

Brazil Curriculum Project

Dawna Linsdell

All parts of the curriculum are either included in this document, or *available as downloads from this Web site.*

Final Project

FP Overview

FP Set up

Getting Started

Viewing

FP Assessment Rubric

Lyrics to John Mayer, Waiting on the World to Change

Ocean Sustainable Development

Monterey Bay Aquarium

Projecto Tamar and Fernando de Noronha

Projecto Tamar and Fernando de Noronha.ppt

Wetlands and Biodiversity Sustainable Development

The Pantanal.ppt

Amazon and Sustainable Development

KEY DYNAMICS Amazon Farmers Grow Grain And Save the Forest

KEY DYNAMICS Last of the Amazon

KEY DYNAMICS The Final Frontier

KEY DYNAMICS Welcome To Shrinking Our Jungle

Notes from the Economy of Heat for Biofuels Debate Activity

"The Lorax" by Dr Seuss Guided Questions

Amazon.ppt

Ethanol.ppt

Greenpeace.ppt

ECONOMICS

Ms. Linsdell

FINAL PROJECT: OVERVIEW

TOPIC:

Driven by economics what marketing/media messages are we given? What are the social costs and/or benefits (i.e., the trade-offs and opportunity costs of these messages)? What leadership action will you take?

Revised for 2008–2009: Are economics and positive social change mutually exclusive or can people as consumers, businesses, and governments create economically viable organizations while also creating social benefits?

- What kind of economic and social conditions will you be leaving Ms. Linsdell when she is in her golden years? Hopefully, my mutual funds will have grown (immensely!?), and in between runs on the beach I'll be serving my community in some capacity with you and, like you, probably still trying to find a balance (trade-offs and opportunity costs) between standard of living (economic conditions) and quality of life (social conditions).
- In what kind of economic and social world do you want to live?
- In what kind of economic and social world do you want to raise your children?
- Money is necessary in our free market economy, but how far are we willing to go for the sake of money? Fear sells. Sex sells. Can we still make money but improve the social messages we are currently receiving? Can we still make a profit by selling products that remind us of our strengths and build us up instead of exploiting our insecurities and focusing on superficial qualities? We will look at many topics including over-consumption, nutrition and junk food, alcohol, cigarettes, exercise, obesity, plastic surgery, beauty products, cars, video games, movies, TV programs, race, education and testing, clothing, etc. You will find a topic that holds your interest. This is where you will have the greatest opportunity to make a change and difference, to take a leadership action—in an area where you can get excited. Look for these opportunities to take action throughout your life.

OBJECTIVES:

In addition to applying the economics vocabulary and concepts we have studied all semester to current economic issues, my hope is that you will see and make a difference in our free market economy both as a consumer and as a decision-maker at your place of employment. Whether you are an entrepreneur, employee of a company, or CEO, you will make decisions in your job and life that affect our economy and world.

I want to raise your awareness of the interconnectedness of economics and social costs and benefits; just about everything ends up relating back to economics on some level. I want you to find real-life examples of economic marketing and media messages and start analyzing their social costs and benefits, and ultimately recognize your power to support these messages, boycott, or even better create your own social benefits through leadership actions.

THE BLING FACTOR:

After the Gallery Walk, students will vote on the most promising project. Ms. Linsdell will donate \$100 to the students' choice (\$50 to C period and \$50 to E Period).

AREAS OF FOCUS:

Media
Health Care
Environment & Sustainable Development
Poverty
Social Entrepreneurship & Social Responsibility
Race & Equity

Revised for 2008–2009: Limit to one Area of Focus: Sustainable Development and the Environment

COMPONENTS:

I. The Problem & Why We Should Care

II. Your Freakonomic-ish (observant and interesting) Question

III. NGO (Non-Government Organization), Non-Profit, Government, or Business Model/Program

IV. Thesis Statement

- Clearly stated thesis statement—**one sentence**—that identifies the marketing/media message, how the message is driven by economics, and the social costs and/or benefits
- Clearly identified marketing/media message
- Clearly identify how the marketing media message is driven by economics
- Clearly identify the social costs and/or benefits of the marketing/media message

V. Solution & Your Personal Leadership Action

- Support a specific current idea or create a new one for an NGO, Non-Profit, Government, or Business
- Use research persuasively
- Illustrate effective leadership action:** what you do/did/will do
- Empower people and self that one can make a difference: what can we do
- Persuade: why should the \$50 go to your project?

