

PROJECT OVERVIEW

Name of Project:	What's Going On In Your Back Yard?	Duration: 3 Weeks					
Subject/Course: Science 7	Teacher(s): Cindy Sengenberger	Grade Level: 7					
Other subject areas to be included, if any:	ELA						
Project Overview							
Project Idea Summary of the issue, challenge, investigation, scenario, or problem:	Students function as a research team determining what environmental issues are affecting Fulton County, including; purple loosestrife, zebra mussels, spiny water fleas, Eurasian water milfoil, deer, coyote, water quality, tree disease, beetles etc. After carefully researching and collecting information, students will develop possible solutions to their environmental problem and determine how to effectively disseminate their findings to the community, using technology.						
Driving Question	How can we educate our community about local environmental issues?						
Content and Skills Standards to be addressed:	Science Research Technology skills Presentation skills						
		T+A	E			T+A	E
21st Century Skills to be explicitly <i>taught and assessed</i> (T+A) or that will be <i>encouraged</i> (E) by project work, but not taught or assessed:	Collaboration	X		Other:			
	Presentation	x					
	Critical Thinking:	x					
						Presentation Audience:	
Culminating Products and Performances	Group:	The group will present to the class and community members their findings through; wikis, PowerPoint, moviemaker or a web site. Students will decide how, where and when (within a time period) they will present. They may choose to present at a BOE meeting, town meeting (school event), classroom, scientific expert panel, online-peer/teacher evaluation.	Class:		X		
			School:		X		
			Community:		X		
	Individual:	Collaborative effort	Experts:		X		

PROJECT OVERVIEW

Entry event to launch inquiry, engage students:	Moviemaker presentation about Fulton County (teacher created). Project expectations outlined in packet and PowerPoint presentation.				
Assessments	Formative Assessments (During Project)	Quizzes/Tests		Practice Presentations	
		KNLA sheet	X	Notes – 10 note cards with citations	X
		Preliminary Plans/Outlines/Prototypes		Checklists	
		Rough Drafts - checked by teacher	X	Concept Maps	
		Online Tests/Exams		Other:	
	Summative Assessments (End of Project)	Written Product(s), with rubric: _Written research paper_____	X	Other Product(s) or Performance(s), with rubric: PowerPoint, MovieMaker, Web Site, wiki	X
		Oral Presentation, with rubric	X	Peer Evaluation (TechYES)	X
		Multiple Choice/Short Answer Test		Self-Evaluation (TechYES)	X
		Essay Test		Other:	
	Resources Needed	On-site people, facilities:	Flo Glasser, Computer lab, media center		
Equipment:		DEC resources, internet			
Materials:		Student guide			
Community resources:		Local DEC staff, North Country Ecological Services, Sam Jackling, Karen Brownell, Roseann Jackling, High School Science Teachers.			
Reflection Methods	(Individual, Group, and/or Whole Class)	Timeline/Milestone Checks	X	Focus Group	
		Whole-Class Discussion	X	Fishbowl Discussion	

PROJECT TEACHING AND LEARNING GUIDE

Project: What's Going On In Your Back Yard?

Course/Semester: 3rd Quarter

Knowledge and Skills Needed by Students
to successfully complete culminating products and performances, and do well on summative assessments

Scaffolding / Materials / Lessons to be Provided
by the project teacher, other teachers, experts, mentors, community members

Research/note taking



ELA and science teacher instruction earlier in the school year.

Paraphrasing



ELA and science teacher instruction earlier in the school year.

Works cited



ELA and science teacher instruction earlier in the school year.

Technology: PowerPoint, moviemaker, web sites, wikis



ELA and science teacher instruction earlier in the school year.

Presentation Skills



ELA and science teacher instruction earlier in the school year.

PROJECT CALENDAR

Project: What's Going On In Your Back Yard?

Start Date:

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

PROJECT WEEK ONE

Introduction: PowerPoint about Fulton County's Environment (10 Minutes).

Discussion about project and expectations.

Student Guide discussed.

Fill out KNLA and discuss as class (post in classroom).

Choose groups, develop and sign contract.

Determine responsibilities of team members.

Choose research topic.

Begin research and review of resources (media center, computers, and DEC resources).

Continue research and review of resources.

Start to write out note cards beginning with 3 source cards and 3 information cards (due by the end of the day Friday).

