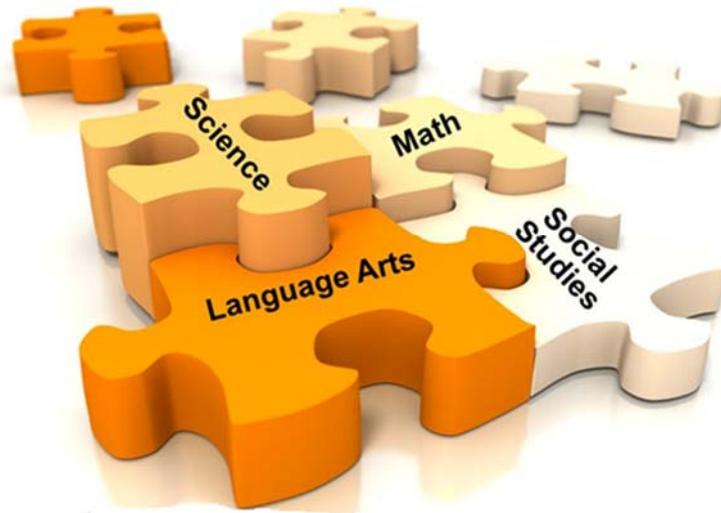


We Powered Content: TASC Cross Curriculum Partnerships That Work

Indiana Summer Institute 2015



Steve Schmidt
Appalachian State University
schmidtsj@appstate.edu
abspd.appstate.edu

This packet contains several lessons that instructors can use to prepare students for the TASC high school equivalency test that address skills in reading, writing, social studies, and science.

Who Can Vote?

This lesson focuses on helping students understand how the right to vote has changed over time as well as practicing the skill of argument based writing.

Items Needed:

- 1965 Alabama Literacy Test
- History of Voting Rights Activity script, identity cards, Can Vote and Can't Vote signs
- Indiana (or your state's) photo voter ID requirements
- Photo Voter ID pro/con prompt and graphic organizer

Directions:

1. Give students the 1965 Alabama Literacy Test but do not tell them what it is at first. Tell them it is an important test and that they will need to make a passing score (by the instructor's judgment) in order to remain in class. After students have taken the test, go over the answers with them. Ask students if they consider it fair that they had to pass the test in order to remain in class. Explain to students that this was a Literacy Test given to discourage Blacks from voting in Alabama in 1965 (and that they can remain in class!). Tell students that this test was changed four times between 1964 and 1965 to confuse potential voters as voting rights advocates came from the North and set up Citizenship Schools to help people pass the literacy tests.
2. After putting up Vote and Can't Vote signs, do the History of Voting Rights Activity and discuss the follow up questions.
3. Google: **Indiana (or your state's) photo voter ID requirements** and ask students to pull out their IDs. See which IDs would work for voting and which would not.
4. Talk about how today, voting rights' advocates feel that photo ID requirements are a threat to people's right to vote while others disagree and feel they are necessary to protect against voter fraud. Have students read the point/counterpoint article on photo voter ID.
5. Model for students how to use the graphic organizer to analyze the arguments in the point/counterpoint articles. With a partner, have students decide which article they feel is more convincing and orally explain why they feel this way.
6. Have students write a letter to the editor about whether they think having photo voter ID is a good idea or not.

TASC High Emphasis Areas Covered

Reading Informational: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain

Writing: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

Social Studies: The struggle for racial and gender equality and for the extension of civil liberties.

Test

- Which of the following is a right guaranteed by the Bill of Rights?
 Public Education
 Employment
 Trial by Jury
 Voting
- The federal census of population is taken every five years.
 True False
- If a person is indicted for a crime, name two rights which he has.

- A U.S. senator elected at the general election in November takes office the following year on what date?

- A President elected at the general election in November takes office the following year on what date?

- Which definition applies to the word "amendment?"
 Proposed change, as in a Constitution
 Make peace between nations at war
 A part of the government
- A person appointed to the U.S. Supreme Court is appointed for a term of _____
- When the Constitution was approved by the original colonies, How many states had to ratify it in order for it to be in effect?

- Does enumeration affect the income tax levied on citizens in various States? _____
- Person opposed to swearing in an oath may say, instead: (solemnly) _____
- To service as President of the United States, a person must have attained:
 25 years of age
 35 years of age
 40 years of age
 45 years of age
- What words are required by law to be on all coins and paper currency of the U.S.?

- The Supreme Court is the chief lawmaking body of the state.
 True False
- If a law passed by state is contrary to provisions of the U.S. Constitution, which law prevails?

- If a vacancy occurs in the U.S. Senate, the state must hold an election, but meanwhile the place may be filled by temporary appointment made by:

- A U.S. senator is elected for a term of _____ years.
- Appropriation of money for the armed services can only be a period limited to _____ years.
- The chief executive and the administrative offices make up the _____ branch of government.
- Who passes laws dealing with piracy?

- The number of representatives which a state is entitled to have in the House of Representatives is based on

- The Constitution protects an individual against punishments which are _____ and _____
- When a jury has heard and rendered a verdict in a case, and the judgment on the verdict has become final, the defendant cannot again be brought to trial for the same cause.
 True False
- Name two levels of government which can levy taxes.

