

Museum Building in the Classroom

This project has students creating a museum display designed from Inquiry based learning. This process increases the learner's deep knowledge about concepts, events, and important people and places (Higgs and Newby, 2005). Students acquire a deeper value for studying history and culture when building museums (Passe and Whitley, 1998).

Teachers choose an Outcome from the curriculum guide for the students to investigate and then create their museum display. The Outcome provides the theme for the classroom museum. The indicators are possible exhibits for the students to research and create. Using the attached ***Inquiry Process*** document, students can follow a step by step inquiry process model, with teacher support, to generate the deeper questions necessary to create an effective museum display and to satisfy the learning outcome.

The benefits of the project include:

- Inquiry based
- Allows for the differentiation of learning styles
 - Kinesthetic learners
 - Auditory learners
 - Visual learners
 - Multiple intelligences
 - Readiness
 - Interests
- Promotes the jig-sawing of class material where students can teach one another
- Cross curricular connection possibilities
 - ELA
 - Arts Ed.
 - Physical Education
 - PAA
 - Science
 - Career Guidance
 - Health
- Encourages access to community resources
 - Statues

- Memorials
- Landmarks
- Local parks
- Nature centers
- Historic buildings
- Hobbyists
- Artisans
- Writers
- Collectors
- Guest speakers

During the inquiry process students can use the indicators in the curriculum document to assist them if they run into problems or if they need parameters to focus their research.

Outcomes that fit the classroom museum project very well are: IN8.1, IN8.2, DR8.1, DR8.3, PA8.1, RW.2, RW8.3.

RW 8.1 was chosen as an example to show how an outcome that is more challenging for the project but can be used for a classroom museum.

Student interest will hopefully guide them to a topic within the theme to investigate. Student creativity will hopefully guide them to how to construct their exhibit and display their information in an engaging way. The following are some guidelines for teachers to help their students in creating an engaging museum exhibit.

WHAT MUSEUM'S MUST DO

Borrowed from *Sensing Architecture: New Ideas for the Architecture of Tomorrow*
by Maria Lorena Lehman

<http://sensingarchitecture.com/1713/top-10-tips-to-great-museum-exhibit-design/>

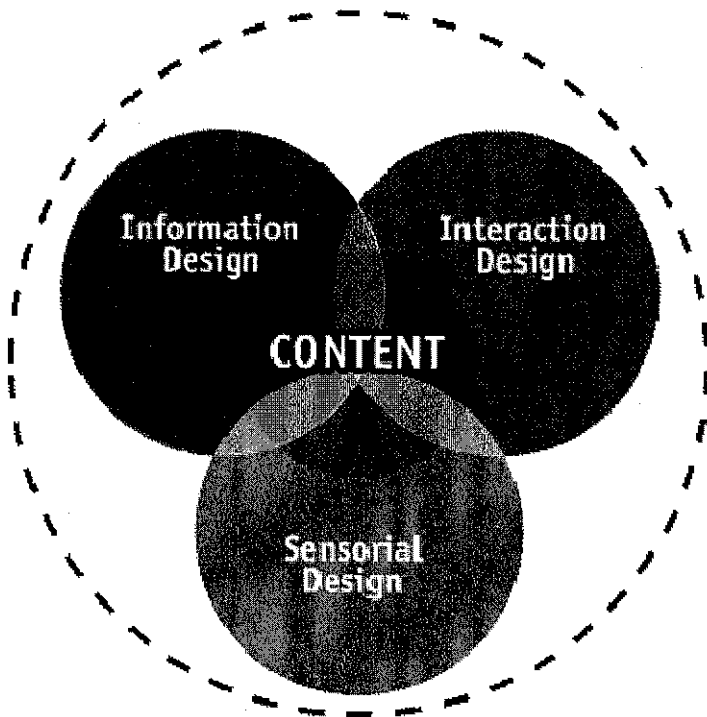
The following are 10 ingredients for successful museum exhibit design:

1. **Motivate Visitors:**
Target an audience — the general public and/or specific communities
2. **Focus Content:**
Filter content so visitors are not bombarded with information overload
3. **Immersion:**
Engage visitors within a "story"
4. **Modularity:**
Present smaller themes instead of one larger complex topic

