

Designing an Exhibit

This modelling the tools is incorporated into critical challenges at grade 8, however, it can be adapted for use at all grade levels.

Overview

These activities help students learn about the qualities and techniques of effective exhibits so they may incorporate these elements into their own exhibits. To begin, present examples of effective and ineffective exhibits to help students generate standards for exhibit design. Next, invite students to critique three exhibits at a local museum. If a local museum is not an option, invite students to take a virtual tour of a museum (see References). Based on their evaluation of the museum exhibits, students review the elements of an effective exhibit to create a checklist of qualities they want to include in their own exhibits. Next, students review their individual research to select the most important facts to feature in their exhibits, and then they prepare a mock-up of their design. After learning about constructive feedback, students critique each other's exhibit designs and suggest specific improvements. Finally, students use the constructive feedback to improve their own exhibits before presenting the finished exhibits to the class.

Session One

Distinguish between qualities and techniques

- To create the best possible exhibit, students need to distinguish between the qualities and techniques of effective exhibits. To help students make these important distinctions, create a two-column chart with the headings "Qualities (the effects or feelings)" and "Techniques (ways to achieve the quality)." In the Qualities column, write the words "soft" and "hard." Explain that qualities are characteristics or attributes that objects have. Ask students what kinds of materials are soft, e.g., fur, feathers, and what kinds of materials are hard; e.g., metal, wood, plastic. Explain that these materials can be added to the Techniques column because they are ways or means that achieve that particular quality. For example, if we were asked to make a soft pillow, we would use a technique to achieve this quality by selecting materials that are soft, such as feathers.

Qualities (the effects or feelings)	Techniques (ways to achieve the quality)
<ul style="list-style-type: none">• soft	<ul style="list-style-type: none">• fur• feathers• silk
<ul style="list-style-type: none">• hard	<ul style="list-style-type: none">• metal• wood• steel

Reinforce the concepts

- To ensure that students understand that the heading **Qualities** applies to objects and events, use school experiences as a new example. Ask students to suggest some of the qualities of classroom work; e.g., boring, interesting, fun. Record these qualities in the left-hand column. For each quality, ask students to suggest techniques or ways that represent the quality; e.g., long lectures, engaging text or videos, games at recess and gym.

Explore effective and ineffective exhibits

- Ask students who have been to a museum to identify their favourite displays and to indicate why. Using the same two-column chart, record the qualities of these exhibits that made them favourites; e.g. informative, interesting, fun. For each quality, ask students to identify the methods or techniques used in the exhibit to achieve that effect. For example, displays are fun because the exhibit is interactive, life-like and uses bright colours. Use a new chart to repeat this exercise for exhibits that students considered uninteresting or boring.

Introduce sample exhibits

- Explain that students will compare the qualities and techniques of two sample exhibits. Organize students into pairs and give each group a copy of [Comparing Two Exhibits](#). Explain that the purpose of this exercise is to identify the qualities of ineffective and effective exhibits so that students will be able to create an effective exhibit and avoid the pitfalls of ineffective exhibits. Explain that the sample exhibits show contrasting ways to construct an ancient Roman arch. Direct attention to the first exhibit and point out that although this is only a drawing, the actual exhibit has an interactive feature in which a visitor can place the numbered blocks in the basket onto the numbered template on the platform. After the blocks have been successfully matched to the numbered template, visitors can pull up the platform to test the self-standing arch. Visitors can also arrange the blocks improperly to see the arch crumble before them. Ask students to determine if this exhibit is effective and to provide reasons for their assessment. See the teacher briefing sheet [Analyzing the Sample Exhibits](#), which provides a sample assessment of successful and unsuccessful techniques.

Record criteria for effective exhibits

- Use the two-column chart to list student descriptions of qualities and techniques of effective exhibits. During the discussion, help students to distinguish between qualities and techniques. Use the prompts provided in [Analyzing the Sample Exhibits](#) to guide students' responses toward the qualities and techniques of an effective exhibit. Repeat this process for the second example, which is on ineffective exhibits. After completing both charts, ask students to agree upon the criteria for an effective exhibit. Focus on these qualities:

- interesting and engaging
- visually well-balanced
- understandable for intended audience
- educational and informative.

Record the criteria on chart paper and post for future reference.