- Communism was the type of government in:
 U.S
 Russia
 England
- Cases tried before a court of law are two types, civil and _____
- By a majority vote of the members of Congress, the Congress can change provisions of the Constitution of the U.S.
 True False

27. For security, each state has a right to form a

28. The electoral vote for President is counted in the presence of two bodies. Name them:

29. If no candidate for President receives a majority of the electoral vote, who decides who will become President?

30. Of the original 13 states, the one with the largest representation in the first Congress was

31. Of which branch of the government is the Speaker of the House a part?
 Executive
 Legislative
 Judicial
32. Capital punishment is the giving of a death sentence.
 True False
33. In case the President is unable to perform the duties in his office, who assumes them?

34. "Involuntary servitude" is permitted in the U.S. upon conviction of a crime.
 True False
35. If a state is a party to a case, the Constitution provides that original jurisdiction shall be in _____
36. Congress passes laws regulating cases which are included in those over which the U.S. Supreme Court has _____ jurisdiction.
37. Which of the following is a right guaranteed by the Bill of Rights of the U.S. Constitution?
 Public Housing
 Education
 Voting
 Trial by Jury
38. The Legislatures of the states decide how presidential electors may be chosen.
 True False
39. If it were proposed to join Alabama and Mississippi to form one state, what groups would have to vote approval in order for this to be done?

40. The Vice President presides over

41. The Constitution limits the size of the District of Columbia to

42. The only laws which can be passed to apply to an area in a federal arsenal are those passed by _____ provided consent for the purchase of the land is given by the _____
43. In which document or writing is the "Bill of Rights" found? _____
44. Of which branch of government is a Supreme Court justice a part?
 Executive
 Legislative
 Judicial
45. If no person receives a majority of the electoral votes, the Vice President is chosen by the senate.
 True False
46. Name two things which the state are forbidden to do by the U.S. Constitution.

47. If election of the President becomes the duty of the U.S. House of Representatives and it fails to act, who becomes President and when? _____
48. How many votes must a person receive in order to become President if the election is decided by the U.S. House of Representatives? _____
49. How many states were required to approve the original Constitution in order for it to be in effect? _____
50. Check the offenses which, if you are convicted of them, disqualify you for voting:
 Murder
 Issuing worthless checks
 Petty Larceny
 Manufacturing whiskey
51. The Congress decides in what manner states elect presidential electors.
 True False
52. Name two purposes of the U.S. Constitution.

53. Congress is composed of

54. All legislative powers granted in the U.S. Constitution may legally be used only by

55. The population census is required to be made every _____ years.
56. Impeachments of U.S. officials are tried by

57. If an effort to impeach the President of the U.S. is made, who presides at the trial?

58. On the impeachment of the chief justice of the Supreme Court of the U.S., who tries the case?

59. Money is coined by order of:
____ U.S. Congress
____ The President's Cabinet
____ State Legislatures
60. Persons elected to cast a state's vote for U.S. President and Vice President are called presidential

61. Name one power which is exclusively legislative and is mentioned in one of the parts of the U.S. Constitution above

62. If a person flees from justice into another state, who has authority to ask for his return?

63. Whose duty is it to keep Congress informed of the state of the union?

64. If the two houses of Congress cannot agree on adjournment, who sets the time?

65. When presidential electors meet to cast ballots for President, must all electors in a state vote for the same person for President or can they vote for different persons if they so choose?

66. After the presidential electors have voted, to whom do they send the count of their votes?

67. The power to declare war is vested in

68. Any power and rights not given to the U.S. or prohibited to the states by the U.S. Constitution are specified as belonging to whom?

History of Voting Rights Activity

Purpose

To visually demonstrate when different groups of people had the right to vote in the United States (in law and in fact.)

Summary

Each participant assumes an “identity” for the activity. Participants move to different sides of the room as the facilitator reads through a brief timeline of US history.

Before the Activity

1. Create the following cards. For groups more than 11, create multiple copies of each card.

- *White male, wealthy property owner*
- *Wealthy white female*
- *Poor white male, unable to read or write*
- *Poor white female*
- *African American male*
- *African American female*
- *Native American female*
- *Immigrant female, not a citizen, working and paying taxes in the US*
- *Immigrant male, not a citizen*
- *Convicted felon, male, in prison*
- *18-year-old male*

2. Post two signs on different sides of the room: “*Can Vote*” and “*Can’t Vote*”.

3. Ask the group: *Who has the right to vote in the U.S.? Has it always been this way?*

Introduce the Activity

1. Explain that we are going to walk through a timeline of voting rights, to look at when different groups gained or lost the right to vote.
2. Give each person in the group a card with an “identity” written on it.
3. Have the group gather under the “can’t vote” sign.
4. Explain that you will give different dates, and ask the group to decide which groups of people had the right to vote at that point. Anyone with the right to vote should move to the “Can Vote” sign.

Begin the Activity

Read through the History of Voting Rights Activity script, pausing after each part, and ask: who can vote? Help the group move to the right places at the right times.

Post Activity Discussion Questions

Lead a discussion with questions like:

1. How did it feel to be denied the right to vote?
2. How did it feel to be granted the right to vote?
3. How did it feel to have the right taken away?
4. What did you learn?
5. Was anyone surprised by what they learned?

Script for History of Voting Rights Activity (ABE Version)

Read aloud all text in bold.

We are going to walk through a timeline of voting rights in the United States, to look at when different groups gained or lost the right to vote. I am giving everyone a card with an “identity” written on it. That’s the group you represent for this activity.