5. **Skimmability:**
Information should be easy to take in because visitors are often standing and/or have different levels of education
6. **Patterns:**
Incorporate traffic/circulation patterns, exhibit sequence patterns and pre-existing framework patterns (architectural elements)
7. **Capture Curiosity:**
Use storytelling techniques to engage visitors
8. **Interaction:**
Give visitors a "fun" experience by tapping into their emotion
9. **Integrate Technology:**
Technology should enhance visitor's experience, not detract from it
10. **Layer Content:**
Present information in a hierarchical manner

Below is a graphic created by Nathan Shedroff (1994) and borrowed from the ***Exhibition design Guidelines*** website.

<http://users.ices.utexas.edu/~natacha/CATTt/theory.html>



Information design

Information Design is an approach to designing clear, accurate and understandable communications by giving care to structure, context, and presentation of data and information.

Interaction design

Interaction Design is an approach to designing interactive experiences (in any medium) which is concerned with the participant's experience flow through time.

Sensorial design

Sensorial Design is a term used to include the presentation of an experience in all senses (visual, hearing, touch, smell, and taste). It is simply the employment of all techniques with which we communicate to others through our senses.

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| Example |
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Outcome RW8.1:

Analyze the social and environmental consequences of living in the Canadian mixed market economy based on consumerism.

Possible Museum Theme:

Canadian mixed market economy: Consumerism and the social and environmental consequences.

Possible Exhibits (Indicators organized according to Bloom's Taxonomy)

Knowledge

- a. Group the producers of goods and services in the local economy as belonging to the public or private sector, and define the differences of the two groupings.
- b. Identify the purpose and characteristics of:
 - public enterprise
 - private enterprise.

Comprehension

- c. Explain the elements of a mixed market economy present in the lives of students.

Application

- d. An investigation of the goods and services produced in the local economy and the consumers of those goods and services (e.g., hospital, hairdressers, manufacturers, farmers, exporters).

Synthesis

- e. Represent the characteristics of a mixed market economy including the roles of the producer, consumer, and government.

Evaluation

- f. Evaluate the role of advertising in the mixed market economy.
- g. Determine the positive and negative social and environmental consequences for family, school, and community in the Canadian mixed market economy.

- h. Recognize the impact of living in situations in which assets are collectively or communally owned (e.g., First Nations, Hutterian communities).

If students are having difficulty generating questions for inquiry, the following list can aid teachers in helping their students.

Sample Question Stems and Activities or Product to

Accompany an Inquiry Unit in Social Studies

(if the students are having trouble coming up with their own)

According to the levels of Bloom's Taxonomy:

Knowledge:

1. What happened after...?
2. How many...?
3. Who was it that...?
4. Can you name the...?
5. Describe what happened at...?
6. Who spoke to...?
7. Can you tell why...?
8. Find the meaning of...?
9. What is...?
10. Which is true or false...?

Potential activities and products:

- Make a list of the main events..
- Make a timeline of events.
- Make a facts chart.
- Write a list of any pieces of information you can remember.
- List all the in the story.
- Make a chart showing...
- Make an acrostic.
- Recite a poem.

Comprehension

1. Can you write in your own words...?
2. Can you write a brief outline...?
3. What do you think could have happened next...?
4. Who do you think...?
5. What was the main idea...?
6. Who was the key character...?
7. Can you distinguish between...?

8. What differences exist between...?
9. Can you provide an example of what you mean...?
10. Can you provide a definition for...?

Potential activities and products:

- Cut out or draw pictures to show a particular event.
- Illustrate what you think the main idea was.
- Make a cartoon strip showing the sequence of events.
- Write and perform a play based on the story.
- Retell the story in your words.
- Paint a picture of some aspect you like.
- Write a summary report of an event.
- Prepare a flow chart to illustrate the sequence of events.
- Make a colouring book.

