Understanding Sustainability

Climate Change-Fact or Fiction?

Information analysis skills for senior secondary school students.

Curricular Focus
- Information Analysis tools.
- Identifying Propaganda Techniques.
- Evaluating Climate Change.
- On-line Learning – Trusting and Citing Internet Sources.

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Understanding Sustainability

Investigation: Climate Change – Fact or Fiction

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Investigation: Understanding Worldviews on Human Relationships with Nature

A. Introduction

This investigation has been adapted from the Hurley Island Project, an integrated two-credit program for senior secondary school students delivered on-line. This investigation requires students to apply information analysis skills and identify propaganda techniques used in the climate change debate.

Teachers working in traditional classroom settings or in school settings with access to computer labs will find this learning investigation adaptable for their use. Learning activity instructions included in Section D are suitable for use directly with students. Other sections are directed to the teacher to assist in the preparation and delivery of the investigation.

Description and Context:

Perhaps you recall the story of Chicken Little. One day he thought he experienced a piece of the sky landing on his head. Being one of the littlest creatures in the barnyard, he felt that if he pointed out such an ominous event he would appear more important to the others, clearly a case of bias. Off he went to tell Turkey Lurky. Together they decided to go tell the king. They had no difficulty convincing Goosy Loosy. Goosy Loosy felt that since everyone else thought this was important, it must be so, a true case of bandwagoning. Eventually a gaggle of them came across Foxy Loxy who had his own reasons for going along. As you recall, in the end only he made out quite well.

Propagandists seemed to have learned a lot from this story since so many of the techniques found in it are used today. The advent of information technology allows these tried and true techniques a new route to reach people.

Whether we actually seek information or are the unwilling recipients of it, it is important to be able to analyze it so we understand the message, and be aware of the tools, tricks, and techniques people use to get us to agree with them. This investigation uses the Web as a source of information. It addresses the issue of trusting on-line sources, correct citing of Internet sources, skills to analyze information, and a number of the common tricks and techniques commonly referred to as propaganda.

Each participant is asked to visit and review a climate change web site and share his or her results. Following the discussion you will be asked to prepare a short summary stating your personal view on the climate change issue using a number of techniques.

In this investigation students will:

• Learn what on-line information sources to trust and how to properly cite them
• Understand and utilize various analysis tools and propaganda techniques
• Become aware of both sides of the climate change debate and form your own opinion.
B. Learning Activity List

1. Trusting and Citing Internet Sources.

2. Introduction of analysis tools and propaganda techniques.

3. Students select a web site dealing with the Climate Change issue from those listed or find your own. The site is reviewed and shared with fellow students using a prepared form.

4. Students participate in a teacher lead discussion on climate change.

5. The investigation concludes with the preparation of a short position paper on climate change. Title: Climate Change, Fact or Fiction? It is written twice, once using methods providing readers with objective information, and once employing five propaganda techniques.

Time Lines and Due Dates

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Trusting &amp; Citing Sources</td>
<td></td>
<td>2 hours</td>
</tr>
<tr>
<td>Complete Analysis Tools Learning Activity</td>
<td></td>
<td>2 hours</td>
</tr>
<tr>
<td>Select web site for analysis</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>Complete and Post Analysis</td>
<td>Date</td>
<td>2 hours</td>
</tr>
<tr>
<td>Read posted summaries</td>
<td>Date</td>
<td>2 hours</td>
</tr>
<tr>
<td>Discussion begins</td>
<td>Date</td>
<td>1-2 hours</td>
</tr>
<tr>
<td>Position Papers on Climate Change</td>
<td>Date</td>
<td>3 hours</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Date</strong></td>
<td><strong>13-14 hours</strong></td>
</tr>
</tbody>
</table>

Assessment Methods and Evaluation Criteria

1. Climate Change Website analysis review and posting (complete/incomplete)
2. Climate Change Discussion (low, medium, high)
3. Climate Change, Fact or Fiction? Position Paper presented both objectively and using persuasive techniques (rating scale).
C. Instructional Issues and Challenges

Climate Change is an issue that has as yet not received universal acceptance in all sectors of society. Students will be subject to a range of perspectives, some of which may be reflected in the positions they hold. It is not beneficial for teachers to take a position that promotes acceptance of climate change as a major societal problem in this investigation. The investigation begins with analysis tools and propaganda techniques. Focusing on the analysis and propaganda techniques used in various sites can lead to compiling information that supports or refutes climate change claims. Analysis of sites should reveal examples of proponents on all sides of the debate using propaganda techniques. Students may become aware of their own subconscious use of these persuasive methods.

