Title: An introduction to Curatorial Thinking

Subject area/discipline: Interdisciplinary

Grade level: 7-12

Suggested time:
- Synchronously (on-line or face-to-face): 125 minutes
- Asynchronously: 135 minutes

**Overarching critical inquiry question:** What are the most essential attributes for ground-breaking scientists who impact the future in positive ways?

**Overarching critical inquiry task:** Tell a compelling story of the discovery of insulin in a way that can inspire powerful future actions to a selected audience using the most appropriate medium.

**Lesson critical inquiry question:**
Can curatorial thinking help to make sense of information and to more effectively create a meaningful story?

**Lesson critical inquiry task:**
Organize artifacts so that they tell the story of Fredrick Banting’s life in a way that provides insights into the experiences and influences that helped to make him a ground breaking scientist.

**Central ideas/learning goals:**
- Develop an understanding of curatorial thinking and its value
- Develop awareness of important events that shaped Fredrick Banting’s life

**Related concepts**
- Validity
- Relevant
- Value
- Curation

**Key competencies**
- Assess credibility and relevance of sources
- Analyze variety of source materials
- Connect evidence gleaned from a variety of sources to construct a coherent story
- Think prospectively to connect evidence from sources for use to imagine powerful future actions
- Communicate effectively using images, captions and labels
Lesson overview
This lesson is built around a belief that schools have a moral imperative to help students become masters of their own knowledge building by giving them the tools to think curatorially so that they a) do not get lost in the morass of information; b) can contribute to our understanding of the past; c) can contribute to positively influencing the future; In this lesson, students are introduced to the concepts of curation and curatorial thinking. Students uncover how thoughtful curation deepens the thinking involved when learning through the study of artifacts.

Materials and preparation required
• 20 artifacts from Fredrick Banting’s life (a balance of texts, images and objects)
• Appendix 1: Analysis Sheet for Reading Around Artifacts (Selection and Archiving)
• Appendix 2: Reading Into Written Documents (Sense-making and Archiving)
• Appendix 3: Developing Sound Inferences
• Appendix 4: Interrogating an Image (Sense-making and Archiving)
• Appendix 5: Interrogating an Object (Sense-making and Archiving)
• Appendix 6: Connecto-Map

Opportunities for Differentiation
The lesson offers students the opportunity to delve into “curatorial thinking”. It is a rich lesson with several opportunities to modify the activities to meet the needs of a range of learners (grades, abilities, interests). Below are some suggestions for ensuring the needs of all learners are met:

1. Take care to select and assign artifacts that are accessible to students considering language, required background knowledge, and complexity of the item.
2. Consider using groups of three to examine artifacts. For students in Grades 7-8, invite each student to first examine one artifact (text, image, or object) and then to suggest revisions (changes or additions) to the other two to ensure multiple eyes supporting each other. In Grades 9-10, invite each student to fully examine three artifacts (text, image, or object), share their findings and receive feedback from 2 other students. In Grades 11-12, invite each student to fully examine multiple artifacts independently and to provide evidence of self-assessment against a given set of criteria.
3. Consider modeling how to examine each type of artifact (written, images, objects).
Launch the learning: (Synchronous: 10 mins; Asynchronous time: 15 mins)
Present students with a collection of 18 of the 20 artifacts provided (3 of each type of artifact) from Fredrick Banting’s life. Ask that they select the 9 artifacts they believe provide the most useful insights into the experiences and influences that helped to make him a ground breaking scientist. Invite students to share a post listing the artifacts they selected with a brief justification.

Note: Artifacts should include primary and secondary sources (textbook, newspaper, encyclopaedia)
Sample items
- Family photos
- His paintings
- Household artifacts
- Books
- Other

Set the task (Synchronous: 5 mins; Asynchronous time: 5 mins)
Inform students that their challenge will be to use selected artifacts to construct an inspiring visual story that tells of Banting’s life and what it takes to become a ground breaking scientist.

Build important background knowledge (Synchronous: 30-40 mins; Asynchronous time: 45 mins)

1. Provide students with a definition of what it means to “curate”. For example: 
   *To curate is to select items from among a large number of possibilities for self or others to use and enjoy.*

2. Suggest to students that curating can be done *thoughtfully* (carefully considered and the selection is based on a set of clear criteria) or *thoughtlessly* (selection is either random or based on personal preferences, no criteria is involved)

3. Present students with the following examples and ask them to sort the examples into two groupings: *Curating done thoughtfully* vs *Curating done thoughtlessly*. Many of the examples could be grouped under either heading depending on assumptions that are made. Encourage students to place at least 4 in each category and for 2 of their selections explain the assumptions they are making to determine the grouping. For example, if the items placed in the time-capsule were randomly selected items it would fit under *Curating done thoughtlessly*. If the selection was based on a purpose such as telling the story of your family’s arrival and life in your community and criteria such
as informative, provides unique insights and represents something important, then it would fit under *Curating done thoughtfully*.