[wait while everyone gets a card.]

To start, we need everyone to gather under the “Can’t Vote” sign.

[wait until the group gathers]

I am going to read different dates, and I’m going to ask the group to decide who had the right to vote at that point. Anyone with the right to vote should move over to the “Can Vote” sign. Does anyone have any questions before we start?

[wait for any questions.]

From 1600-1776, the colonies were ruled by Great Britain; the British Parliament could veto decisions made by colonists. No one really had the right to vote. Colonists argued that they shouldn’t have to pay taxes if they didn’t have a say in how the money was spent: “No taxation without representation.” On July 4th, 1776, colonists declared independence from Britain, and the Revolutionary War began. At the very beginning of this country, who could vote?

[wait for the group to guess]

Only white men (21 or older) who owned land – the “landed gentry” – could vote.

[wait while the white male, wealthy property owner moves to “Can Vote”]

In 1789, George Washington was elected the first President of the United States. Who could vote?

[wait for the group to guess]

Only White men (21 or older) who owned land could vote. The Constitution left it up to each state to decide who could vote. In some states, men had to pass religious tests in order to vote.

[no one moves]

During westward expansion, many new states and territories used voting as an incentive to attract immigrant settlers. Immigrants had to live in the state or territory for 6 months to 1 year before they were allowed to vote.

[wait for immigrant men to move to “Can Vote”]

By 1860, most states allowed white men who didn’t own property to vote.

[wait for Poor White male, cannot read or write and Convicted Felon, white male, in prison to move to “Can Vote”]

Before the Civil War, western territories were often forced to disenfranchise their non-citizen populations in order to gain statehood, as southern states felt that non-citizens were too likely to oppose slavery. Non-citizens begin losing their right to vote.

[wait for immigrant men to move back to “Cannot Vote”]

In 1865, the Civil War ended. Slavery was outlawed. In 1870, the 15th Amendment Constitution gave men of all races the right to vote.

[wait for African American male to move to “Can Vote”]

But, in the 1870s and 1880s, southern states introduced racist laws that kept African Americans from voting. For example, voters had to pass a very difficult literacy test in order to vote, unless their grandfathers had had the right to vote. So, while the Constitution gave African American men the right to vote, many states took the right away.

[wait while African American male moves back to “Cannot Vote”]

In 1899, after poor people had become politically active and gained political power, many states introduced poll taxes — a fee you had to pay when you went to vote — to keep poor people from voting. Men who could not pay the poll tax could not vote. Convicted felons and ex-felons were also prevented from voting in some states.

[wait while Poor White male, cannot read or write, Convicted Felon, white male, in prison moves back to “Cannot Vote”]

In 1920, after many decades of protesting, women won the right to vote through the 19th Amendment to the Constitution.

[wait while wealthy white female, Poor white female, African American female, and Native American female move to “Can Vote”]

The Constitution gave all women the right to vote, but some women still couldn’t vote because of the other barriers. Women who can’t pay the poll tax, can’t pass the “literacy test”, or aren’t legal citizens cannot vote.

[wait while Poor white female, African American female, and Native American female move back to “Cannot Vote”]

In 1924, the United States declared that Native Americans were now U.S. citizens. Native Americans could now vote. (NOTE: Native Americans were given the right to vote in 1887 *if they renounced their tribal affiliation*. Also, states were allowed to decide if they would indeed allow Native Americans to vote. Many did not. Some Native Americans did not have the right to vote until 1957.)

[wait for Native Americans to move to “Can Vote”]

In 1964-1965, The Civil Rights movement brought attention to the rights of African Americans and poor people, including the right to vote. The 24th Amendment to the Constitution outlawed poll taxes for federal elections. The Voting Rights Act banned all tests or other obstacles to keep African Americans or other minorities from voting. Men and women (21 or older) of all races and economic levels could vote.

[these people move to “Can Vote”: Poor white male, unable to read or write; Poor White female; African American male; African American female]

Young people protesting the Vietnam War argued that if they could be drafted to fight and die for their country, they should have the right to vote. In 1971, the 26th Amendment gave 18-year-olds the right to vote.

[wait while the 18 year old male moves to “Can Vote”]

In recent years, more and more states are passing voter identification laws. In 2015, 34 states require voters to have some kind of identification with 12 of those states requiring voters to have a photo ID. What does this mean for voters? Will some have to move back to the “Can’t Vote” side of the room?

Also, convicted felons and ex-felons cannot vote in some states. Non-citizens — even those who pay taxes — cannot vote.

[wait while people decide who should move]

Answers to 1965 Alabama Literacy Test

1. Trial by Jury only
2. False (every 10 years)
3. Habeas Corpus (immediate presentation of charges); lawyer; speedy trial.
4. January 3
5. January 20
6. Proposed change, as in a Constitution
7. Life (with good behavior)
8. Nine
9. Yes
10. Affirm
11. 35
12. In God We Trust
13. False
14. U.S. Constitution
15. The governor
16. Six
17. Two
18. Executive
19. Congress
20. Population (as determined by census) *less untaxed Indians*
21. Cruel and unusual
22. True
23. State and local
24. Russia
25. Criminal
26. False
27. Militia
28. House of Representatives, Senate
29. House of Representatives
30. Virginia
31. Legislative
32. True
33. The Vice President
34. True
35. The Supreme Court
36. Co-appellate
37. Trial by Jury
38. True
39. Congress and the legislatures of both states
40. The Senate
41. 10 miles square
42. Congress; state legislatures
43. Constitution
44. Judicial
45. True
46. Coin money; make treaties
47. The Vice President, until the House acts
48. 26
49. 9
50. Murder
51. False
52. (Preamble statements) "to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity."
53. House of Representatives and Senate
54. Congress
55. 10
56. The Senate
57. The Chief Justice of the Supreme Court
58. The Senate
59. The U.S. Congress
60. Electors
61. Pass laws, coin money, declare war
62. The Governor
63. The President
64. The President
65. They can vote for different people
66. Vice President (President of the Senate)
67. Congress
68. The states; the people