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| Application |
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1. Do you know another instance where...?
2. Could this have happened in...?
3. Can you group by characteristics such as...?
4. What factors would you change if...?
5. Can you apply the method used to some experience of your own...?
6. What questions would you ask of...?
7. From the information given, can you develop a set of instructions about...?
8. Would this information be useful if you had a ...?

Potential activities and products:

- Construct a model to demonstrate how it will work.
- Make a diorama to illustrate an important event.
- Make a scrapbook about the areas of study.
- Make a paper-mache map to include relevant information about an event.
- Take a collection of photographs to demonstrate a particular point.
- Make up a puzzle game using the ideas from the study area.
- Make a clay model of an item in the material.
- Design a market strategy for your product using a known strategy as a model.
- Dress a doll in national costume.
- Paint a mural using the same materials.
- Write a textbook about... for others.

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| Analysis |
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1. Which events could have happened...?
2. If ... happened, what might the ending have been?
3. How was this similar to...?
4. What was the underlying theme of...?
5. What do you see as other possible outcomes?

6. Why did ... changes occur?
7. Can you compare your ... with that presented in...?
8. Can you explain what must have happened when...?
9. How is ... similar to ...?
10. What are some of the problems of...?
11. Can you distinguish between...?
12. What were some of the motives behind...?
13. What was the turning point in the game?
14. What was the problem with...?

Potential activities and products:

- Design a questionnaire to gather information.
- Write a commercial to sell a new product.
- Conduct an investigation to produce information to support a view.
- Make a flow chart to show the critical stages.
- Construct a graph to illustrate selected information.
- Make a jigsaw puzzle.
- Make a family tree showing relationships.
- Put on a play about the study area.
- Write a biography of the study person.
- Prepare a report about the area of study.
- Arrange a party. Make all the arrangements and record the steps needed.
- Review a work of art in terms of form, colour and texture.

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| Synthesis |
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1. Can you design a ... to ...?
2. Why not compose a song about...?
3. Can you see a possible solution to...?
4. If you had access to all resources how would you deal with...?
5. Why don't you devise your own way to deal with...?
6. What would happen if...?
7. How many ways can you...?
8. Can you create new and unusual uses for...?
9. Can you write a new recipe for a tasty dish?
10. Can you develop a proposal which would...

Potential activities and products:

- Invent a machine to do a specific task.
- Design a building to house your study.
- Create a new product. Give it a name and plan a marketing campaign.
- Write about your feelings in relation to...
- Write a TV show, play, puppet show, role play, song or pantomime about...?
- Design a record, book, or magazine cover for...?

- Make up a new language code and write material using it.
- Sell an idea.
- Devise a way to...
- Compose a rhythm or put new words to a known melody.