Session Two

Pose the critical task

- Organize a trip to a local museum to help students learn about professional exhibits and the nature of the design process. Explain to students that they are to use their new knowledge of the qualities and techniques of effective exhibits to complete the critical task:

Critique and rank the effectiveness of three exhibits.

Introduce the evaluation form

- Organize students into groups of two and give each pair a copy of [Evaluating the Exhibits](#). Explain that the evaluation sheet asks them to rate the effectiveness of three exhibits on a scale of zero to three. Ask students to give reasons for their ratings by explaining how the techniques communicated the intended qualities. Check that students record the names of the exhibits they are evaluating.

Rank exhibits

- After students have evaluated the exhibits, ask them to tally the total score for each exhibit. Students can now rank the exhibits—first, second and third—based on the overall ratings. Lead a discussion in which each pair presents to the class, or a small group, the exhibit that received their best rating. Ask each group to specify the techniques that were used to make the exhibit effective. End the discussion by asking the class for examples of exhibits that were not effective. Ask students to identify what was missing from these exhibits and to suggest techniques to improve the exhibits.

Session Three

Identify most significant facts

- After students have finished their library and Internet-based research on their topic, ask them to look at the full list of facts to select the most important ones to include in their displays. Recommend that they select three to five facts per topic, but the number of facts will vary depending on the number of categories researched and age of students. The prioritized list of facts is important because it will make up the core content of their exhibits.

Review criteria for effective exhibits

- After students have identified the content of their exhibits, they can focus on design and layout. Explain that they will design a rough draft, or mock-up, of their exhibits. Review with students the elements that make effective displays by highlighting the qualities and techniques. You may want to refer to the posted list of qualities and techniques of effective displays. Broaden the discussion by encouraging students to brainstorm additional techniques that would enhance a display; e.g., live performances, audio messages, computer or interactive components.

Distribute technique checklists

- Hand out a copy of [Exhibit Checklist](#) to each student or group. Ask students to use this handout to create a checklist of techniques they wish to include in their display. These techniques should be the ones that students judge most likely to achieve the qualities of an effective exhibit, such as:
 - interesting and engaging (holds your attention)—bold title prominently placed; vivid and colourful images
 - visually well-balanced—different groups of ideas clearly separated; a good balance between images, text and display
 - educational and informative—written in a personal not a lecture style; clear set of important ideas presented
 - understandable for intended audience—written in language appropriate for the age and level of audience; no spelling or grammar mistakes to hinder meaning.

Pose the critical task

- After students have filled out their individual checklists of techniques they wish to incorporate in their exhibit, assign the critical task:

Design and sketch an exhibit based on your assigned topic.

Hand out a copy of [Exhibit Mock-up](#) to each student. Ask students to incorporate the qualities and techniques into actual mock-ups of their exhibits. Students should include all aspects of the design, including how they will layout the information categories. Explain that using a mock-up to design an effective exhibit helps students to develop pride in their work as the final product will provide evidence of thinking and effort. Decide if you will allocate time in class to work on the mock-ups or if you will assign it for homework.

Introduce peer review

- Explain that students will use a constructive feedback form to review and evaluate each other's work and to offer suggestions for improvement. The following activity will help students distinguish between productive and unproductive feedback.

Demonstrate productive and unproductive feedback

- Ask an adult volunteer or a student with a strong sense of self-esteem to volunteer for this demonstration. Before the activity, explain to the volunteer that he or she will experience both productive and unproductive feedback as part of the activity. Ensure the volunteer is comfortable in that role. Direct the volunteer to leave the room while you explain the activity to the class. Explain to students that the volunteer will be blindfolded and given six to eight ping-pong balls (crunched up pieces of paper will also work). The volunteer will be asked to toss as many balls as possible into a basket placed about eight feet away. There will be four rounds to this activity:
 - First round: Ask the class to remain silent and to give no help or suggestions to the volunteer.
 - Second round: Ask the class to be very critical of the volunteer's performance and to provide lots of exaggerated groans and jeers; e.g., "What a lousy shot!"; "You won't make the basketball team!".
 - Third round: Ask the class to be positive but very vague when giving suggestions for improvement; e.g., "Good throw!"; "Nice try!"
 - Final round: Ask the class to be positive and to provide constructive and specific suggestions on how to improve the shots; e.g., "Good arch on that throw. Lean into your throw more the next time."