TASC Argumentative Essay Prompt

There is an ongoing debate as to whether states should require voters to have a photo ID. Does requiring photo voter IDs prevent voter fraud? Does requiring photo voter ID discriminate against the poor and minorities?

Weigh the claims on both sides, and then write an argumentative essay supporting either side of the debate in which you argue for or against photo voter ID. Be sure to use information from both texts in your argumentative essay.

Before you begin planning and writing, read the two texts:

- 1. Point: Voter ID Stops Voting Fraud**
- 2. Counterpoint: Voter ID Laws Keep Real People from Voting**

As you read the texts, think about what details from the texts you might use in your argumentative essay. You may take notes or highlight the details as you read.

After reading the texts, create a plan for your argumentative essay. Think about ideas, facts, definitions, details, and other information and examples you want to use. Think about how you will introduce your topic and what the main topic will be for each paragraph.

Now write your argumentative essay. Be sure to:

- Introduce your claim.
- Support your claim with logical reasoning and relevant evidence from the passages.
- Acknowledge and address alternate or opposing claims.
- Organize the reasons and evidence logically.
- Use words, phrases, and clauses to connect your ideas and to clarify the relationships among claims, counterclaims, reasons, and evidence.
- Establish and maintain a formal style.
- Provide a concluding statement or section that follows from and supports the argument presented.

Point: Voter ID Stops Voting Fraud **By Angela Stampey**

Dead people should not vote. Voter fraud exists in the United States, and our democracy is at stake when we cannot trust election results. To ensure fair voting, we need to require photo identification at the polls.

In recent years we have seen cases of voter fraud including people impersonating someone else, voting under the names of dead people, and voting by those in the U.S. illegally. The U.S. Supreme Court has upheld the use of voter ID saying the risk of fraud is real and could affect close election results. In 2000, President Bush won election by only 500 votes. Every vote is important, and voter ID makes voting fair.

While some say that obtaining a government issued photo ID is a hardship for many citizens, it is instead a necessary thing to have in modern life. Photo IDs are required to drive a car, get on a plane, buy alcohol, and gain access to government buildings. States that have passed voter ID laws pay for those without photo IDs to have them made, and several recent surveys have shown that less than one percent of the voting age public do not have photo IDs.

Finally, what about the claim that requiring voter IDs hurts minorities and the poor? Georgia passed a voter ID law before the 2008 election. A U.S. Census Bureau survey found that the number of African American voters actually increased after the new law began. Sixty-five percent of the African American voting age population voted in 2008 up from only 54.4 percent in 2004. Our democracy works when people believe voting is fair, and voter IDs ensure this.

Counterpoint: Voter ID Laws Keep Real People from Voting By Tavares Wiggins

I strongly disagree with Ms. Stampey's argument about voter ID. I am against requiring voter photo ID because it discriminates against minorities and the poor.

The lack of a valid photo ID presents a huge problem for many Americans. According to a 2006 survey conducted by the Brennan Center for Justice, up to 21 million American citizens do not have a current government issued photo ID. This is especially an issue with elderly citizens over age 65, African American and Hispanic citizens, and those who earn incomes under \$35,000 per year. Even for those with a photo ID, estimates are that about 4.5 million Americans' photo IDs do not reflect their current name or address. This especially affects young Americans in the 18 to 24 year old age bracket who move frequently and are more likely to experience a name change.

Going beyond statistics, voter ID laws keep real deserving American citizens from voting. Consider the case of Pennsylvania's Viviette Applewhite. Ms. Applewhite, who is 93 years old and confined to a wheelchair, was a welder during World War II and fought for voting rights during the Civil Rights Movement with Dr. Martin Luther King, Jr. She would be denied the right to vote under these new laws since lacks the proper documentation to get a government issued photo ID. Ms. Applewhite does not drive, had her Social Security card stolen from her purse, and lost her birth certificate many years ago. Is it right to deny the right to vote to a deserving citizen who has been voting since 1960 merely because she lacks the proper ID?

The real truth is that state efforts to require photo IDs are not really about voter fraud but are led by Republican lawmakers who want to prevent minorities and the poor from voting. Since these groups are more likely to vote for Democratic candidates, stopping these citizens from voting helps Republican candidates win elections. Common sense and our history of living by the principle that "all men are created equal" tells us this is wrong and voter photo ID requirements should be dropped.