A pedagogical approach included in this investigation is the consideration of alternative or minority perspectives. This learning activity presents students with many minority perspectives to consider. The juxtaposition of conflicting views is fertile ground for learning and should be exploited by the instructor with appropriate moderation of the discussion.

Teachers may wish to extend and enhance the learning investigation by adding a student communication component to the investigation in place of the Climate Change position paper assignment. Identify means of sharing what has been learned with the broader community (such as letter writing, presentations to an elected official, short video clip for local cable television, community displays.) Working individually or in small groups, students can undertake this project-based approach.

Information Technology Instruction

This investigation provides a good opportunity to enhance student abilities in evaluating information provided through web sites. Instructions for properly citing on-line sources are also provided. Teachers should require students to apply the recommended citation techniques.

Curriculum Applications

This investigation addresses learning expectations in a number of senior secondary school courses including:

- Canadian and World Issues: A Geographic Analysis, Grade 12 CGW4U
- World Geography: Human Patterns and Interactions, Grade 12, CGU4U
- The Environment and Resource Management, Grade 12, CGR4M
- Twentieth Century History: Global and Regional Perspectives, Grade 11, CHT3O
- Canadian Politics and Citizenship, Grade 11, CPC3O
- Canadian and World Politics, Grade 12 CPW4U

Teachers should refer to the relevant curriculum document to identify related relevant specific learning expectations that can be addressed through this investigation.
Moderating the Discussion Regarding Climate Change Sites

Discussions on-line and in traditional classroom settings provide students with relatively unstructured learning opportunities. In this open forum teachers can get insights into the views that students hold on an issue or glimpse their level of understanding of a significant concept. The interaction of students with each other in substantive student-student discussion can be a very successful learning method.

a. Purpose
   1. To ensure that students are aware of the range of positions on climate change.
   2. To distinguish objective presentation of ideas positions promoted through the use of propaganda techniques.
   3. To prepare students to complete the position papers on climate change.

b. Discussion Prompts

   There will be a lot of discussion that arises from this investigation but if you are at a loss to get things going try these prompts.

   • Group and identify with a suitable name, the different players in the climate change debate. State what you feel motivates them to take the positions they hold on climate change?
   • When is it acceptable to use propaganda techniques to persuade someone?

c. Content to address during the discussion

   • Refer to learning expectations for the course of study.

d. Summarizing the Discussion

   In summarizing the discussion the instructor has the opportunity to reiterate the main concepts and issues that should have been addressed in the investigation. Examples that illustrate these can be drawn from the discussion record.

   • Note any relationship between the types of sites and the propaganda techniques that were used.
   • Identify the use of propaganda techniques from the range of positions.
   • Identify the types of sites that seem to be free of propaganda techniques.
   • Identify particular areas of agreement in the discussion.
   • Note questions or issues that are unresolved.
D. Learning Activity Instructions for Students

1. Trusting and Citing Internet Sources

One needs to be sceptical when referring to any source of information. There are too many people out there who would like you to just accept the information without questioning it. They want you to accept their point of view. The most common form of persuasion through information manipulation is advertising.

The advent of the Internet has offered all of the suppliers of information a new medium. The ease of setting up a web site that looks very authoritative just makes the process of sorting who is providing objective information and who is a scam artist just a little more difficult.

**Content**  What is the purpose of this material? Is it current?

**Authorship**  Is the author identified? Can you reach him or her by email? URL extensions give some indication of credibility but not of quality. Example: .edu, .com, .gov or .org? Is information provided about the publisher?

**Follow the Links**  Review the links provided on the site. They can give you an idea of the organizations and views that the site you are evaluating supports. You may sometimes be surprised by the content that is found in the linked sites, which in turn may provide you with an insight into the views of those responsible for the site you are evaluating.

**Analysis**  Analyze the information to help you determine the quality of the site. What are the main ideas presented? Is there any reason for the source to show bias? We consider analysis skills later in this investigation.

