



Women Taking the Lead to Save Our Planet – Curriculum Guide

From: *Her Story: A Timeline of the Women Who Changed America* by Charlotte S. Waisman and Jill S. Tietjen, New York: HarperCollins, 2008.

Dear Educator,

We are pleased that you are receiving this slide presentation (See Item 2 of 2) to use in your classes. This document provides comments, directions, and options for your use in preparing curricula for your class.

We welcome you to read our book and to connect with us. We have followed one theme in this curriculum. There are many other ways to use the information in the book. The book can be used in a classroom setting in a number of thematic ways. For example, one can follow important women in politics and public service. Another thread is to follow women important in major social movements. You will come to know the book as a whole; it contains brief profiles of over 850 important and influential women in the history of the United States, in a timeline format that also clarifies important moments in our country's history. The overwhelming majority of the women who are identified are excellent role models for both girls and boys.

The series of slides that accompany this document highlight many of the women who are making a difference in our environment: *Women Taking the Lead to Save our Planet*. The women we feature exemplify women's environmental leadership.

This teaching module is meant to identify many different types of contributions made by women who have led efforts to save the planet. We touch on water, plants, animals, insects, birds, fuel and air in an overview fashion. Any of these topics could be explored in further detail in a series of lessons that you create to aid in that exploration.

Use our ideas "as is" or incorporate changes that are appropriate for your learning environment. Should you choose to enhance or develop our work, tell the National Women's History Project (ednasmolly@aol.com) and they will list your ideas, so others can try them. And most of all, enjoy reading and teaching about these exemplary women "on whose shoulders we all stand."



Experiential Learning Activity

A specific, practical module to incorporate into your overall learning plans is developed below.

- Activity Summary. Show a PowerPoint presentation (provided) that makes the students aware of the women who have made a difference through their efforts in helping to support and save a healthy environment for our Earth.
- Age of Students. Our book was written for an adult audience. The curriculum we designed is targeted to high school age students; they would benefit immensely from immersion in this material. Older middle schoolers are certainly an appropriate audience as well. (the language on the slides can certainly be modified to support a different reading comprehension level)
- Classroom make-up. It is anticipated that the class will be both boys and girls.
- Goals:
 1. To identify a number of important, historical female figures who have done work to contribute to saving our environment.
 2. To clarify the many different ways that one might contribute to saving our environment.
 3. To develop a definition of what “saving our environment” means for each person.
 4. To interest students in a project based on this teaching module that takes their learning deeper.
- Group Size. There is no minimum or maximum number of students who would be the best audience for this module. The “typical” classroom would work well. There is no need to divide into smaller groups, or subgroups although this can be a useful variation, should your class benefit from small group discussions.
- Time Required. From your introduction through showing the slides, through processing (or discussion or small group activity), the module itself may take one or more than one typical class period. Projects undertaken outside of class will require additional time and efforts on the parts of the students.



- Materials and AV Requirements.
 1. A computer to show the PowerPoint slides
 2. An LCD projector
 3. A screen
 4. A white board (or flip chart) and chalk or markers
 5. Blank paper and pencil/pen for notes or questions (each student will need to have these)
 6. Assignment Sheet (teacher generated from ideas below)
 7. Copies of the quick quiz to distribute to all students

- Physical Setting. A typical classroom where the lights can be dimmed for projection purposes will work. There are no special seating or table requirements.

- Facilitating risk. The risk to the teacher is low, as all information is supplied in a step-by-step manner.

- Other. This curriculum module on *Women Taking the Lead to Save Our Planet* would, generally speaking, be introduced in a history or social studies class. However, many of the assignment topics would be strong assignments for a Science class as well. In schools where there is a strong collaboration element, work with a teacher in another area, to either team teach or use the assignment in an additional area.

- **Process: (step by step)**
 1. Elicit definitions from the students as to “what would saving our environment include”?
 2. Post their answers and suggestions
 3. Ask if they know any national or local women throughout U.S. history who are or who have been engaged in saving our environment (and post) – alternatively, have students answer the quick quiz provided later in this document
 4. Show the PowerPoint presentation that identifies (listed by historical year) both women and their contributions
 5. Use note pages that are below the slides to help provide the narrative. (Or, print out the notes in a script format)
 6. Stop any time during the slides, to take questions or pose issues
 7. Understand that one of the desired outcomes of the presentation will be that the definition of what constitutes “saving the environment” will be broadened.



