

The Lines of Perception

Developed By	Victoria Baldwin - Thomas
Suggested Length	3 – 4 class periods per lesson
Suggested Grade Level(s)	10, 11, 12
Subject Areas	Social studies, visual arts, science

Overview

Students will interpret and comment on works in 1 and 2 point perspective, concentrating on the technical skills necessary to represent their own environment by investigating natural and man made locations.

Links to Curriculum Outcomes

Students will (be expected to)

- use spatial concepts and models to interpret and make decisions about the organization, distribution, and interaction of physical and human phenomena (social studies)
- analyse the causes and consequences of human modification of the environment on systems within the environment (social studies)
- show competence and responsibility in the use and manipulation of materials, tools and techniques (visual arts)
- work collaboratively in planning and carrying out investigations, as well as generating and evaluating ideas (445) (science)

Links to Telling Stories: Themes / Key Words

- Perspective

Art Works

- *A View of Summerside*, George Ackermann, CAG 78.24
- *Queen Street Charlottetown*, Robert Harris, CAG H-122
- *Market Day, Queen's square, Charlottetown*, Robert Harris, CAG H-115
- *Wharf at Charlottetown*, Robert Harris, CAG H-104
- *In Front of Charlottetown Park, Before Government House*, Robert Harris, CAG H-107
- *Charlottetown Street, 1869*, Robert Harris, CAG H-171
- *Old St. Dunstan's Cathedral*, William Harris, CAG H-1892

- *Craigdarroch Castle* (pen and ink), Robert Amos
- *Vancouver Street Grocery* (watercolor), Robert Amos
- *Shoppers on Government Street* (sketch), Robert Amos
- *Monro's Book Store on Government Street* (watercolor), Robert Amos

- *Fisgard Street at Twilight* (watercolor), Robert Amos

(See Suggested Resources for access to Amos works. If unavailable check the John Singer Sargent web site for selected works.)

Context

Instruct students in the basic principles of 1 and 2 point perspective. (See Suggested Resources.)

When social studies teachers are dealing with issues concerning the effects of society on the environment, they may find it useful to review with students how humans as a group have affected, negatively or positively, the world they inhabit.



Lesson #1: Make your Point

Objective Students will locate the focal point of works done in 1 point perspective and create a drawing of a street or landscape in their local area using 1 point perspective.

Materials

- smooth paper 11" x 14"
- ruler 12" or 16"
- pencils 2h, Hb, 2b, 3b
- paper tape

Activities

1. Review with students the importance of a focal point in a work of art.
2. Encourage students to collectively locate the focal point and the horizon line of the following works:
 - CAG 78.24
 - CAG H-122
 - CAG H-104
 - CAG H-107
 - *Shoppers on Government Street*
 - *Fisgard Street at Twilight*
 - *Henderson's*
 - *Fairfield at Moss Street* (or selected Sargent works)
3. Ask them how the artist leads the viewer's eye to the focal point (road, trees, clouds, water?) If they are having difficulty, ask them

to close their eyes and note the first thing they see when they open their eyes again.

4. Students decide on a landscape or city street they are familiar with.
5. Have students tape the paper horizontally on a hard surface.
6. Using a hard pencil put in the horizon line, noting that the lower the line, the less foreground will be in the picture. Suggest that they place the horizon line two-thirds from the top of the paper.
7. Then place the focal point (dot) anywhere on the line, connect the road or waterline to the focal point, block out the main elements of the drawing connecting to the focal point, and remove construction lines.
8. Students determine a light source and shade the picture accordingly. Ask them to refer to the methods in the above mentioned pieces.
9. Suggest that students observe the clouds in CAG H-107 that follow the perspective line to the focal point creating depth.
10. Invite students to circulate, comment on, and identify the focal point in classmates' pieces.



Lesson #2: Become Historians

Objective Students will research and sketch historical sites in their own community and draw conclusions regarding change in these areas due to human intervention.

Materials

- sketch book
- sketching pencils

Activities

1. In a class discussion students analyze the works listed above, paying special attention the use of perspective. Share ideas on the impact of the types of perspectives used (1 point, 2 point, or multiple point). Throughout, students note class comments in their sketchbooks for future reference.