To read more about evaluation of Internet sources visit:
[http://www.uwec.edu/library/Guides/tencs.html](http://www.uwec.edu/library/Guides/tencs.html)

Citing Internet Sources

We are receiving information all of the time both formally and informally and using it to form our own ideas and opinions. When writing, it is customary to acknowledge sources of information that we have used. To not do so is to be subject to a charge of plagiarism.

It takes time to recognize other sources of information and many people don’t bother just because the extra effort that is required. On one level this is very poor scholarship and on another it is illegal. Many sources of information are held under copyright. They are protected by law. So get into the habit of citing the sources of information you use in all of your work.
Standard rules have been devised for citing information sources. Check the back of almost any non-fiction book and you will find the information sources that the author has used in preparing the publication.

On-line sources have created the need for new means of citing sources. This can be very complex. (See Modern Language Association) http://www.mla.org/www_mla_org/style/style_main.asp?level=2&mode=page&page=1&link=sty72800121438&section=sty51800124510

For general purposes however the following information should be sufficient in citing an on-line information source. If any part of the information listed does not apply, just leave it out.

Author or editor, Title underlined, version such as volume number, date posted or electronically published, subscription service or library-give name and location if a library, name of organization sponsoring the Web site, date when you accessed the source, electronic address of the source in angle brackets.

2. Analysis Tools and Propaganda Techniques

Analysis involves the separation of a piece of work to critically examine its essential features and associated elements. A number of analysis tools are presented in this section for you to understand and apply. There are many sources of information to which you can apply these techniques.

Analysis Techniques

a. Identifying Bias
Being biased seems to be a human condition. It is normal to favour oneself and one’s group over others. When we are very young our level of self-centredness is quite domineering. We really look out for number one. As we get older, we learn that there are others in the world and we tend to bring our self-centredness more into line.

People tend to bring their biases into their decision-making consciously or unconsciously. Bias can be based on gender, age, racial group membership, social position membership, or holding of a particular ideology. Financial or material gain however, is one reason for bias that is often easy to detect. We can suspect biased views to be held by those who gain personally by advancing a particular point of view.

Consider the following situations.

• Would school children be able to make an unbiased decision about the number of holidays during the year?
• Can teenagers trust tobacco companies to tell the full story about cigarette use?
• Can employers set the rate of minimum wage considering the best interest of everyone in the community?

These scenarios show some very difficult situations in which to make unbiased decisions. People can rise to the occasion and make them, but often they do not. Analyzing a situation to determine who may be overly influenced by self-interest is important to determine if information is presented from a biased view.

Bias Activity
Browse through a newspaper and look for examples where one or more parties in a story may be biased. Identify these and the possible reasons for their bias.

b. Main Ideas

It is not always easy to pick out exactly what is being stated in a piece of work. This can be confusing and when you are confused it is difficult to react to information. Blocking a paragraph or reading selection helps sort out the main ideas from the supporting ideas. These don’t always come in order so it is not as straightforward as it looks.

Read the following selection and see if you agree with its analysis for main idea.
How many people do you know who actually pay the hundreds of dollars it costs to go see a professional sports game? Most of us are waiting upon the “generosity” of companies who buy blocks of tickets and then distribute them to promote sales and public relations. Unfortunately this is where we all get stung. The hundreds of thousands of dollars spent by corporations on sporting events are a direct tax write off. And what they don’t pay in taxes, you and I do!

Main Idea - individuals pay higher taxes because corporations can deduct the cost of professional sports promotions from their tax bills.

Supporting Ideas - many people don’t buy pro sport tickets but wait for corporate freebees
-sport tickets are a tax write off for corporations
-what corporations don’t pay individuals have to make up

Main Idea Activity Locate an editorial from a newspaper. Identify the main ideas that it expresses and the supporting information. Find an article in a newspaper (on-line edition are readily available, example (www.globeandmail.ca) and analyze it for main ideas.

c. Fact or Opinion
Most opinions have less value in supporting an argument than facts. Classifying information into facts and opinions is an important analysis tool. To make matters worse, people often try to confuse you into thinking that their opinions are facts. If someone starts a statement with “as a matter of fact” be on guard for an opinion.