8. Conclude with returning to the definition and determining new elements that have arisen as a result of what the students have seen.
 9. Create an assignment list from the choices you wish to pursue.
- Assignment Topics [Note to Teacher: The optional assignments vary in their difficulty and complexity. You may wish to determine the length of reports to be provided or reduce the number of bullet points that students explore in preparing the assignment. The description below is a summary of each of the assignments. They are described in more detail on the notes section of each slide.]
 1. Jane Colden. Assignment to examine the nomenclature for naming species using a specific example named for a woman and identification of environmental threats to this species.
 2. Maria Martin Bachman. Assignment to examine a species of insect, determine its environment, and identify environmental threats that it faces.
 3. Ellen Swallow Richards. Assignment relating to the role trees play in filtering water. Assignment to investigate local water quality standards and related issues.
 4. Harriet Strong. Assignment to investigate types and impacts of various forms of irrigation.
 5. Florence Bascom. Assignment to examine alternative means of fueling vehicles.
 6. Catherine Furbish. Assignment to research biomass resources in the U.S. Assignment to examine recycling and gardening.
 7. Mary Engle Pennington. Assignment to examine the environmental impacts of our food supply. Assignment to learn more about organic foods.
 8. Ruth Patrick. Assignment to learn more about diatoms and their role in the diagnosis of sources of water pollution.
 9. Marjorie Stoneman Douglas. Assignment to learn about environmental stewardship. Assignment to learn more about a specific ecosystem and environmental threats to that form of ecosystem. Assignment to learn about Green Collar jobs.
 10. Jane Jacobs. Assignment to learn about urban planning.
 11. Rachel Carson. Assignment to write an essay to put her sentiment into action. Assignment to learn more about a specific event or piece of legislation related to the environment. Assignment related to “thinking outside of the box” in helping the environment.



12. Lady Bird Johnson. Assignment to research state symbols and develop a plan for a new state symbol designation.
13. Mary Sinclair. Assignment to research forms of renewable energy.
14. Dian Fossey. Assignment to research a specific threatened or endangered plant or animal.
15. Flossie Wong-Staal. Assignment to research viruses.
16. Mae Jemison. Assignment to research a category of air pollution.
17. Katherine Siva Saubel. Assignment to look at sustainable development. Assignment to create an advertising campaign.
18. Sylvia Earle. Assignment to look at environmental threats to the Earth's oceans. Assignment to talk about connection with nature.
19. Conclusion slide. Assignment to understand how personal choices affect the environment. Assignment on conservation, preservation, and restoration. Assignment to discover more about specific groups working to protect the environment. Assignment to envision the future and how to get there.

Be sure to connect with us if you have any questions or issues. Also, let us know how your module goes!

Most Sincerely,

Charlotte S. Waisman
charlotte@herstoryatimeline.com

Jill S. Tietjen
jill@herstoryatimeline.com

www.herstoryatimeline.com



Quick Quiz – Match the Woman With Her Accomplishment

Many women have worked to save our planet and protect our environment. Here is a brief quiz before you begin this module to test your knowledge:

- A. Harriet Strong
- B. Jane Colden
- C. Dian Fossey
- D. Mary Engle Pennington
- E. Lady Bird Johnson
- F. Rachel Carson
- G. Marjory Stoneman Douglas
- H. Maria Martin Bachman

- _____ 1. The first American woman botanist, she catalogued more than 300 species of plants and names the gardenia, a flowering plant.
- _____ 2. She painted the plants, flowers, insects, birds, and other details for John James Audubon's masterpiece entitled *Birds of America*.
- _____ 3. Her patents in water conservation and irrigation techniques helped promote the development of southern California as a major agricultural region.
- _____ 4. Her research on bacteria and refrigeration led to safer food products including safer eggs, poultry, and fish.
- _____ 5. She is considered the patron saint of the Everglades, a key wetlands area in the state of Florida.
- _____ 6. Her book, published in 1962 and titled *Silent Spring*, exposed the dangers from the pesticide DDT.
- _____ 7. For her entire professional career as a primatologist, she studied the mountain gorilla and strove to preserve its habitat.
- _____ 8. She worked to beautify America, especially through encouraging the planting of wildflowers.



ANSWERS:

All of the answers are contained within *Her Story: A Timeline of the Women Who Changed America* (HarperCollins, 2008) by Charlotte S. Waisman and Jill S. Tietjen. Let's see how you did.

1. B
2. H
3. A
4. D
5. G
6. F
7. C
8. E