Used by Permission from New Readers' Press

Graphic Organizer for Analyzing Argument Essays

Article Title:	
Thesis:	
Argument 1:	
Strengths	Weaknesses
Argument 2:	
Strengths	Weaknesses
Argument 3:	
Strengths	Weaknesses

Answer Keys for Voter Photo ID Graphic Organizers

Article Title: Voter ID Stops Voting Fraud	
Thesis: We should require voter photo ID in elections	
Argument 1: Voter fraud is a real problem	
Strengths	Weaknesses
<ul style="list-style-type: none"> - Examples of voter fraud - Supreme Court has upheld use of voter ID - Example of a close election that fraud could have affected 	<ul style="list-style-type: none"> - No sources provided for voter fraud evidence
Argument 2: Photo IDs are necessary for modern life	
Strengths	Weaknesses
<ul style="list-style-type: none"> - Examples of where photo IDs are needed - States will provide photo IDs to voters that do not have them - Survey about few voters lack IDs 	<ul style="list-style-type: none"> - Even a free ID is made, it could still be a hardship for people to get them (travel, taking time off work) - No sources provided for survey evidence
Argument 3: Voter IDs do not hurt minority voting rates	
Strengths	Weaknesses
<ul style="list-style-type: none"> - Georgia evidence that voter turnout increased after voter IDs 	<ul style="list-style-type: none"> - This is an example from only one state

Article Title: Voter ID Laws Keep Real People From Voting	
Thesis: Photo voter ID discriminates against minorities and the poor	
Argument 1: Many Americans lack voter ID	
Strengths	Weaknesses
<ul style="list-style-type: none"> - 2006 Brennan Center study 	
Argument 2: Voter ID laws keep real Americans from voting	
Strengths	Weaknesses
<ul style="list-style-type: none"> - Viviette Applewhite example 	<ul style="list-style-type: none"> - This is an appeal to emotions
Argument 3: Voter ID laws discriminate against minorities and the poor	
Strengths	Weaknesses
<ul style="list-style-type: none"> - Logical argument why Republicans support these laws 	<ul style="list-style-type: none"> - No sources provided, sounds more like a personal opinion

The Fracking Files

Directions

This lesson may take two class periods to complete. Do steps 1 and 2 in the first class, and then steps 3 and 4 in the second class.

1. To help students get a background on fracking, show the two videos and have students summarize what they see after watching. Model how to do a summary. (If there is no computer access, use the picture on the front of the handout to explain fracking and discuss the major pros and cons.) Have students do the Talk, then Write activity. Have a class discussion based on their responses.
2. The fracking files contain four case studies, some from people who support fracking and some from people who do not. Have the students read the four case files and then complete the graphic organizer. Model how to complete the first graphic organizer. An alternative to having students read the case files would be to have different students play the role of each one of the case file participants and have them talk about their situation.
3. Use the “Fracking File – My View” handout. Students must take a side and choose their three best reasons why they support or are against fracking.
4. Students will then use their answers to the “Fracking File – My View” handout as the basis for writing a letter to the editor in which they either support or are against fracking in their community.

TASC High Emphasis Areas Covered

Reading Informational: Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

- Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.

Writing: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

Social Studies: Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers

- Identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist.

Science: Earth and human activity

- Ecosystems: Interactions, energy, and dynamics

The Fracking Files

Introduction to Fracking

Summarize what you have learned after watching each video:

Video # 1

Google: Fracking Explained: Opportunity or Danger?

<https://www.youtube.com/watch?v=Uti2niW2BRA>

Video # 2

Google: Animation of Hydraulic Fracturing (fracking)

<https://www.youtube.com/watch?v=VY34PQUiwOQ>

Talk, then Write

Which one do you find to be more accurate? Why? Which video was sponsored by an oil company? How would this sponsorship affect the way fracking is shown?

The Fracking File – Case 1

Name: Susan Connell

Age: 39

Place of Residence: Watford City, North Dakota

Occupation: 18 Wheel Truck Driver

Susan Connell is one of the few women big rig truck drivers in the Bakken Oil Fields in North Dakota. She works 12 hour days hauling the water used in fracking oil wells. While the work is exhausting and the hours long, Susan earns \$2,000 a week for her work.

In order to earn this salary, Susan had to move from her home in Montana to North Dakota. She now lives seven hours away from her husband and two young daughters. Back in 2009, both Susan and her husband lost their construction jobs during the Great Recession. The family fell three months behind on their mortgage payments and began receiving threatening letters from their bank. Susan then heard that big rig truck drivers were desperately needed in the booming North Dakota oil fields.

Some years before, Susan drove a commercial bus between Philadelphia and Atlantic City. How much harder could it be to drive an 18 wheeler? In order to upgrade her license to drive the big rigs, Susan had to take a \$4,000 driver training course. At a time when her family struggled to buy groceries, they took the gamble and financed the course on a credit card.

At first, no one believed Susan Connell could do the difficult trucking jobs required in the oil fields. She applied at more than a dozen trucking companies, all of which turned her down. Some managers said that women did not belong in the oil field. Others scolded her for not being home taking care of her kids. She lived in her car and focused on finding a job. After proving herself hauling grain during the many blizzards of a North Dakota winter, she finally won a coveted job as an oil field trucker.

When asked about her work in the oil fields, Susan said, “There’s good and bad in everything. I just accept it. I’ve been trying to leave since the work is so exhausting, unreliable, and lonely. It gets harder and harder to leave my family. Each time I leave home after a visit, my daughters beg me not to go. It’s not very safe for a woman here too. I’m out here alone in the middle of nowhere. I carry a steel rod with me for protection wherever I go.”