One kind of opinion that seems to hold considerable sway is that of the so-called expert. Nevertheless experts are people and they too are subject to all kinds of influences that can cause them to give “biased expert” opinions. Watch out for the unqualified expert opinion. Some experts will give opinions on topics with which they have no formal experience.

Fact or Opinion Activity Find a newspaper article and analyze it for facts and opinions. Brownie points for identifying any examples of unqualified expert opinions, or opinions being disguised as facts.

d. Cause and Effect
If your neighbour stated that because of your dog, their cat always ends up in the Maple tree, they would be making a cause and effect statement. Based on their belief in the statement they might call canine control even though they have never seen your dog chasing their cat.

In analyzing cause and effect statements you should ask yourself if it makes sense and what evidence there is to support the statement. Furthermore is the evidence reliable? You might be able to point out to your neighbour that the cat is often up the tree even if your dog is not around.
People often try to make cause and effect statements to understand a problem. It can often be a means of trying to simplify a complex problem. Unfortunately unless cause and effect statements are based on evidence they only confuse the issue.

**Cause and Effect Activity** Identify a cause and effect statement from a newspaper story. Is there any evidence to support it?

e. Understanding the Numbers

Manipulating numbers and statistics is a very common means of getting people to think in a certain way. The mutual fund industry often does this. Companies often give the time span that puts their performance in the best light. An ad might say the company had an increase in value of 25 percent over the last five years but fail to tell you that over the last six months they lost ten percent.

Advertisers manipulate statistics as well. Have you heard that “three out of four dentists recommend sugarless gum”? Better ask which four dentists and what they were comparing when they asked the question. This basically dishonest use of numbers and statistics is a real problem so it is a good idea to always question how they were arrived at and who paid for the work to be done.

Graphic data is also often manipulated. Sometimes only a portion of a graph is shown or over emphasized. A drop or increase on a line graph can be made to look much greater or smaller by changing the scale on the x and y-axis.

There are many ways to manipulate numerical data. The best analysis techniques include taking the time to fully understand what is being presented and carefully considering the conclusions that are being drawn from the data.

**Understanding the Numbers Activity** Locate the use of a numerical value used to support a position or a graphic presentation of data. Comment on its appropriateness. Identify how it might have been manipulated to support a particular view. Alternately identify how it could be manipulated?
Propaganda Techniques

Propaganda can be defined as systematic efforts to spread opinions or beliefs. There are numerous techniques used and most of them involve some means of distorting, excluding, or manipulating information to the benefit of a particular view. People use propaganda techniques both consciously and unconsciously to get people to agree with their views. Knowledge of propaganda techniques is very valuable in analyzing information to help establish your own views.

At best advertising is a means of informing people. At worst it is a means of getting people to do things that really are not in their own best interest. All of the propaganda techniques that we identify can be found in advertising with most represented on your morning cereal boxes.

As you read through the propaganda techniques presented here, try to think of times when you yourself may unwittingly have used them. People commonly use many of them.

a. Bandwagoning
The basic idea behind the bandwagon approach is just that, "getting on the bandwagon." If everyone supports a person or cause, so should you. The bandwagon approach appeals to the conformist in all of us. No one wants to be left out of what is perceived to be a popular trend.
Example - Everyone in Lemmingtown is behind Jim Duffie for Mayor. Shouldn't you be part of this winning team?

b. Slanted Words and Phrases
Words that because of past use have certain negative or positive meanings associated with them can be thought of as slanted in a positive or negative way. Words such as luxury, beautiful, paradise, and economical are used to evoke positive feelings in the viewer.
Example – Grandma’s Homemade Apple Pie
Alternately, words with negative connotations are used to evoke negative feelings. Example – using the word slum instead of low rental housing development.

c. Scare Tactics
Scare tactics are used to get you to believe that something very bad will happen to you unless you agree with the proponent.
Example – Buy our mutual funds and you will avoid crippling poverty in your old age.

d. Testimonials
Testimonials can be a positive or negative technique. It all depends on the person giving the testimonial. If they have legitimate expertise then the testimonial may be worth considering. If however their only claim to fame is their popularity as a celebrity, one has to question what they are saying. Advertisers know that testimonials work and they pay celebrities millions of dollars to get them to endorse products.
Example - Michael Jordan’s endorsement of Nike products.