VI. Economic Application

- Explain why this is an economic issue
- Use the vocabulary and concepts from the semester (see review sheet)
- Include a Production Possibilities Frontier
- Include a Supply & Demand Graph

VII. Bibliography

- MLA format

VIII. Gallery Project

- Engaging, creative, thought provoking, and interactive project displayed to raise awareness of issue
- Make us interact with the project
- Teach us something
- At least 10 stats integrated into the project with sources cited
- Effective use of research
- Ideas: mural, video, song, find a song to analyze, photo essay, collage, benefit party, puppet show, one act, skit, music video, graphics, picture book, PowerPoint, cartoons, painting, sculpture

IX. Research

-At least 5 sources

-Printouts with highlights and/or notes

CHECK POINTS:

1) DUE week of April 1: Research Question

2) DUE week of April 15: Research: 30 stats listed, parenthetical cite, List of Works Cited

3) DUE week of April 29: Problem, Solution/Leadership Action, NGO, \$50 to go to_____

4) DUE week of May 6: Thesis Statement and Gallery Project

5) DUE week of May 20 Rough Draft/Sketch on graphic organizer: gallery project

6) DUE week of May 27 Economic Application

*FINAL June 4

FINAL PROJECT: SET UP

<p>The Problem & Why we should care</p> <p>Your Freakonomic-ish (observant and interesting)</p> <p>Research Question</p>	<p style="text-align: center;">NGO</p> <p>Thesis Statement -Clearly stated thesis statement in one sentence -Clearly identified marketing/media message -Clearly identify how the marketing media message is driven by economics -Clearly identify the social costs and/or benefits</p> <p style="text-align: center;">Solution & Your Personal Leadership Action</p> <ul style="list-style-type: none"> ○ Specifics from the NGO ○ What you do/did/will do ○ What we can do ○ Why the \$50 should go to your project ○ Persuasive use of research 	<p>Economic Application</p> <ul style="list-style-type: none"> ○ Explain why this is an economic issue ○ with Production Possibilities Frontier ○ with Supply & Demand Graph ○ with other key concepts (see review sheet) <p>Bibliography MLA format</p>
--	--	--

The Gallery Project

- Creative, engaging, thought-provoking & INTERACTIVE
- Make us interact with the project
- Teach us something
- At least 10 stats integrated into the project with sources cited
- Effective use of research

If art: explain vision and what to look for

Folder of Research

- At least 5 sources
- Printouts with highlights and/or notes

FINAL PROJECT: **GETTING STARTED**

To get started on your final project,

- 1) Obtain a 3-ring binder to contain all of the final project materials and check points
- 2) Obtain 5 dividers to organize all of the final project materials and check points
- 3) Use the **Resource List From Fulbright Brazil** (on next page), Resource List From Bill Clinton's *Giving*, or your own Web search
 - a. Visit 10 Web sites in the resource list
 - b. For each Web site
 - i. Print the home page (or interesting page from the site)
 - ii. Briefly explain what the organization does
 - iii. Briefly describe one project the organization does
 - iv. Identify the Area of Focus
 - v. Identify the type of action the program relates to from Bill Clinton's *Giving*
 1. Private Citizens/Public Good
 2. Giving Money
 3. Giving Time
 4. Giving Things
 5. Giving Skills
 6. Reconciliation/New Beginnings
 7. Gifts That Keep on Giving
 8. Model Gifts
 9. Giving to Good Ideas
 10. Organizing Markets
 11. Non-Profit Markets
 12. What About Governments
 13. How Much and Why
- 4) Answer the following questions:
 - a. What topics may interest you?
 - b. What organizations may interest you?
 - c. Explain why for a. and b.