“But, good paying jobs are hard to come by. The economy is still tough back home. Our family needs the money I bring in to survive. I’ve proved I can do the job, and I can do it better than most of the guys here. I’ve made a place for myself here. There’s other draws too. At night, when I’m on a well picking up water, I can see thousands of stars blazing in the sky and hear the coyotes howl off in the distance. The salt water smell coming up from the wells makes it seem like I’m at the ocean.”

The Fracking File – Case 2

Name: Brenda and Richard Jorgenson

Age: Both 58

Place of Residence: Mountrail County, North Dakota

Occupation: Housewife and Farmer

Brenda and Richard Jorgenson love the quiet, wide open spaces of North Dakota. He's been farming land in Mountrail County for more than 30 years. Specifically, Richard farms the White Earth Valley, a wide, grassy basin that seems to stretch as far as the eye can see. Brenda and Richard have lived in a home they built themselves over 30 years ago. "It was instant love," says Brenda about the first time she laid eyes on the land where they would build their home.

Alliance Pipeline plans to soon locate a 12 inch high pressure gas conduit across their land. The Jorgensons are dead set against this plan. "I don't want a bomb in my backyard," Richard says about the gas line. The Jorgensons and their neighbors all oppose the project, but Alliance has gone to court and have threatened to use eminent domain, the process by which private property can be taken in the name of the public good. The public good in this case is providing the energy the United States needs.

While the Jorgensons continue to fight the pipeline project, oil drilling is going on almost literally in their backyard. Only 800 feet from their home, another company named Petro-Hunt runs an oil well just 800 feet from their house. When the fracking boom started, the Jorgensons discovered a nasty surprise. North Dakota law allows for separate mineral and surface land rights. So while the Jorgensons own the land their house sits on, over 110 different strangers own the mineral rights to the 40 acres of land nearest their house! When his father bought the 1000 acres their farm sits on, he didn't know that the previous owner had sold off the mineral rights, in five acre parcels, to people all over the country when he needed money to buy some equipment.

"It's just constant noise with that pump going all the time. But my biggest worry is about our water safety. I hear that some people living in Pennsylvania near fracked wells can light their water on fire with all the methane that's leaked into their water supply. The companies say it's safe, but I know the Environmental Protection Agency can only do so much to make sure drillers are following the rules. I am so concerned for the future. I want to pass this land along to my kids and grandkids. While getting this energy may be great for the country, this land won't be worth two cents to my family if it's polluted. All those dangerous fracking chemicals could cause cancer and who knows what else. These oil companies just need to back off so we can be sure fracking is really safe."

Adapted from America Strikes Oil: The Promise and Risk of Fracking, National Geographic, March 2013

The Fracking File – Case 3

Name: Brent Sanford

Age: 40

Place of Residence: Watford City, North Dakota

Occupation: Owner, S& S Motors and Mayor, Watford City North Dakota

Brent Sanford is a proud North Dakota native. His family has lived here for four generations. In 1946, his grandfather started the auto sales business he now runs. While the Sanfords have been a stable part of Watford City for many years, the town around them is changing at an incredible pace.

“My town was dying,” Sanford says. Some people were even suggesting that the town be abandoned and returned to the buffalo. North Dakota struggled as living wage jobs were hard to come by, and it emptied of population as people moved away in search of better opportunities. But with the fracking boom, jobs are plentiful and word has reached those searching for work. Like oil gushing from a new well, Watford City’s population has soared. In the past two years, the number of residents exploded from about 1,700 to almost 10,000 people!

Sanford thinks that the media has overemphasized the negatives of the oil boom. He believes his town will survive the boom and the benefits of growth will outweigh the costs. While housing all the new arrivals has been difficult, he sees a slow change from RV “man camps” to apartments and then single family homes. There’s a new recreation center and a public housing and day care complex. A hospital will soon be built too. Existing businesses are booming and new ones are opening up every day.

Sanford said, “The bottom line is that energy production creates jobs, and jobs with great wages like the ones here mean more tax revenue. We’re getting so much tax revenue in our small town that we can now fund a new and bigger elementary school. Before the boom, we could barely provide basic service to everyone. Now, we are able to help the community in so many ways.”

He also noted other benefits to fracking. “This energy boom will save America. We’re seeing prices drop dramatically on oil which means far cheaper prices at the gas pump. The increase in natural gas from fracking has lowered prices there too and makes it cheaper for people to heat their homes. Families now have more money to provide for their families and save for the future. New fleets of buses run on natural gas, and natural gas is a lot cleaner for the environment than burning coal. “

“I’m also hopeful that this oil and gas boom will allow America to become energy independent. We rely way too much on foreign oil. We’re in the mess we’re in Iraq and Afghanistan because of Middle Eastern oil. Most of those countries hate us; why should we give their economies billions of dollars in oil money? Even our so called allies like Saudi Arabia aren’t really our friends. Almost all of the 9-11 hijackers were Saudis. We are so much better off not messing with those people over there.”

Fracking has brought new prosperity to Sanford’s once dying town and has transformed his community in a positive way. Instead of being left to die, Watford City is alive and thriving once again. “Fracking has allowed me to stay here, and I feel confident my children we’ll be able to live here for generations to come.”

Adapted from America Strikes Oil: The Promise and Risk of Fracking, National Geographic, March 2013

The Fracking File – Case 4

Name: Dr. Lisa Ingraham

Age: 45

Place of Residence: Grand Forks, North Dakota

Occupation: Professor of Environmental Science

As a driver, I love the fact that fracking has helped bring gas prices have gone down. As an environmental scientist, I am far more concerned about fracking's environmental impact. Human life and the long term protection and safety of our water supply is far more important than cheap gas in the short term.