- Creating a playlist
- Filling a scrapbook with pictures and mementoes from a trip
- Preparing a time-capsule
- Selecting your favourite snacks for a party
- Selling items you no longer use at a garage sale
- Setting out a selection of books on a bookshelf in a family room
- Selecting games you enjoy to take on a vacation
- Preparing your backpack for the first day of school

4. Co-construct a definition for “curatorial thinking” by inviting students to suggest words or phrases that describe an important difference between curating thoughtlessly and curating thoughtfully. If helpful, share the following chart to help solidify students understanding of what distinguishes curatorial thinking from curation.

<table>
<thead>
<tr>
<th>Curation</th>
<th>Curatorial Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating a playlist</td>
<td>Creating a playlist to support Black Lives Matter organized to illustrate the history of racism and resistance</td>
</tr>
<tr>
<td>Preparing a time-capsule</td>
<td>Creating a time-capsule that illustrates your family’s history in the community that you live</td>
</tr>
<tr>
<td>Hanging family photos on a wall in your home</td>
<td>Hanging a set of carefully selected photos organized so that they present the story of your family</td>
</tr>
<tr>
<td>Instagram posts</td>
<td>Posting a selection of related images with relevant captions that share a story of an event</td>
</tr>
<tr>
<td>Filling a scrapbook with pictures and mementoes from a trip</td>
<td>Creating a scrapbook that includes the most important and informative pictures and mementoes organized so that they capture the lasting impacts of a trip.</td>
</tr>
</tbody>
</table>

When co-constructing a definition consider that curatorial thinking:

- extends curation beyond the selection of items/artifacts to involve quality thinking in the selection, analysis, archiving, and sharing of information
- is a subset of critical thinking as it relies on the ability to thoughtfully select, organize and use information to communicate a compelling story.
- has a purpose that is primarily explanatory rather than evaluative, and consequently, curators hope to open doors to intriguing stories and invite others in.
If time permits and you wish to have your students consider the importance of curatorial thinking, ask them consider five statements (a-e) and select the three most convincing statements. Invite them to explain their selection by commenting on why they believe the statements selected are convincing.

a) In an information-rich world we are all curators on a daily basis. We select news from a wide range of sources, skim through various social media platforms, listen to views from our friends and family. We decide what to share, what to ignore, what to read.

b) Without curatorial thinking we rely on others to determine what is accepted as truth.

c) Curatorial thinking invites everyone to contribute to building knowledge of the past and present removing control over our collective memory from the hands of a small elite group of scholars.

d) As we consume information we decide how it fits with what we already know – what it adds to our body of knowledge and how it challenges our beliefs.

e) If we are unable to curate information we will become overwhelmed with the information that we encounter every day.

Teach the tools for curatorial thinking (the way in which students make sense of overwhelming mounds of information they encounter on daily basis).

1. Inform students that curatorial thinking involves an iterative process. Three iterative or repeating phases lead to the final phase of sharing: The three iterative phases are Selection, Archiving, and Sense Making. Each of these phases are informed by the other. After an initial selection of trustworthy artifacts, students will begin to cluster artifacts in related groupings. As they engage in sense-making through deeper analysis of the artifacts they may see new connections across and within clusters. Remind students that often artifacts will not speak directly to them but may reveal important insights through sound inferencing. Note, the analysis and making connections involved in sense making require that students are able to form sound inferences. Inferring is a key tool in becoming a competent curatorial thinker. If students are unfamiliar with how to form sound inferences consider using Appendix 3: Developing Sound Inferences. They may also realize that some artifacts are revealing insights they had not initially recognized or that other artifacts are expendable as they are not offering any new information or insights. Hence, the iterative nature of curatorial thinking.
Selection-----Archiving-----Sense-making-----Archiving-----Sharing

a) **Selection:** The scrutinizing of artifacts
   - Involves consideration of the usefulness of a variety of artifacts
   - Usefulness depends on three essential criteria: **validity** (can the artifact be trusted to provide accurate information?); **relevance** (does the artifact contribute information that relates to the issue being explored?); and, **adds value** (does the artifacts provide helpful evidence or insights that adds to what is already known?)

b) **Sense Making:** Coming to understand what artifacts can tell us
   - Involves careful reading or examination of the artifacts that have been selected
   - Requires both observation and inference to draw out useful conclusions about the artifact
   - Requires making connections between the evidence and insights that the artifact yields and the broader understanding of the issue

c) **Archiving:** Grouping artifacts to help discern trends, patterns and to detect overlapping evidence
   - Requires determining which artifacts are essential to constructing understanding; which are helpful and worth keeping; and which are expendable
   - Involves determining how to cluster artifacts to create a cohesive story
   - Allows for the recognition of a range of perspective
   - Contributes to prospective thinking (forward focus) by revealing trends, patterns
   - Supports the generation of innovative ideas that are inspired by the emerging clusters

d) **Sharing:** Constructing and sharing narratives
   - Involves the use of the selected artifacts to construct a narrative account of the event that is accurate, informative and insightful
   - Requires the careful consideration of purpose (is the intent of the narrative primarily to entertain, inform, warn, persuade, celebrate etc.) and audience (for whom is the narrative intended?) in the construction of the narrative

2. Suggest to students that a helpful framework when engaging with curatorial thinking is the Read Around the Artifact; Read Into the Artifact; and to Read Beyond the Artifact.
3. Bring back the 18 artifacts that began the lesson. Assign artifacts to students in a way that differentiates their learning (see Opportunities for Differentiation for suggestions) and invite students to begin with a “Read Around” their artifact(s).