Resource List From Brazil

(List from Fulbright Scholar, Linda Yaron)

Projecto Tamar, Fernando de Noronha

www.tamar.org.br/ingles/

ISER, Rio De Janeiro

www.iser.org.br

Cooperative Novo de Novo, Salvador

www.novodenovo.art.br

ELL English Language Learners, Salvador

www.pracatum.org.br

Caiman Ecological Lodge, Pantanal

www.caiman.com.br

Blue Macaw Conservation Project, Pantanal

www.projetoararaazul.org.br

Precious Woods, Manaus

www.preciouswoods.com

OELA Project-Oficina Escola de Lutheria de Amazonia, Manaus

www.oela.org.br

Fulbright Teacher Exchange Program

www.fulbrightexchanges.org

ECONOMICS

Ms. Linsdell

Final Project Assessment Rubric

Content	5	4	3	2
I. The Problem & Why We Should Care	Identified the problem and engages the viewer to learn more	Identified the problem and explains why the viewer should learn more	Identified the problem only	Not Identified
II. Your Freakonomic-ish (observant and interesting) Question	Asks a creative and unique question	Asks a thoughtful research question	Asks a superficial question	Incomplete or missing research question
III. NGO (Non-Government Organization), Non-Profit, Government, or Business Model/Program	Identified an organization			Organization not identified
IV. Thesis Statement -Clearly stated thesis statement — one sentence —that identifies the marketing/media message, how the message is driven by economics, and the social costs and/or benefits -Clearly identified marketing/media message -Clearly identify how the marketing media message is driven by economics -Clearly identify the social costs and/or benefits of the marketing/media message.	Inventive approach going beyond what is obvious or what was explicitly taught; makes subtle connections; well supported by argument and evidence; novel thinking applied	Reflects some in-depth and personalized ideas; the student is making the work his/her own, going beyond the given—there is supported theory here, but insufficient or inadequate evidence	An incomplete account but with apt and insightful ideas	Superficial account
V. Solution & Your Personal Leadership Action -Support a specific current idea or create a new one for an NGO, Non-Profit, Government, or Business	Inventive approach going beyond what is obvious or what was explicitly taught; makes subtle connections; well supported by	Reflects some in-depth and personalized ideas; the student is making the work his/her own, going beyond the given—	An incomplete account but with apt and insightful ideas	Superficial account

<p>-Use research persuasively -Illustrate effective leadership action: what you do/did/will do -Empower people and self that one can make a difference: what can we do -Persuade: why should the \$50 go to your project?</p>	<p>argument and evidence; novel thinking applied</p>	<p>there is supported theory here, but insufficient or inadequate evidence</p>		
<p>VI. Economic Application -Explain why this is an economic issue -Use the vocabulary and concepts from the semester (see review sheet) -Include a Production Possibilities Frontier -Include a Supply & Demand Graph</p>	<p>Fluent, flexible, and efficient; able to use knowledge and skill and adjust understanding well in novel, diverse, and difficult contexts</p>	<p>Competent in using knowledge and skill and adapting understanding in a variety of appropriate and demanding contexts</p>	<p>Able to perform well with knowledge and skill in a few key contexts, with a limited repertoire, flexibility, or adaptability to diverse contexts.</p>	<p>Relies on a limited repertoire and does not demonstrate understanding of key economic concepts</p>
<p>VII. Bibliography -MLA format</p>	<p>Sources cited with no mechanical errors</p>	<p>Sources cited with few or no mechanical errors</p>	<p>Sources with mechanical problems</p>	<p>Sources not cited</p>
<p>VIII. Gallery Project -Engaging, creative, thought provoking, and interactive project displayed to raise awareness of issue -Make us interact with the project -Teach us something -At least 10 stats integrated into the project with <u>sources cited</u> -Effective use of research -Ideas: mural, video, song, find a song to analyze, photo essay, collage, benefit party, puppet show, one act, skit, music video, graphics, picture book, PowerPoint, cartoons, painting, sculpture</p>	<p>Aesthetically pleasing and catches the viewer's attention through creativity and engaging content; the project is interactive; teaches the viewer thought provoking information; project is supported with thorough research</p>	<p>Aesthetically pleasing and catches the viewer's attention through creativity and engaging content; the project has some interaction; teaches the viewer information; project is supported with some research</p>	<p>Appearance interferes with content with too many gimmicks rather than content; the project has limited or distracting interaction; teaches the viewer limited information; project is supported with little research</p>	<p>Appearance interferes with content with few creative elements and little content; the project has no or limited interaction, teaches no information, project is not supported with research</p>

IX. Research -At least 5 sources -Printouts with highlights and/or notes	Well researched and included in the project	Research completed but lacks depth	Some research included but incomplete	Research is not included
--	---	------------------------------------	---------------------------------------	--------------------------

Some ideas for this assessment rubric come from [The Understanding By Design Handbook](#) and Intel's education Web site.