e. Card Stacking
Card stacking involves a number of techniques that stack the cards in favour or against a position. These techniques include use of half-truths, distorting facts, only giving the facts that support your argument, and quoting out of context.
Example – The use of “Cholesterol Free” labels when the product never had cholesterol in it.

f. Good Works
Getting you to buy the product based on the premise that if you buy the product, the company will give some of the money it gets to charity or some noble cause.
Example – Some money from the purchase of McDonald’s gift certificates goes to Ronald McDonald House.

g. Plain Folks
Here the candidate or cause is identified with common people from everyday walks of life. The idea is to make the product/cause come off as grassroots and like “the common man”.
Example - After a morning speech to wealthy supporters, the Prime Minister stops by McDonald's for a burger, fries, and photo-op.

h. Logical Fallacies
Applying logic, one can usually draw a conclusion from one or more established premises. In the type of propaganda known as the logical fallacy, however, the premises may be accurate but the conclusion is not.
Example - Premise 1: Mr. Smith supports gun control. Premise 2: Communist regimes have always supported gun control. Conclusion: Mr. Smith is a communist. We can see in this example that the conclusion is created by a twisting of logic, and is therefore a fallacy.

i. Repetition
The product name or keyword or phrase is repeated several times.
Example – Meow Mix commercial “meow, meow, meow, meow…………..”
Repetition is also used for getting false information accepted. “If it said enough times people will believe it is true”

j. Greenwashing
Greenwashing includes any technique used by a group to get readers to believe they support environmentally sound initiatives when they actually hold negative environmental views or are participating in poor environmental practices. This hiding harmful activity behind the guise of environmentalism and conservation is called "greenwashing." There are many techniques that come under the greenwash label.

Example – An automaker claimed its SUVs were good for the environment because they could also use ethanol as a fuel. The claim was made despite the fact that the vehicles do not meet minimal mileage standards and that there are very few places to buy ethanol.

Identifying Propaganda Techniques Activity It is often quite easy to find examples of use of propaganda techniques in advertising. Look at food containers, magazines and newspapers, or television ads for examples of the techniques listed. See if you can identify an example for each technique. Share your survey with class members.
3. Analysis of Climate Change Web Sites

Climate Change has increasingly become a focus of concern and discussion. Many believe it to be the most important environmental issue we face, while others consider it at best a hoax. There is no shortage of propaganda on all side of this debate. Nevertheless we must try to make sense of the claims and explanations and decide if climate change is a real problem or someone’s environmental bogeyman.

Listed below is a series of web sites that all deal with the climate change issue. Select one of the sites to read and analyze. Use the suggested format to help share the results of your analysis. Once you have completed the analysis, shared with others, and read the contributions of others, we will be ready to discuss use of communication techniques in the Climate Change debate, and the issue of Climate Change.

Climate Change Web Sites

- American Petroleum Institute gives background on global climate change policy issues from an energy perspective.  
  [http://www.globalclimate.org/00_0315healtheffects.htm](http://www.globalclimate.org/00_0315healtheffects.htm)

- Anti-Global Warming Petition provides a research review of global warming evidence, including over 17,000 scientists who declare that global warming is a lie with no scientific basis whatsoever.  
  [http://www.oism.org/pproject/](http://www.oism.org/pproject/)

- The Cato Institute believes in promoting environmental public policy based on limited government, free markets, individual liberty and peace.  

- Center for the Study of Carbon Dioxide and Global Climate Change - Disseminates factual reports and sound commentary on new developments in the world-wide scientific quest to determine the climatic and biological consequences of the ongoing rise in the air's CO2 content.  
  [http://www.co2science.org/](http://www.co2science.org/)

- Climate Action Network is an international site with newsletters from all the negotiating sessions under the UNFCCC and the Kyoto Protocol.  
  [www.climatenetwork.org](http://www.climatenetwork.org)

- Common-Sense Environmentalist's Suite brings together “the best research and commentary on sound science and market-based environmental protection from the nation's leading think tanks and advocacy groups.”  
  [http://www.heartland.org/suites/environment/climate.htm](http://www.heartland.org/suites/environment/climate.htm)

- David Suzuki Foundation. In depth analysis of all of the issues surrounding climate change.  
  [http://www.davidsuzuki.org/Climate_Change/](http://www.davidsuzuki.org/Climate_Change/)

- Environment Canada's Climate Change Web site has a multimedia overview.  

