from the image?</td>
<td></td>
</tr>
<tr>
<td>Describe the landscape and physical features in the image.</td>
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<td></td>
</tr>
<tr>
<td>What geographic event / issue / problem does this image illustrate?</td>
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Appendix D

**EXIT TICKET**

Name:___________ / Period:__ / Date:____________

Question: ______________________________

“I Can” Statement

Response:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Appendix E

NAME:

TOPIC

Natural Resources

Cultural Diffusion

“I Can” Statement

Relative Location

Physical Location