Lyrics to **John Mayer, Waiting On The World To Change**

me and all my friends
we're all misunderstood
they say we stand for nothing and
there's no way we ever could
now we see everything that's going wrong
with the world and those who lead it
we just feel like we don't have the means
to rise above and beat it

so we keep waiting
waiting on the world to change
we keep on waiting
waiting on the world to change

it's hard to beat the system
when we're standing at a distance
so we keep waiting
waiting on the world to change
now if we had the power
to bring our neighbors home from war
they would have never missed a Christmas
no more ribbons on their door
and when you trust your television
what you get is what you got
cause when they own the information, oh
they can bend it all they want

that's why we're waiting
waiting on the world to change
we keep on waiting
waiting on the world to change

it's not that we don't care,
we just know that the fight ain't fair
so we keep on waiting
waiting on the world to change

and we're still waiting
waiting on the world to change
we keep on waiting waiting on the world to change
one day our generation
is gonna rule the population
so we keep on waiting
waiting on the world to change

we keep on waiting
waiting on the world to change

Monterey Bay Aquarium

Monterey Bay Aquarium www.mbayaq.org
Monterey Bay Aquarium The Insiders' Guide

I. Show students the book, *Monterey Bay Aquarium The Insiders' Guide*

- p. 1-3: Local example Stanford and Packard aquarium
Local example of over-fishing sardines Monterey, California, Cannery Row
1945: 235,000 tons
1948: 15,000 tons
1969: closed @ 10,000 tons
<http://www.mtycounty.com/pgs-misc/cannery-row2.html>

p. 16: "The true measure of an aquarium's success is not solely how many people come, but how many leave with a greater awareness of the wealth of life our oceans hold. For only through this awareness will the oceans rise to the forefront of world conservation efforts, where they belong." – Julie Packard

p. 42-43: Sea otter current population 3,000, was 20,000

p. 53: Sea turtles: "Every species of sea turtle, like this green sea turtle, is endangered throughout the world's oceans, due to drowning in fishing nets and real estate development on their nesting beaches."

p. 62: Julie Packard

p. 65: Things You Can Do

II. Monterey Bay Aquarium www.mbayaq.org Homework Activity

- A. Research consumer actions that can be taken
Check out links in the Seafood Watch section
Check out the links in the Take Action section
- B. Explain the economics of at least one of these consumer actions. Be sure to include a Production Possibilities Frontier in your explanation.
- C. Is there an action you might be willing to take? Why or why not? Explain the economic impact and opportunity cost of this decision.

E C O N O M I C S
Ms. Linsdell

Project Tamar and Fernando de Noronha, Brazil, Lesson

PowerPoint Guide

Slide 1:

Are there any solutions to the problems presented in Fishbanks?
(Fishing industry: jobs and income vs. fish depletion)

Slide 2:

Answer: YES! Project Tamar in Brazil, including the Brazilian island Fernando de Noronha

Slide 3:

Fernando de Noronha
Archipelago
Atlantic Ocean
220 miles off the coast of Brazil
South of the equator
2000 Population
7 Square Miles

Slides 4-6:

Photos from Fulbright Brazil

Slide 7:

Arrive on propeller plane from Recife – couple of flights per day
Small scale tourist activities
Not crowded
Snorkeling, boating, diving
Small eateries and lodging
R\$33.09 per day Environmental Preservation Tax

Slides 8-10:

Photos from Fulbright Brazil

Slide 11:

70% National Marine Park
IBAMA
Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis
(Brazilian Institute of Environment and Renewable Natural Resources)

Preserve the land and marine environment: Sea Turtles and Spinner Dolphins

Slide 12:

Final Project Question: Are economics and positive social change mutually exclusive or can people as consumers, businesses, and governments create economically viable organizations while also creating social benefits?