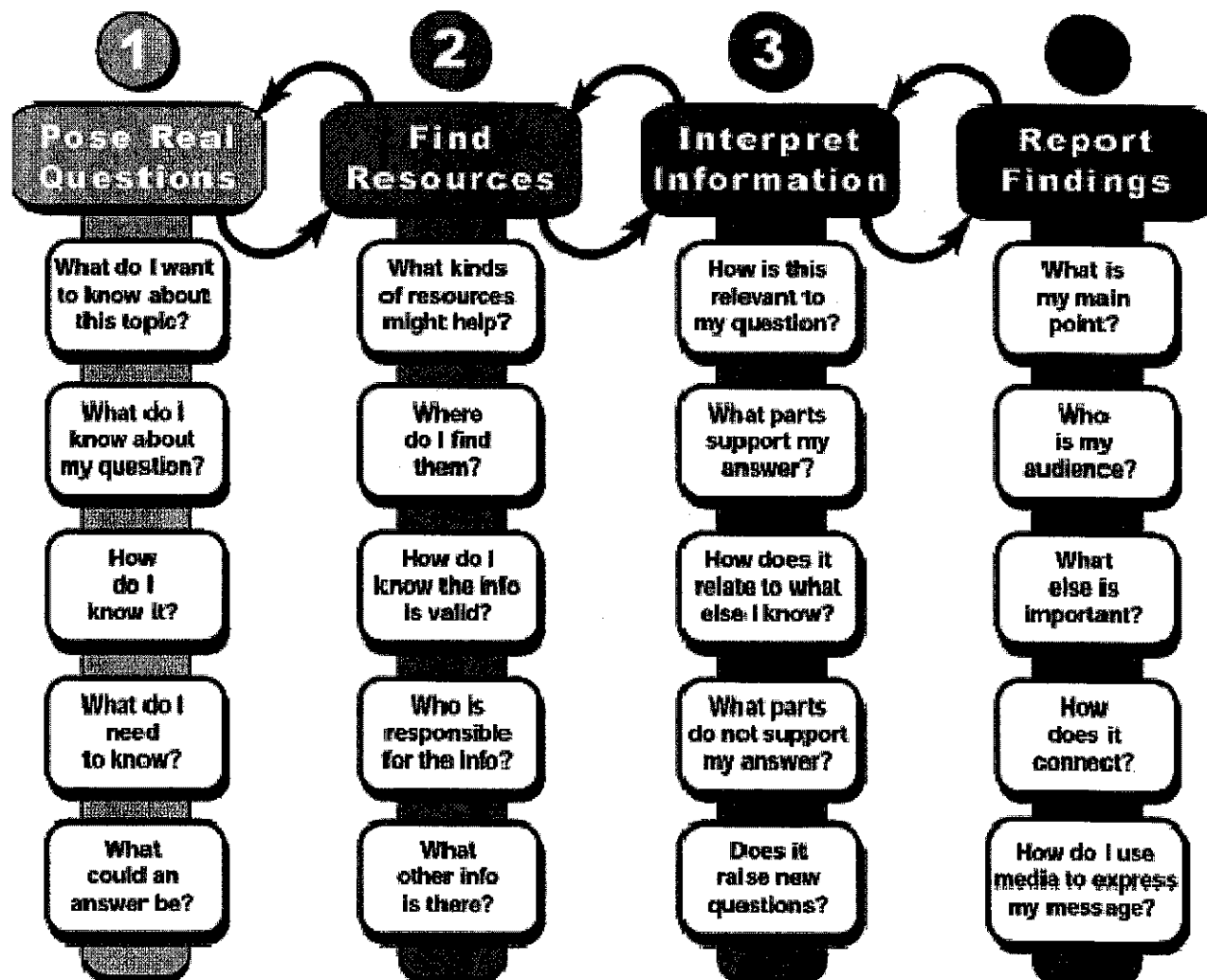
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| <i>Evaluation</i> |
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1. Is there a better solution to...
2. Judge the value of...
3. Can you defend your position about...?
4. Do you think ... is a good or a bad thing?
5. How would you have handled...?
6. What changes to ... would you recommend?
7. Do you believe?
8. Are you a ... person?
9. How would you feel if...?
10. How effective are...?
11. What do you think about...?

Potential activities and products:

- Prepare a list of criteria to judge a ... show. Indicate priority and ratings.
- Conduct a debate about an issue of special interest.
- Make a booklet about 5 rules you see as important. Convince others.
- Form a panel to discuss views, eg "Learning at School."
- Write a letter to ... advising on changes needed at...
- Write a half yearly report.
- Prepare a case to present your view about...

