



## Women in Science

### A Teaching Strategy for Use with the Library and Archives Canada's *Celebrating Women's Achievements* website

This activity offers students the opportunity to practice critical thinking skills, to imagine solutions to career obstacles, and to learn about the contributions Canadian women have made to science.

**Subject/Age**

Guidance/Career Education  
Social Studies (Contemporary Studies, Women's Studies)  
Ages 14+

**Learning Outcomes (APEF)**

**Expectations (ON)**

**Objectives (QC)**

**Learning Outcomes (WCP)**

**Social Studies Outcomes (History)**

On completing this project, students will:

- Demonstrate how diverse groups and individuals have contributed to the historical, cultural, and economic development of Canada

**Guidance/Career Education**

On completing this project, students will:

- Demonstrate knowledge of selected fields of work, occupations, and workplace issues

**Language Arts Outcomes**

On completing this project, students will:

**R (Reading):**

- Locate and use explicit information and ideas from texts in forming opinions and developing generalizations

**W (Writing):**

- Use a variety of forms of writing to express themselves, clarify their ideas, and engage the audience's attention

**O/V (Oral and Visual Communication):**

- Use listening techniques and oral communication skills to participate in classroom discussions and more formal activities, such as role playing and reporting or presenting, for specific purposes and audiences

**These Language Arts Outcomes correspond to:**

- WCP GO -- **R:** 3.2; **W:** 3.3; **O/V:** 4.4
- Quebec objectives -- 3 (**Reading**); 1 (**Writing**); 6, 4 (**Oral**)
- APEF CGO -- **R:** 5; **W:** 8; **O/V:** 2

**Student Demonstration of Learning**

Students will research the lives of prominent Canadian women in science, and look for traits that make a successful scientist. They will identify barriers to the entry of more women into science and develop an action plan for governments to change this.



## Materials/Resources Required

Computers with access to the Internet  
Student Handout  
Assessment Criteria

## Web Links

**Library and Archives Canada:** *Celebrating Women's Achievements* website

URL: <http://www.collectionscanada.gc.ca/women/>

### *Related sites:*

#### **Herstory**

URL: <http://library.usask.ca/herstory/>

**Library and Archives Canada:** *Memorable Canadians*

URL: <http://www.collectionscanada.gc.ca/8/2/>

**Canada Career Consortium:** *Career Directions*

URL: <http://www.careerccc.org/careerdirections/>

**University of Alabama:** *4000 Years of Women in Science*

URL: <http://www.astr.ua.edu/4000WS/4000WS.shtml>

**San Diego Supercomputer Center:** *Women in Science*

URL: <http://www.sdsc.edu/ScienceWomen/>

**UNESCO:** *Femmes, science et technologie*

URL: [http://www.unesco.org/science/wcs/meetings/afr\\_ouagadougou\\_99\\_report.htm](http://www.unesco.org/science/wcs/meetings/afr_ouagadougou_99_report.htm)

**Status of Women Canada (SWC)**

URL: <http://www.swc-cfc.gc.ca/>

**SWC:** *Setting the Stage for the Next Century: The Federal Plan for Gender Equality*

URL: <http://www.swc-cfc.gc.ca/publish/fedpln-e.html>

See also the selective bibliography of the LAC *Canadian Women in Science* site

URL: <http://www.collectionscanada.gc.ca/women/002026-400-e.html>

## Instructional Procedures

Students will need to have a basic understanding of Internet navigation and web search tools.

### **Task 1: Large Group Work**

Begin by asking the class to name some important scientists. Keep a list. Count the number of men in the list, and the number of women. Ask the class:

- Are women under-represented in science?
- If so, is this a problem? Why or why not?
- How has this happened?
- Are there jobs that men have traditionally been excluded from? Is that a problem?
- How should people be selected for jobs?



**Task 2: Small Group Work**

Students are then invited to visit the LAC *Celebrating Women's Achievements* website (and other websites and resources).

They should read several of the online biographies of women in science and generate lists of qualities needed to be a good scientist, education required to become a scientist and barriers faced by women in becoming scientists, as well as a short list of notable women scientists and their accomplishments.

**Task 3: Large Group Work**

Review the material generated by tasks 1 and 2. Ask the class which of the qualities needed to be a good scientist are possessed by women.

**Task 4: Small Group Work**

Students brainstorm methods to attract more women to the sciences and overcome any hurdles that might exist. From this, they should develop an action plan for the government to follow. Sources provided in the Web Links section can be used to guide the students' work.

Students can present their findings to the class in a creative presentation or as a report.

**Educators' Notes on  
Improving this Activity**

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