Each fracking job requires a staggering one to eight million gallons of water. With one half million active wells in the U.S, that's 72 trillion gallons of water used per year! This water has to come from somewhere. It likely comes from nearby wells, lakes, or municipal water systems, leaving local residents with smaller water supplies or potential water shortages.

Beyond water waste, fracking creates chemical pollution. Energy companies like to say that 99.5 percent of what is used in fracking is water and sand with only .5% chemicals. Let's do the math. If it takes eight million gallons of water to get a well going, which means up to 40,000 gallons of chemicals are used in each fracking! This creates a toxic bath of waste water that contains 600 chemicals including mercury and uranium.

What happens to this chemical laden waste water? Sometime it is left in open pits to evaporate. This releases volatile organic compounds into the air which contaminate the air, make acid rain, and release ground level ozone. Waste water is also pumped back into wells. While companies say it is pumped far below water sources, studies of decades old wells in Montana show that waste water has leaked into the water supply. Other studies show that methane concentrations are 17 times higher in drinking water wells near fracking sites. There have been more than 1000 documented cases of water contamination next to drilling sites which have caused sensory, respiratory, and neurological damage to nearby residents.

There are other pollutants to consider beside chemical. To get a well started, it takes 2000 tractor trailer trips to carry water and other supplies to and from the site. This creates a massive amount of air pollution! Even more alarming, some new studies about old fracking sites in Pennsylvania show that fracking released radioactive substances into the surrounding environment.

Fracking File Graphic Organizers

Fracking File Case 1

Person and Occupation:

Are they pro or anti-fracking?

What reasons do they give?

Fracking File Case 2

Person and Occupation:

Are they pro or anti-fracking?

What reasons do they give?

Fracking File Case 3

Person and Occupation:

Are they pro or anti-fracking?

What reasons do they give?

Fracking File Case 4

Person and Occupation:

Are they pro or anti-fracking?

What reasons do they give?

The Fracking File – My View

I _____ fracking for several reasons.
support or do not support

My reasons are:

1. _____

Evidence to support this reason:

2. _____

Evidence to support this reason:

3. _____

Evidence to support this reason:

Letter to the Editor

Write a letter to the editor describing why you either support or do not support fracking. Make sure you back up your reasons with evidence.

Plastic, Dirt, and the Dustbowl

Directions

1. With a partner, have students review a typical day and make a list of the plastic items they used that will eventually be thrown away. For example, "I get up in the morning and take a shower. My shampoo comes in a plastic bottle. I brush my teeth. Both the toothbrush and toothpaste tube are plastic."
2. Have students complete the plastic recycling activity. They will need a piece of plastic and flip chart paper. Have groups present their findings to the entire class.
3. Read the short article, "How Long Does it Take for Plastics to Biodegrade?" Ask the question, "What does throwing away plastic have to do with soil (dirt)?"
4. Complete the "How Much of the Earth is Usable Soil?" activity. You will need paper plates, rulers, and scissors to do the activity.
5. Watch the video *January: Soils Sustain Life* (Google: January Soils Sustain Life) and discuss the questions.
6. Have students look at the interactive map (Google: chartsbin agricultural land area as percentage of total land) and discuss the questions.

Extension

7. This activity can be extended to U.S. History content. Google: history.com dust bowl video and view the videos *Dust Storms Strike America* and *Black Blizzard*. Discuss the content on the History.com page and look at the interesting facts about the Dust Bowl. Then have students complete the diary activity.

How much of the earth is usable soil activity is adapted from Science Teacher's Activity a Day, Walker

TASC High Emphasis Areas Covered

Reading Informational: Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.

Social Studies: U.S. History: The Great Depression and World War II (1929-1945)

- The causes of the Great Depression and how it affected American society
- Identify and evaluate the benefits and costs of alternative public policies, and assess who enjoys the benefits and who bears the costs.

Science: Earth and human activity

- Ecosystems: Interactions, energy, and dynamics

Plastic Recycling Activity

About 32 million tons of plastic ends up in landfills every year! What can we do with all the plastic waste that never gets recycled?

Your team will be given a piece of unrecycled plastic and some flip chart paper. First, brainstorm a list of ideas on what could be done to reuse your piece of plastic. How else could this piece of plastic that we normally throw away be used? Once your team has decided on the best idea, create a drawing that you will present to the other groups!

How Long Does it Take for Plastics to Biodegrade?

By William Harris

Drop a ketchup bottle on the floor, and you'll be thankful for polyethylene terephthalate, or PET, the nearly indestructible plastic used to make most containers and bottles. Drop the same bottle into a landfill, however, and you might have second thoughts. Why? Because petroleum-based plastics like PET don't decompose the same way organic material does. Wood, grass and food scraps undergo a process known as biodegradation when they're buried, which is a fancy way of saying they're transformed by bacteria in the soil into other useful compounds. But bacteria turn up their noses at plastic. Load their dinner plates with some plastic bags and bottles, and the one-celled gluttons will skip the meal entirely.