After each round, tabulate the number of ping-pong balls the volunteer tossed into the basket and, after the fourth round, compare the scores. This activity should demonstrate that providing no comments, negative comments and vague, positive comments is of little help in improving success. Point out that the most helpful feedback for improving results consists of positive, specific and constructive suggestions.

Session Four

Introduce feedback form

- Distribute copies of [Constructive Feedback on Exhibits](#) to each student and ask them to provide feedback on the student mock-up exhibits. Ask students to exchange their completed mock-ups. Review the feedback form by explaining that in the top left-hand quadrant, students record a specific quality they liked in the person's exhibit. In the top right-hand quadrant, they explain how a used technique was effective in achieving this quality. For example, "The exhibit attracts my attention (quality) because of the large, bold title (technique)." In the bottom half of the chart, students are to provide suggestions on how to improve the exhibit by identifying two qualities that are lacking in the exhibit and suggesting techniques to add the missing qualities to the exhibit.

Complete peer review

- Review the posted criteria for effective exhibits or provide students with a copy of the criteria. Allow students time to complete the peer review and to explain to their partners or groups their positive comments and proposed improvements.

Create displays

- Provide students with an opportunity to revise and rework their mock-ups so as to incorporate the constructive suggestions. Give students sufficient time to complete their displays. Decide on the balance of in-class and at-home time to be allocated for this task.

Evaluation

Assess the exhibit evaluations

- Assess students' ratings and explanations as recorded on [Evaluating the Exhibits](#) by using the rubric found in [Assessing Student Evaluations](#). Assignments are assessed on two criteria:
 - completeness and relevancy of reasons given
 - identification of techniques to substantiate ratings.

Assess constructive feedback

- Assess students' identification of positive qualities and constructive suggestions as recorded on [Constructive Feedback on Exhibits](#) using the rubric found in [Assessing Constructive Feedback](#). Tasks are assessed on two criteria:
 - provides positive qualities
 - provides constructive suggestions for improvement.

Assess exhibits

- After students have finished their exhibits, assess each student's display using the rubric found in [Assessing the Exhibit](#). Assignments are assessed on four criteria:
 - interesting and engaging
 - visually well-balanced
 - understandable for intended audience
 - educational and informative.

References

- Title: *Glenbow Museum: Where the World Meets the West*
Host: Glenbow Museum, Calgary
Description: The Web site contains information about visiting exhibitions, permanent exhibitions, programs and events, collections and research.
Navigation Tips: Scroll down and click on Site Map at the bottom of the screen to view the contents of the site. Click on Exhibitions on the tool bar at the top of the screen to view information about past, present and future exhibitions. Click on Collections and Research on the tool bar at the top of the screen to access museum collections and to search the collection databases.
URL: <http://www.glenbow.org/>
- Title: *Virtual Museum of Canada*
Host: Department of Canadian Heritage
Description: The Web site is a portal to access content from museums throughout Canada. The Virtual Museum of Canada contains over 420 000 images in the Image Gallery, more than 150 interactive games and over 500 Virtual Exhibits and Community Memories Exhibits. Also included are a Teacher's Centre and a student-created museum (My Personal Museum).
Navigation Tips: Click on a category in the right-hand-side menu or click on a title listed in the bottom half of the screen to select an area of the Web site. Alternatively, mouse over the coloured gateways to reveal the categories and then click on a category to access the exhibit.
URL: http://www.virtualmuseum.ca/English/index_flash.html

Credits

This lesson is taken from *Legacies of Ancient Egypt*, edited by Roland Case and Catriona Misfeldt. Richmond, BC: The Critical Thinking Consortium, 2002. Permission granted by The Critical Thinking Consortium for use by Alberta teachers.


Documents

The following documents are referenced in the above modelling the tools. They can be adapted for your needs and re-saved.

Graphic Organizers

- [Constructive Feedback on Exhibits](#) 
- [Exhibit Checklist](#) 

Assessment

- [Assessing the Exhibit](#) 
- [Assessing Constructive Feedback](#) 
- [Assessing Student Evaluations](#) 

- [Evaluating the Exhibits](#) 

Lesson Material

- [Analyzing the Sample Exhibits](#) 
- [Comparing Two Exhibits](#) 
- [Exhibit Mockup](#) 