



Lignite Seminar 2019

Grading Expectations

Grading Reminders

- ▶ Only do a lesson plan if you expect a letter grade
- ▶ Summaries are sufficient for pass/fail (P/F) grades
- ▶ All NDSU signups have to do a lesson plan as all are graded
- ▶ Some UND signups get a letter grade and some are P/F
- ▶ All Minot State signups are Pass/Fail, or P/F
- ▶ The following pages have examples of summaries and lesson plans to give you some guidance for your work

Some examples of well written summaries

- ▶ Electricity Generation from Lignite
- ▶ Speaker: John Bauer
- ▶ There are many different types of energy sources to choose from in North Dakota and the United States. John discussed the Pros and Cons of: Solar, Wind, Nuclear, Natural Gas and Coal. Even though there are lot so options to choose from the most efficient and reliable energy for us in the North Dakota is Coal. Natural Gas is used a lot but the volatility of the fuel makes cost fluctuate and can become unaffordable during peak times or the day and year. He also discussed how electricity is generated using different systems and how they produce half a million horse to provide electricity for our homes. To maintain a stable and affordable energy, lignite coal will remain North Dakota's main source of energy.

Summaries Cont'd

- ▶ Lignite: The Regions Best Kept Secret- Daryl Hill-
- ▶ Daryl did an excellent job of talking about the economic impact that lignite has on the state. I feel that it is essential for the public to be made more aware of the positive economic impact that lignite has had on the state besides hearing all the negative environmental impacts we currently are flooded with. The fact that lignite has the 5th largest economic impact on the state clearly proves the importance of keeping it strong and running. The evolution of the lignite development was also fascinating. I can now share this information with my students and colleagues. From the beginning when the first mines were being run by local farmers/ranchers to the current coal and gasification plants. I also found it interesting to learn about all the different mines and plants located throughout the state. From when they started to their current megawatt output. Daryl's presentation provided me with information that will be valuable in my upcoming science classes.

Lesson plan examples

LESSON OVERVIEW			
Lesson Title:	ND Lignite/ Govt. Bureaucracy		
Teacher Name:		Email:	
Subject/Course:	Government	Grade Level:	12 th Grade
Other subject areas to be included, if any:	Chemistry & Environmental Science		
Content Standards/ Learning Goals Why are students doing this activity? What do I want them to learn?	<p>9-12.1.4 Use media (e.g., oral, written, websites, computer simulations, multimedia resources) to access, record, analyze, and communicate information relating to social studies</p> <p>9-12.3.4 Analyze the role government plays in an economy (e.g., provision of public goods and services, taxes, protection of property rights, resolution of market failures)</p> <p>9-12.4.4 Evaluate the effectiveness of structures, operations, and influences of political systems and constitutional governments (e.g., federalism; separation of powers; checks and balances; media and special interest groups)</p> <p>9-12.5.2 Interpret the relationships between physical environments and society (e.g., humans modify environment, environment modifies society, and use, distribution, and importance of resources)</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • Compare and contrast positives and negatives of mining in North Dakota • Identify the purpose of bureaucracy. • Describe the purpose of government regulation • Identify who does government regulation in North Dakota • Describe how federalism is used in government regulation in the North Dakota regulation of coal 		

Lesson plan

the blanks of the worksheet. This will act as their introductory day to learning more about coal in North Dakota and the good/bad that come with it.

Day Two: Students will pick up and finish the discovery learn worksheet at the start of class. This will act as a refresher of what they did the day before. When they are complete with that, the students will move onto another set of worksheets included with their packet. On this second set of worksheets, they will be looking at the EPA web-site along with the ND Public Service Commission web-site. On these worksheets, they will be looking up information on what these two entities due to set up rules and regulations for the coal mining companies to do. This should take them up to the end of the class period.

Day Three: The teacher will go through the Lignite Mining and Reclamation Presentation from the flash drive received at the Lignite Education Seminar. The teacher will go through the process the coal companies have to abide by because of the rules and regulation set by the EPA and ND Public Service Commission. After the presentation, the students will be posed a couple questions they will give a written response to. These will be used as the assessment and are described below.

Example of a Rubric

	Not Proficient (1)	Partially Proficient (2)	Proficient (3)	Advanced (4)
1. Compare & Contrast Venn Diagram	No Venn Diagram is given.	The Venn Diagram is given, but reasons are not correct	Venn Diagram is given and answers are correct	Venn Diagram is given while also giving answers that are extremely well defended.
2. Identifies Purpose of Bureaucracy	Student does not identify purposes of what a bureaucracy does	Student somewhat identifies the purpose of what a bureaucracy does	Student identifies purposes of what a bureaucracy does	Student identifies purposes of a bureaucracy and cites examples to defend their claim
3. Describes the purpose of government regulation	Student does not describe the purpose of government regulation	Student somewhat identifies the purpose of government regulation	Student identifies the purpose of government regulation	Student identifies the purpose of government regulation and cites examples to defend their claim
4. Identifies who regulates coal in North Dakota	Student does not identify who regulates coal in North Dakota	Student identifies one of entities that regulate coal in North Dakota	Student identifies both entities that regulate coal in North Dakota	Student identifies both entities that regulate coal in North Dakota while also citing examples of how they do produce it
5. Describes how federalism applies	Student does not identify federalism in terms of regulation	Student identifies federalism in terms of regulation but does give examples of this	Student identifies federalism in terms of regulation and gives examples of this .	Student identifies federalism in terms of regulation and gives multiple examples of this that are well defended

Example Rubric

Criterion (Score 0 if element is absent)	Below Expectations (1)	Meets Expectations (2)	Exceeds Expectations (3)	Score
Presentation is 5 minutes in length	Presentation is less than 5 minutes in length	Presentation is 5 minutes in length	Presentation is more than 5 minutes in length	
Job name is given along with the job description	Job name is given but no job description is given	Both job name and job description are given	Both job name and description are given along with extra details about the job and what it entails	
Basic working conditions are described	Limited conditions are described	A full description of basic working conditions are described	A detailed description of working conditions is given.	
Education needed is described along with where to obtain it.	Education requirements are given but no information on where to obtain it is given	Both educational requirements and locations of schooling programs are given	Educational requirements, locations of schooling, and information on continuing education are given	
Beginning, average, and highest wages are described and discussed	Only beginning and average wages were given	Beginning, average, and highest wages expected are given	Beginning, average, highest, and local average wages are given	

Good luck and Enjoy the Seminar!