Slide 13:

Project Tamar

Slide 14: ACTIVITY

<http://www.tamar.org.br/ingles/>

Use Project Tamar's site to answer:

- Groups of 3 Students
 - Person A:
 - What is the “Adopt A Turtle” Program?
 - What is Tartaruguerio in Project Tamar?
 - Explain hunter turned protector.
 - Person B:
 - What threatens the sea turtle?
 - How are we in California connected to the sea turtles in Brazil?
 - Person C:
 - What are the solutions to protecting sea turtles in Project Tamar?
 - Who and what communities are involved with protecting sea turtles? Who has been the “most important” in creating change?
 - All Students:
 - Identify the specific economics related to Project Tamar
 - Identify Project Tamar's marketing message

Slide 15: Poster or Flyer

Using your group's Project Tamar research, answer the final project question on a poster or flyer:

Are economics and positive social change mutually exclusive or can people as consumers, businesses, and governments create economically viable organizations while also creating social benefits?

Include engaging visuals and persuasive, accurate content

Slide 16:

Conclusion

- Ms. Linsdell's purchases on Fulbright
 - Bring Bag
 - Wear Hat
 - Wear Sweatshirt with research stations
 - <http://www.tamar.org.br/ingles/onde.asp>
- Is Project Tamar making a difference?
 - http://www.tamar.org.br/ingles/t_result.htm

Amazon Farmers Grow Grain And Save the Forest
Key Dynamics

“greening of Chicken McNuggets”

McDonald’s: fast-food giant

Cargill: US commodities multinational

The Nature Conservancy: an environmental group

Responsible Soy Project

Producers can only sell soy to Cargill if they promise to plant trees on denuded land.

Mc Donald’s, which buys chicken feed with Brazilian soy, set that condition after pressure from environmental groups and consumers.

The Nature Conservancy, with \$390,000 from Cargill, assists all sides and oversees compliance.

“The Responsible Soy Project is based around compliance of Brazil’s Forest Code. The code dictates that Amazonian landowners must keep natural vegetation on 80% of their territory and farm only 20%.”

“But, like many laws in Brazil, it is largely ignored. Around 17% of the Amazon has disappeared, with much of the recent deforestation coming to make way for massive soy plantations on the southern edges of the jungle Brazil is now the world’s largest exporter of soybeans.”

*GO BACK TO THE GREENPEACE MAP SHOWING SOY PUSH FROM THE NORTH UP INTO THE RAINFOREST.

*GO BACK TO BRAZIL’S EXPORTS AND SHOW HOW IN 6 MONTHS MOVED TO LARGESTS EXPORTER OF SOY.

*ALSO MENTION HIGHER FOOD PRICES RAISING THE STANDARD OF LIVING FOR BRAZILIANS. BRAZIL, A TOP EXPORTER OF SOY, BEEF, CHICKEN, AND GRAIN – July 15, 2008, Christian Science Monitor

“The Responsible Soy Project began after Greenpeace launched a Europe-wide campaign targeting McDonald’s and Cargill as advocates of deforestation.”

“Soy is a vital component in animal feed.”

“Mc Donald’s buys soy from Cargill to fatten chickens that become McNuggets.”

“Cargill agreed to only buy soy from farmers who are complying with the 80/20 law.”

For the majority farmers setting aside 80% means they would not have enough land left to produce a profitable crop.

“One idea being discussed is having the farmers pool their money, and buy a large chunk of forested land elsewhere in the state and designate it protected. That solution would bring them into compliance with the 80/20 law.”

(The land could be used as an agricultural frontier—or to create biodiversity corridors—or as fire breaks—or be given over as reserves to indigenous communities.)

Now ethanol farms and other farms are asking for advice from the Nature Conservancy.

Last of the Amazon
Key Dynamics

“In the time it takes to read this article, an area of Brazil’s rain forest larger than 200 football fields will have been destroyed.”

“During the past 40 years, close to 20% of the Amazon rainforest has been cut down—more than in all of the previous 450 years since European colonization began.”

“Cowboys herd prime assets: Beef exports earn Brazil three billion dollars a year. With cattle numbers now topping 60 million, the demand for new pastureland drives much deforestation.”

“The Amazon is too big for police to shut down all illegal operations.”

“Blairo Maggi’s fortunes have paralleled Brazil’s accelerating deforestation and emergence as a global agricultural powerhouse.”

“Brazilian producers are the only ones in the world who are obliged to maintain a reserve. There should be a royalty for leaving those areas intact—they need to be compensated in some way.”- Blairo Maggi

“Farmers are entitled to clear up to 20% of their land, as long as they maintain the other 80% as a so-called legal reserve.”