- Fossilfuels.org describes the importance of coal, oil and natural gas, and addresses climate change in relation to their use.  
  [http://www.fossilfuels.org/change.htm](http://www.fossilfuels.org/change.htm)

- Friends of the Earth.

*Climate Change- Fact or Fiction*
http://www.foe.org.uk/campaigns/climate/

- George C. Marshall Institute is a non-profit institution dedicated to providing rigorous, unbiased technical analyses of scientific issues which impact public policy.  
  http://www.marshall.org/

- The Global Climate Coalition is an organization of trade associations established in 1989 to co-ordinate business participation in the international policy debate on the issue of global climate change and global warming.  
  http://www.globalclimate.org/

- Global Warming: Focus on the Future is a site based on a Smithsonian exhibition for those who want to learn a little, or a lot, about climate change.  
  www.enviroweb.org/edf/

- Greening Earth Society provides sound information about CO₂ and fossil fuels to educators, students, business and media representatives, community leaders and policymakers.  
  http://www.greeningearthsociety.org/index2.html

- Greenpeace.  
  http://www.greenpeace.org/

- The Intergovernmental Panel on Climate Change assesses the scientific, technical and socio-economic information relevant for the understanding of the risk of human-induced climate change.  
  www.ipcc.ch

- Pacific Institute for Studies in Development, Environment and Security includes an extensive and up to date collection of resources on climate change issues, including climate science, possible impacts of climate change, policy issues related to implementation of the United Nations Framework Convention on Climate Change and literature of climate change skeptics.  
  www.pacinst.org/ccresource.html

- The Pembina Climate Protection Solutions site is a clearinghouse of success stories on how to reduce greenhouse gas emissions.  
  www.climatechangesolutions.com

- The Science and Environment Policy Project - A non-profit, 501(c)(3) educational group founded in 1990 by atmospheric physicist S. Fred Singer on the premise that sound, credible science must form the basis for health and environmental decisions that affect millions of people and cost tens of billions of dollars every year.  
  http://www.sepp.org/

- Union of Concerned Scientists  
  http://www.ucsusa.org/index.html

- World Climate Report is a United States publication covering the breaking news concerning the science and political science of global climate change.  
  http://www.greeningearthsociety.org/climate/
Activity  Review your selected site and post or share the following information.

Climate Change Web Site Analysis

Site Title:
Reviewed by:
Date of Review:
Web Address:
Last Updated:
Sponsored by:

a. Complete at least three of the following:

Screening for Bias
Determine who the sponsoring organization(s) is for the web site. If possible state the organization’s purpose and source of funding. Who belongs to the organization? Could there be any link between the organization’s position on Climate Change and the self-interest of its members.

Main Ideas
What is the position on climate change promoted on this site?

Fact or Opinion
What important facts are presented to support the position on climate change? Identify any instances where opinions are used to in the content.

Cause and Effect Relationships
Identify the use of any cause and effect relationships and give your opinion of their merits.

Understanding the Numbers
Identify instances where numerical values, statistics, or graphs are used to support a position. Give your opinion on their merits.

b. Propaganda Techniques
Identify use of any of the propaganda techniques we have studied and state why you think they should be considered as such.

Summary
Based on your analysis of the website can you recommend this site as one that provides an objective view of the issue of climate change?
4. Instructions for Sharing Research Summaries

a. Working On-line

For classes conducting this investigation on-line, once individual students have completed their research and compiled it according to the format that has been provided, post it in a discussion board for others to read.

Each member of the class should then read all of the posted summaries. They can direct questions and issues requiring clarification to the relevant writer. Once everyone has read all of the submissions you are ready to participate in the discussion.

b. Traditional Classroom Settings

Students should print their research summaries and post these at a designated location for others to read. Copies of each summary may be available in the classroom, school library, or other designated location. Teachers may request that students use a checklist to indicate when they have read a summary.

Once you have read the summaries, you are ready to participate in a class discussion on the topic.
5. Discussion Regarding Climate Change

Activity  Post a response to the following to start this discussion.