2. Organize students in groups of four. Each group collaborates on the influence of Victorian society on the works. Students compare the works of Amos' Victoria BC (or Sargent's international pieces) to Harris' pieces.
3. Ask each group to decide on four sites in their community affected by social change. With students, decide on some sites to visit together, or have students go to the sites as an assignment. As the students view the sites they draw the areas in their sketchbooks, using 1 or 2 point perspective.
4. Take the students to a local library or historical society to research these sites as they were in the past. Students take notes and draw pictures (following the rules of perspective) in their sketchbooks for research material.
5. Groups reconvene and make conclusions on their sketchbook findings. Encourage them to question the changes made to their locations and debate whether these adjustments were necessary for the community or whether the areas should have been left unchanged.
6. Have each group write up a brief historical report including their opinions and findings, defended by their research.

Computer Option

- Search for additional information by accessing provincial sites, or local historical societies' sites.

Ideas for Assessment

Teachers may review the group's final report and compare it to their sketchbooks.

Check sketchbooks for research findings, and note if the sketches are in perspective.



Lesson #3: Views from the Corner

Objective Students will produce a watercolor in 2 point perspective from an original reference.

Materials

- pencils
- watercolor paper

- watercolors
- waterproof fine line pens
- 12" ruler
- kneadable erasers
- camera
- paper tape

Activities

1. Students examine CAG H-1892, CAG H-171. Also study *Craigdarroch Castle* (pen and ink, page 49) and Vancouver Street Grocery (watercolor, page 51) found in *Victoria*. This book is referenced in Suggested Resources.
2. Have students break down the elements of the buildings in the pictures into boxes, viewed from the corner.
3. Go on a field trip around town and have students take pictures of historical and contemporary buildings (from a corner angle). If your school has a digital camera, students may use it and print out their own photos.
4. Students prepare the watercolor paper by wetting and taping. Using their own photos as references, students lightly block in the cubes in proper perspective on the watercolor paper, eliminating detail.
5. Now students go over their pencil lines (avoiding construction lines) with the waterproof fine liners. Students carefully erase the graphite so as not to damage the rough surface of the watercolor paper.
6. Encourage students to determine the general emotional intent of their works. Remind them that a soft application of watercolor creates a less intense, relaxing piece.
7. Some students may choose to apply the watercolor (less pigment more water), with the intent of showing pen lines for an architectural effect. Others may choose to apply the watercolor (more pigment) in a more dramatic manner hiding pen lines and building up the color. Suggest that students consider letting the water run to create a loose, casual effect.
8. Students mount their work with the original photo for display.

Ideas for Assessment

In a whole class discussion, note depth of understanding as students comment on the various treatments of the buildings by their classmates.



Lesson #4: Changing the Landscape

Objective Students will question the environmental effects on landscapes over a given period of time and collaborate on probable results.

Materials

- sketching pencils
- sketch book
- ruler
- colored pencils

Activities

1. The class views the Harris landscapes noted above. Students question how he achieved depth in the pieces. Collectively, students speculate on the specific types of natural elements in the picture. They search for clues by noting such things as the angle of a branch, treatment of leaves, and colors used.
2. Briefly review the basic principles of perspective drawing. Have each student reproduce one piece as a loose sketch applying the principles of perspective.
3. Ask them to make notations by their sketches, identifying the natural elements of the piece (e.g., moss, maple tree, ferns, types of wildflowers, rocks).
4. Initiate a class discussion on how the area would look today.
5. The students research, or speculate on, the weather patterns on PEI since Harris painted the landscape. Were there significant storms or unusual freezing and thawing patterns that would have caused specific changes in the ecosystems?
6. Organize student in groups of four. Each group will determine what a Harris picture would look like in four stages, 25 years apart. They consider that, for example, plants may have died off and others taken over, or animal habitat may have been disrupted allowing specific plants to flourish. Students base their conclusions solely on natural factors (e.g., erosion).

7. Each student in the group draws one of the four stages as per the group consensus.
8. Students use colored pencils and the principles of perspective to aid in visual understanding. Notations are made on another page explaining the progression from one piece to the next.

Ideas for Assessment

Groups exchange sketchbooks. They assess the conclusions of their classmates, considering if they are viable.

Wrapping up the Learning

Have students reflect on the use of perspective drawing in landscapes as a visual aid that provides valuable clues to ecosystems of the past, and on how choices made in a society can irreversibly change their environment, ultimately impacting future generations negatively or positively.

Encourage students to become more aware of their surroundings and appreciate the value of interconnections among disciplines for researching and problem solving applications.

Suggested Resources

- *Victoria* (Robert Amos, 1990)
- *Perspective Made Easy* (David R. Morin, 1985)
- *Sargent* (Carter Ratcliff, 1982)
- John Singer Sargent Virtual Gallery (www.jssgallery.org)