The Inquiry Process



| CATEGORY | Advanced | Comprehensive | Basic | Incomplete | Does Not Understand | POINTS |
|-----------------------------------|---|--|--|--|---|--------|
| Research Questions | 5 points | 4 points | 3 points | 2 points | 1 point | ___/5 |
| | Wrote thoughtful, creative, well-worded specific questions that were relevant to the assigned topic. | Wrote well-worded, specific questions that were relevant to the assigned topic. | Wrote basic questions that were relevant to the assigned topic. | Wrote questions which lacked focus, were poorly stated, and were not entirely relevant to the assigned topic. | Wrote questions which lacked a specific focus, were poorly stated, and not relevant to the assigned topic. | |
| Selection of Sources | 5 points | 4 points | 3 points | 2 points | 1 point | ___/5 |
| | Identified highly appropriate sources in a variety of formats (books, journals, electronic sources). | Identified mostly appropriate sources in a variety of formats (books, journals, electronic sources). | Identified some appropriate sources using some basic formats | Identified a few appropriate sources but made little attempt to balance format types. | Identified no appropriate sources in any format. | |
| Note-taking & Keywords | 5 points | 4 points | 3 points | 2 points | 1 point | ___/5 |
| | Extracted relevant information. | Extracted mostly relevant information. | Extracted some relevant information. | Extracted a lot of information which wasn't relevant. | Extracted irrelevant information. | |
| | Brainstormed keywords, categories, related terms that were effective in researching the questions. | Selected mostly effective keywords to use in researching the questions. | Selected basic keywords to use in researching the questions. | Selected some keywords that were not effective in researching the questions. | Selected no effective keywords to use in researching the questions. | |
| | Wrote notes including succinct key facts which directly answered all of the research questions and were written in the student's own words. | Wrote notes which included facts that answered most of the research questions and were written in the student's own words. | Wrote notes which included facts that answered some of the research questions and were written in the student's own words. | Wrote notes which included irrelevant facts which did not answer the research questions. Some notes were copied directly from the original source. | Wrote notes which included a majority of facts which did not answer the research questions. Most or all notes were copied word-for-word from the original source. | |

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|-----------------------------------|--|--|--|--|---|--------|
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| Organization and Synthesis | 5 points | 4 points | 3 points | 2 points | 1 point | ___/5 |
| | Presented content clearly and concisely with a logical progression of ideas and effective supporting evidence. | Presented most of the content with a logical progression of ideas and supporting evidence. | Presented basic content with some progression of ideas and supporting evidence. | Presented content which failed to maintain a consistent focus, showed minimal organization and effort, and lacked an adequate amount of supporting evidence. | Presented content which was unfocused, poorly organized, showed little thought or effort and lacked supporting evidence. | |
| | Selected an appropriate and effective format to creatively communicate research findings. | Selected an appropriate format to structure and communicate research findings. | Selected a somewhat effective format to structure and communicate research findings. | Needed to select a more effective format to structure and communicate research findings. | Failed to select an appropriate format to communicate research findings. | |
| Citations/Documentation | 5 points | 4 points | 3 points | 2 points | 1 point | ___/5 |
| | Cited all sources of information accurately to demonstrate the credibility and authority of the information presented. | Cited most sources of information in proper format and documented sources to enable accuracy checking. | Citation and documented sources are somewhat accurate. | Cited most sources of information improperly and provided little or no supporting documentation to check accuracy. | Created citations which were incomplete or inaccurate, and provided no way to check the validity of the information gathered. | |
| | Used information ethically all of the time. | Used information ethically most of the time. | Used information ethically some of the time. | Failed to use information ethically some of the time. | Failed to use information ethically. | |
| TOTAL POINTS | | | | | | ___/25 |

Tips for Planning a Classroom Museum

Borrowed from the *ELC Museums Education* website

<http://edubuzz.org/blogs/museums/making-a-classroom-museum/>

1. Decide which area you're going to use: classroom, a GP room, hall, or more than one room.
2. Establish where your entrance will be and a way of controlling numbers entering and exiting your museum. Plan the museum from this point onwards, from the perspective of a visitor.
3. Are you going to let people wander round your classroom museum, or will they be escorted by a tour guide? If not escorted, visitors may need a map and more room will be required to move around.
4. Play about with different layouts for your museum (this may change again once you complete your displays)

Essential things to remember:

- Leave space for a greeting desk at entrance to museum (especially if you are charging for entry)
- Set aside spaces for chairs in front of your whiteboard, or ensure there is space around it if children will be demonstrating using it
- Have children's corner in small area where children can sit on floor.
- Make sure your café/shop is in a corner, or different room, so it doesn't distract from your displays
- Don't put all text displays in one place.
- Your museum is likely to be noisy so make sure any displays including sounds are at an appropriate height and place for visitors to get their ear to!
- If any of your displays use demonstrators, set aside a chair or space for them to stand.
- Have your visitor's book in clear sight so that people can't leave without writing in it!

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