“But the marketplace has yet to assign value to the forest: It’s far more profitable to cut it down for grazing and farming than to leave it standing.”

Last summer, Cargill and Brazil’s other big soy traders agreed to a two year moratorium on buying soy grown on newly deforested land in the Amazon. The agreement is sending a signal to soy producers that the environmental impact of their operations is increasingly important in the world marketplace.”

“But Brazil’s measures to protect the Amazon must be weighed against its other ambitions. These include plans to build seven dams on the environmentally sensitive Xingu and Madeira Rivers, as well as roads, power lines, oil and gas pipelines, and large-scale mining and industrial projects. The dams will power aluminum smelters, and shipping channels will facilitate river transport of exports to Chinese markets. The dams will also flood millions of acres of forest, releasing methane and other greenhouse gases, destroying biodiversity, and forcing indigenous communities to flee ancestral lands.”

government corruption or ill-equipped and outmatched to enforce laws

The Final Frontier
Key Dynamics

“Putting a price on a priceless asset.”

“Brazil formally proposed an international fund to pay Brazil for the forest’s environmental services to the planet (value to compete with profits to be gained from its destruction).”

“If Brazil’s contribution to global warming came only from its fleet of vehicles and power plants, it would be a model environmental citizen, thanks to its use of renewable resources. But three-quarters of its carbon emissions come from the destruction of the Amazon, turning the country into one of the top ten polluters.”

“April 2007 may be changing. Deforestation has fallen by more than half over the past two years, to its lowest level since 1991.”

“The government has created 40m hectares of conservation areas in the past four years.”

“A new law declares that no public forest can be privatized, which should discourage land-grabbers, and provides for concessions for sustainable logging and other tree-friendly uses.”

“Federal police have arrested dozens of officials for trafficking in fraudulent logging licenses. Consumer pressure, transmitted from rich countries to the Amazon via green NGOs is beginning to have an effect.”

“Last July processors announced a two year moratorium on buying soya from deforested land.”

“Pioneers out race the state’s capacity to enforce the law and to exercise its own property rights.”

“Cycle starts with illegal logging— creates first trails into the forest. Land grabbers often follow or stake their claim to virgin forest by razing and burning the trees and turning the land into pasture. Then come the planters, who replace pasture with more profitable soya, driving the ranchers deeper into the forest.”

“1960s military rulers promoted settlement to rid themselves of troublesome social groups; 18% of the forest has disappeared.”

Welcome To Our Shrinking Jungle

Key Dynamics

NEW, JUNE 7, 2008

New Environment Minister, Carlos Minc, explained to a crowd of journalists why the rate of deforestation is increasing again.

“Since taking office in 2003, President Lula has balanced the wishes of those who would like the Amazon to be a giant park and Indian reserve against those who want to turn it into a giant farm.”

“He has sometimes been willing to enforce the laws against loggers: In February he sent troops to Tailandia, a town in Para state where illegal logging is the main industry, after inspectors from the environment ministry were thrown out by sawmill workers.”

“But Lula has also encouraged infrastructure projects in the Amazon that trouble conservationists, including two new hydroelectric dams.”

Lula “is touchy when he feels Brazil is being lectured by foreigners: Europeans, Lula said recently, should take a look at a map of their own continent and see how much forest is left before telling Brazil what it should do with the Amazon.”

“On June 2, 2008, the National Institute for Space Research, which monitors deforestation, announced that the forest retreated substantially in April compared with the month before.”

“Link between high commodity prices and deforestation, with a lag of about a year.”

*GO BACK TO THE GREENPEACE MAP SHOWING SOY PUSH FROM THE NORTH UP INTO THE RAINFOREST.

*GO BACK TO BRAZIL’S EXPORTS AND SHOW HOW IN 6 MONTHS MOVED TO LARGESTS EXPORTER OF SOY.

*ALSO MENTION HIGHER FOOD PRICES RAISING THE STANDARD OF LIVING FOR BRAZILIANS. BRAZIL, A TOP EXPORTER OF SOY, BEEF, CHICKEN, AND GRAIN – July 15, 2008, Christian Science Monitor

“Meat from the Amazon is eaten in Brazil but not exported because the cattle there have not been declared free of foot-and-mouth disease. So the link between a hamburger eaten in Paris and a tree felled in Brazil is indirect.”