Continue to write out note cards with proper citations.

Phase 1: 3 source cards and 3 information cards due at the end of the day.

*First team work grade.
*Check problem log.

PROJECT WEEK TWO

Continue to write out note cards with proper citations. A minimum of 7 additional cards are required (total of 10 + 3 source cards)

Due Tuesday.

Phase 2: Collect 10 + 3 source cards.

Use note cards to formulate rough draft of written paper. Must include introduction, body and conclusion.

After teacher approval, finalize written paper and word process.

Phase 3- Rough draft due.

How can we effectively present our research to our community?

Brainstorm ideas as a class.

Decide on dissemination format as a group.

Decide where and to whom you will present as a group.

Phase 4: Word Processed written paper with proper works cited page due.

How can we effectively present our research to our community?

Create presentation.

*Second teamwork grad.
*Check problem log.

PROJECT WEEK THREE

Create presentation and develop/practice oral presentation skills.

Use PowerPoint Presentation Planning Guide.

Create presentation and develop/practice oral presentation skills.

Use PowerPoint Presentation Planning Guide.

Phase 5:
Floating Presentation date

Phase 5:
Floating Presentation date

Phase 5:
Floating Presentation date

*Project Debrief (Work Ethic)
*TechYES evaluation

Project Based Learning

Driving question:

How Can We Educate Our Community About Our Local Environmental Issues?



What's Going On In Your Backyard?



Table of Contents:

- Introduction
- KNLA
- Student Contract Template
- Timeline
- Resources/Websites
- PowerPoint Planning Guide
- Works Cited
- Rubrics
- Project Debrief

Introduction

What's going on in your backyard?

Can we do something about it?

Is this important and why?

How can we educate our community about local environmental issues?

Invasive species are a major threat to our environment because they

- can change an entire habitat, placing ecosystems at risk
- crowd out or replace native species that are beneficial to a habitat
- damage human enterprise, such as fisheries, costing the economy millions of dollars. <http://www.actionbioscience.org/biodiversity/simberloff.html>

Your challenge is to:

- Investigate environmental problems in Fulton County, New York.
- Choose one environmental issue.
- Research it thoroughly and write a research paper that presents your findings and possible solutions to solve this local problem.
- Create a presentation that will inform your local community about your findings and possible solutions.
- Do your presentation.



Name(s): _____

Topic/skill under study: _____

Period/Block: _____

KNLA

What do we know ?	What do we need to know?	How will we learn more?	How will we apply what we learned?

Team Contract

Team Members:

Project Name: What's going on in your backyard?

Time Line:

Project Start Date: _____

Project Due: _____

Contract Agreement:

1. If a team member is absent...

Suggestions:

- In the result that I am unable to attend class, I will make it my personal responsibility to get any and all notes from my group.
- Under any and all circumstances, I will get what work I am allotted to do, done and turned in on time.
- If I am sick and unable to make it to class on the date a group assignment is due, I will call my group members to make other arrangements to get my work turned in on time.

2. If a team member needs to be fired because they are not doing their job or are coming to our meeting unprepared...

Suggestions:

- I will do my share of the group work, there will never be an occasion where one group member does all of the work nor will there be a time when a group member does none of the work.
 - Each member will agree on the answer for each group problem before it is turned in. In circumstances where agreement is not automatic, each member shall explain how they arrived at their particular solution until a correct solution is clear. If no agreement can be reached, a vote will be taken on which result to submit.
 - I will do everything in my capabilities to help my fellow group members understand each and every concept and problem.
 - If I do not understand a concept or solution, I will not hesitate to ask my fellow group members for help.
 - I will communicate with my fellow group members about any concerns I have about our group work.
 - I will be an active member of this group in all aspects. I will not take answers as fact, but instead confirm final results by working the problem myself and attempting to get the same solution.
3. If we are running behind schedule we will...

4. The Team Leader is _____ . The team leader will...

-
-
-

5.

Task	Team Member	Date Due

I certify that I have thoroughly read this contract and that I will abide by it. I am signing this contract at my own free will, and have initialed each of the above statements because I agree with it, and am willing to adhere to each clause. I understand that breach of contract will result in verbal reprimand on the first two instances, followed by immediate dismissal on the third instance. This contract is subject to be amended pending a unanimous vote within the group.