Identify what you think is a particularly relevant fact as well as an interesting example of a propaganda technique or manipulation of information used by proponents or opponents of the climate change debate.

Notes For Participating in Discussions On-line

• If you are reading submissions and not responding, no one knows you are privy to the discussion. Participate in the discussion regularly.
• Facilitate the discussion and add meaning by asking specific participates to elaborate or clarify what they have posted.
• Be civil. Treat others participating in the discussion in a courteous manner. If you are in a cranky mood, leave participating in the discussion to another day.
• Know when to move an issue to personal email and out of the discussion board. Not everyone has to read trivial things such as when you are available to work with one other person on a related assignment.
6. Climate Change, Fact or Fiction Position Papers

Following your review of a climate change web site, our discussion and your understanding of the issue, prepare two, one page papers (500 words maximum) stating your position on the climate change issue. In the first one use objective information and straightforward writing techniques. This version should not contain any propaganda techniques. Re-write the paper but this time incorporate propaganda techniques with the aim of getting others to agree with your position on the issue. At the end of the second paper list the propaganda techniques employed and the paragraphs where they are found.

Rating Scale for the Climate Change Position Papers

Evaluation of Short Essay Assignment

<table>
<thead>
<tr>
<th></th>
<th>E</th>
<th>Level 1 -D</th>
<th>Level 2 -C</th>
<th>Level 3 -B</th>
<th>Level 4 -A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventions of Writing a Short Essay</td>
<td>Complete</td>
<td>-Improper paragraphing</td>
<td>-Poor paragraphing</td>
<td>-Appropriate paragraphing</td>
<td>-Appropriate paragraphs with good intro &amp; closing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Many mechanical writing errors</td>
<td>-Multiple mechanical errors</td>
<td>-3 or less errors</td>
<td>-No mechanical writing errors</td>
</tr>
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<td></td>
<td></td>
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<td>-References cited</td>
<td>-References cited according to standard procedures</td>
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| Content                        | Incomplete | -Main idea difficult to distinguish | -Main idea evident | -One or two main ideas clearly expressed | -As for level three |
|                                |            | -Little or incoherent support | -Some expansion and support provided | -Main idea expanded | -Synthesis of ideas following from the main idea |
| Use of Propaganda Techniques    | Incomplete | Two techniques attempted | Three techniques employed at least one successfully | Three techniques employed, all successfully | Five techniques employed, all successfully |
E. Administrative Issues

1. Maintaining Links

Prior to use of this investigation, each web site listed needs to be visited to ensure that it is still functional.

2. Background Reading And Information Sources

Short lists of common propaganda techniques are listed at these sites.

http://www.lcet.doe.state.la.us/laintech/propagan.htm

http://www.soe.usfca.edu/AuthEd/Propaganda/techniques.html

Media propaganda techniques exposed in Seattle. No holds barred here.

http://www.geobop.com/Education/Media/Propaganda/

Visit the Institute of Propaganda Analysis.

http://carmen.artsci.washington.edu/propaganda/home.htm
Student Self-Guided Instruction on Writing a Short Essay

Let's look at a short essay to see its structure.

Introduction

One or more paragraphs that make a statement about what the essay is about.

*Sustainability means many things to different people. To me it…*

*Clarifying the meaning of sustainability is an important first step to ensuring our future …*

Body of the Essay

Consists of paragraphs that build the case stated in the introductory paragraph or expand on the main idea expressed in the introduction. Each paragraph has its own main idea and introductory sentence that introduces the main idea in the paragraph.

Conclusion

Re-state what you have said in the introduction in several sentences or sum up the position you have taken in the essay.

If you use sentences with an average length of ten words, and paragraphs of five or six sentences each, a five hundred-word essay will be about eight to ten paragraphs long.

Refer to these sites to help improve your research, and writing.

- [http://www.geog.umn.edu/courses/1301/essay_in.html](http://www.geog.umn.edu/courses/1301/essay_in.html)
- [http://www-cmil.unex.berkeley.edu/resources/essay_writing.html](http://www-cmil.unex.berkeley.edu/resources/essay_writing.html)
- [http://homeworktips.about.com/](http://homeworktips.about.com/)