“As for soya, the relationship is even more indirect. The vast majority of the crop is grown nowhere near the Amazon. But its expansion has pushed cattle ranches further into the jungle, and started itself to encroach on the forest.”

“Big trading houses have imposed a ban on buying soya from recently deforested parts of the Amazon.”

“Mr. Minc has already picked a fight with Blairo Maggie.”

“Illegal deforestation happens when ranchers and loggers conspire to clear swathes of land. A rancher typically claims a part of forest and then sells the timber rights to a logger. This helps to finance the next stage of the rancher’s operation. The logger then takes what he wants and afterwards clears the area. The rancher tidies it up with the help of a bulldozer, burns what is left, sows grass and raises cattle. When the land is exhausted, as it quick is, the ranchers moves on.”

“That is the most common way to stake a claim to ownership of land in the Amazon. Of the 36% of the forest that is supposedly privately owned, only 4% is covered by a solid title deed, according to Imazon, an NGO. Since the government does not know who owns what, enforcing any rules is impossible.”

“As of July, ranchers and other farmers who fail to present any kind of documents backing up their claims to ownership of land will have lines of subsidized credit suspended. If they have not co-operated after four years, their land will be confiscated. But in practice it is close to impossible for the government to impose its will on the edges of its empire, even if it wanted to.”

The Economy of Heat, Dreaming of Glory A Special Report on Brazil from The Economist,
April 14, 2007

Notes for Biofuels Debate Activity

“Ethanol in Brazil based on sugar cane – cheaper than anyone else’s”

“Ethanol got started after the oil price shocks of the 1970s, when dictators introduced the car industry to convert from petrol that Brazil could not longer afford. The Proalcool programme ended with a hangover around 1990 as oil prices fell and cane growers switched back from ethanol to sugar infuriating drivers of ethanol only cars.”

“But it left behind a system for distributing ethanol to petrol stations which suddenly looks like a national treasure, thanks to two recent developments. One is the Brazilian invention of the flex-fuel cars which can run happily on any combination of ethanol and gasoline 83% of new cars in Brazil.”

“The second is the belated realization the world over that fossil fuels overheat the planet, are controlled by dodgy regimes and cost too much. In January 2007 President George Bush announced an American version of Proalcool— he wants to cut petrol consumption by one-fifth—and has since signed an agreement with President Lula to spread production and consumption of ethanol world wide.”

“It will take a while for any other country to copy Brazil, where ethanol already accounts for 40% of the fuel used by cars. The United States insists on producing most of its ethanol from home-grown maize, which is more expensive than Brazil’s cane-based version and burns up about seven times more fossil fuel per unit of energy produced. No other country can match Brazil’s distribution network, so in the short term ethanol will be mostly an additive to fuel, not the main ingredient.”

“Even that is enough to cause a fever. Brazil currently produces 18 billion litres of ethanol a year of which it exports 4 billion litres, just over half of world wide exports. By 2013 consumption in Brazil is expected to double. Global ethanol trade could rise 25-fold by 2020.”

***The Lorax* by Dr. Seuss**

Summary activity for the students to use the story to review and apply what was learned from the Amazon Rainforest

I.

Who is the Oncler?

What is the Lorax?

What happened to the Lorax and the community when the Oncler started cutting down the Truffula Tree?

What were the short-term impacts?

What were the long-term impacts?

What were the costs?

What were the benefits (e.g., jobs, capital, creating things we need)?

II.

What negative emotions did you feel? Explain.

(sad – disappearance of the Lorax, Truffula Trees, green, wet, and clean)

What positive emotions did you feel? Explain.

(hope – making a difference)

III.

What motivated the Oncler?

Who are the responsible parties for the loss of the Lorax?

Dr. Seuss talks about greed. How can greed negatively affect society? How can greed create benefits for society?

What are some solutions related to CONSUMERS to keep or bring back the Lorax and his friends? What are the associated opportunity costs?

What are some solutions related to BUSINESSES to keep or bring back the Lorax and his friends? What are the associated opportunity costs?

What are some solutions related to GOVERNMENTS to keep or bring back the Lorax and his friends? What are the associated opportunity costs?

What are some solutions related to NON-GOVERNMENTAL ORGANIZATIONS to keep or bring back the Lorax and his friends? What are the associated opportunity costs?

IV.

What solutions do you recommend?