Based on this logic, it's safe to argue that plastic will never biodegrade. Of course, that's not the end of the story. Daniel Burd, a student at Waterloo Collegiate Institute, recently demonstrated that certain types of bacteria can break down plastic. Until other researchers can replicate Burd's experiment and waste treatment plants can implement any new processes, the only real way to break down plastic is through photodegradation. This kind of decomposition requires sunlight, not bacteria. When UV rays strike plastic, they break the bonds holding the long molecular chain together. Over time, this can turn a big piece of plastic into lots of little pieces.

Of course, plastic buried in a landfill rarely sees the light of day. But in the ocean, which is where a lot of discarded grocery bags, soft drink bottles and six-pack rings end up, plastic is bathed in as much light as water. In 2009, researchers from Nihon University in Chiba, Japan, found that plastic in warm ocean water can degrade in as little as a year. This doesn't sound so bad until you realize those small bits of plastic are toxic chemicals such as bisphenol A (BPA) and PS oligomer. These end up in the guts of animals or wash up on shorelines, where humans are most likely to come into direct contact with the toxins.

One solution to this environmental disaster is biodegradable plastic. There are two types currently on the market -- plant-based hydro-biodegradable plastic and petroleum-based oxo-biodegradable plastic. In the former category, polylactic acid (PLA), a plastic made from corn, tops the list as the most talked-about alternative. PLA decomposes into water and carbon dioxide in 47 to 90 days -- four times faster than a PET-based bag floating in the ocean. But conditions have to be just right to achieve these kinds of results. PLA breaks down most efficiently in commercial composting facilities at high temperatures. When buried in a landfill, a plastic bag made from corn may remain intact just as long as a plastic bag made from oil or natural gas.

How Much of the Earth is Usable Soil?

Humans depend on the soil for food, because it supports plant and animal life. It may seem that soil is in abundant supply because we see it everywhere. What we do not realize is that there is not as much soil as we think. This activity will help you put into perspective how little of the Earth's crust contains usable soil. When soil is lost, it is hard to replace because it can take 500 to 1000 years to create just one inch of topsoil! Water and wind erosion are constantly depleting the amount of soil that is available for use.

Materials

Paper plate; ruler; scissors

Activity

1. Look at the paper plate and imagine that this plate represents a one-dimensional view of the surface of the Earth. As you read the statements below, first draw and then use the scissors to cut away the parts of the Earth's surface that do not have usable soil.
 - a. On three-fourths of the plate, draw ocean waves, rivers, and lakes. This represents the fact that 75 percent of the Earth is water. Cut away the three-fourths of the paper plate where you drew the water.
 - b. On half of the part remaining, draw deserts, mountains, bogs, and cities, as these areas do not have usable soil. Cut away the one-half of the paper plate slice where you drew the deserts, mountains, bogs, and cities.
 - c. On 75 percent the small slice you have left draw symbols that represent hot and cold temperatures and weather that prevent the soil from being used. Cut away the three-quarters of the remaining plate where you drew the weather symbols.
2. Look at the slice of paper plate you have left in your hand. It represents only about one thirty-second of the Earth's surface.

Follow-Up Questions

1. What are some ways that humans use the soil?
2. What are some ways that humans abuse the usable soil supply?

Extension

Do some research and look up the areas of the Earth that have the greatest amount of fertile soil. How are we trying to conserve the soil in these areas?

Video: January Soils Sustain Life

Why is soil so important?

How is soil formed?

How can soil be lost?

Interactive Map Activity

What areas of the world have the most agricultural land area? Why?

What areas of the world have the least agricultural land area? Why?

What patterns do you notice?

Relation to US History: Dust Bowl

Interesting Facts about the Dust Bowl

- In 1932, there were 14 dust storms recorded on the Plains (an area that included the panhandle of Oklahoma and Texas, southwest Kansas, southeastern Colorado, and Nebraska). In 1933, there were 38 dust storms.
- Because of years of repeated dust storms, by 1934 approximately 100 million acres of farmland no longer had enough topsoil to grow crops.
- In April 1935, an Associated Press reporter used the term “dust bowl” to describe the conditions, and the term soon became popular.
- Nebraska – in the heart of “Dust Bowl” country – typically averaged 20 inches of rain per year. In 1934, only 14.5 inches fell, which caused corn yield crops to drop by 75%.
- Poor farming practices contributed to the Dust Bowl of the Great Depression. These included: over planting crops and overgrazing, as well as massive plowing under of natural grasses and replacing them with crops that weren’t drought resistant.
- An estimated 2 million people became “hobos” – people who would illegally hop on trains to get to jobs they’d heard about that were hundreds or thousands of miles away from their Dust Bowl farmland.
- In one year alone during the Great Depression, an estimated 6,500 people were killed as they tried to hop on moving freight trains (either by accident or by guards who were hired by the railroad to prevent people from jumping on trains).
- The New Deal programs initiated during the Great Depression included five major farm laws (AAA, CCC, FSA, SCS, and REA) that were designed to get farmers back on their feet. Many of these programs still exist today.
- During the worst of the Dust Bowl days, students were sometimes sent home to prevent “dust pneumonia.” Other times, they were kept at school overnight, because it was too dangerous to walk home in such harsh conditions and low visibility.

Dust Bowl Diary

Imagine you are a farmer whose land has been devastated by the Dust Bowl. The topsoil is gone and the crops you planted last year never grew. You have been living on your land for three generations, but you need money to feed your family and pay the mortgage. What will you do? Write a diary entry for May 5, 1935 describing what you will do.