**Introduce “reading around the artifact”** (Synchronous: 15 mins; Asynchronous time: 15 mins)

4. Explain that “reading around an artifact” involves quickly scanning the object—not engaging in careful analysis for the moment. Suggest that peripheral clues to understanding the artifact may include the following features:
   - type and condition of the material,
   - dominant features of the artifact,
   - any headings or subheadings,
   - stamps or markings,
   - opening and closing salutations.

5. Provide student with a copy of Appendix 1: Analysis Sheet for Reading Around Artifacts. Remind students to consider the criteria for useful artifacts by asking themselves these questions:
   a. Is the artifact **relevant** to the issue I am exploring?
   b. Considering by whom and when the artifact was created, can I **trust** the clues it provides?
   c. Does my scan of the artifact suggest that it is likely to **add value** (new information) to what I already know?

6. Once students have had an opportunity to “read around” their artifact and to make observations and draw inferences encourage them to rate the usefulness of the artifact in helping to tell an inspiring story of Fredrick Banting’s life that also reveals what it takes to make someone a ground breaking scientist. Invite students to share (via short statement to the class or a brief post online) why they believe the artifact they examined should be kept or set aside.

**Introduce “reading into” the artifact** (Synchronous: 15 mins; Asynchronous time: 15 mins)

7. Re-distribute the artifacts that students have recommended be kept. Inform students that after having read around the artifacts they will now do a more careful examination of the evidence by “reading into” the artifacts. “Reading into” the artifacts involves two important steps.

   **Step 1:** Suggest students do a “lateral” examination of their artifact. A lateral examination involves a skimming of written artifacts or a scan of images or items to get a general sense of what the text/image is about or the object might be. To
affirm the validity of the source or the soundness of their assumptions based on their scan, encourage students to consult 2-3 reputable sources (a text book, a website they are familiar with, an encyclopedia). If the sources consulted support the initial reading students are ready to go to step 2. If the sources consulted raise concerns, students should set aside the artifact and try to do additional research to see if there is a conflict between the artifact and sources, or if the validity of the artifact, is called into question.

**Step 2:** Inform students they are now ready to do a deep dive into their artifact by doing a careful examination and analysis of their artifact. If the artifact students are examining is:

- written text provide students with a copy of Appendix 2: Reading Into Written Documents
- an image, provide them with a copy of Appendix 4: Interrogating an Image
- an object, provide them with a copy of Appendix 5: Interrogating an Object

**8.** Review each of the Appendices and if necessary work through an example for each to ensure students understand how to use the analysis sheet to help them “read” their artifact.

**Introduce Reading Beyond** (Synchronous: 10 mins; Asynchronous time: 10 mins)

**9.** Inform students that “reading beyond the artifact” involves making connections between the artifact they have examined and what they already know to be true and/or what has been revealed through the examination of related artifacts.

**10.** Invite students to share (through discussion or posting) key insights they have learned from the individual artifacts they examined that will be helpful in constructing an inspiring story of Fredrick Banting’s life and that also reveals what it takes to make someone a ground breaking scientist.

**11.** Provide students with Appendix 6: Connecto-Map. As the insights revealed by each of the artifacts is presented, encourage students to make connections in support of developing a complete picture of the various elements that made up the character of Fredrick Banting and influences that helped to shape his life and make him a ground breaking scientist. Encourage students to consider how the insights presented help us to understand 1 or more aspects of Banting’s life and character. Also, encourage them to use arrows to make connections between related insights to show how they help to form a complete picture of Banting as a person.
12. Applaud students for their perseverance in completing their careful study of historical artifacts. Remind them that they are now ready to construct (or curate) an insightful (and informative) story of the life of Fredrick Banting that reveals what it takes to make someone a ground breaking scientist.

13. Review from Lesson 1, the details of the Seven Sentence Story Structure from their Thoughtbook. Ask students to sequence 9 artifacts that have been studied during this lesson to set out a story that:
   - provides accurate and important information about events and experiences that shaped Banting’s life;
   - highlights important contributions Banting made during his life; and
   - points to important character traits that contributed to Banting becoming a ground breaking scientist

**Connect to the over-arching task:** (Synchronous: 10 mins; Asynchronous time: 10 mins)

1. Invite students to go back to their insulin story they began to construct in Lesson 1 and encourage them to add artifacts from Banting’s life that contribute to telling the story of the discovery of insulin that highlights Banting’s role as a ground breaking scientist. Remind students to add ideas from this lesson to their 7 Sentence Story Structure Thoughtbook so that they are continuing to build their compelling story that highlights the attributes of ground-breaking scientist.