Digital Libraries & K-12 Uses of Primary Sources
A UBC Library Study
Erin Fields, UBC Library
Peter Musser, SLAIS MLIS Student
The use of primary sources in classrooms has many benefits and can foster discussion, encourage high-level thinking, and allow students to engage in the historical research process by actively interpreting the past. To **broaden the reach and impact of the proposed BC Historical Documents Project** and of our current and past projects, we hope to **bring our collections into K-12 classrooms across British Columbia** in a way that promotes inquiry and critical thinking, and creates connections between students and the past.

With the **increase of open education resources and the need to prepare students with core 21st century competencies** the way to reach our audience requires an investigation into the use of digital environments for identification, analysis, adaptation, and retention of **historical resources** for the instruction of students. Historically museums, art galleries, and archives have engaged students by fostering a personal connection to materials by providing face-to-face, hands-on activities and events. This type of learner-centred experience needs to be reflected in an online environment. This proposal seeks to **investigate an open online education tool that will support teachers, and the broader community, in use of the BC Historical Documents in the classroom.**

Project Proposal (Version 21/07/2017) , Open Education Environment - BC Historical Digitization Project Proposal

Duhamel du Monceau, M., 1700-1782, Fisheries 1782
Research Design

Survey + Digital Primary Tool Evaluation + Simulated Task Scenarios + Interviews
Literature Review

Interdisciplinary subject, including:

- Library and Archival
- Education
- Galleries and Museums
- Education Pedagogy
- Teaching Practice

Focused Literature Review on the following:

- Historical Thinking & Literacies
- Digital Primary Source Use in Classrooms
- Digital Libraries & Archives - Education Critiques
- Education Development in Cultural Institutions

Core Authors
Seixas, Levesque, Harris, Levstik. Hicks, Menzies. Birrell, Lee, Levine
Historical thinking focuses on the concept of students developing historical narratives by critically engaging with primary sources.

Casual rather than integrated use of digital primary sources with the use of technologies focusing on teacher-centred approaches

Use of primary sources to communicate information about the past and add “flare” to lectures and presentations fails to engage students in constructing historical narratives.

Distribution of user groups and use cases make decisions about content, resource development and system infrastructures more diverse calling for future development of DLs to incorporate a wider array of user perspectives to remain relevant.

Continued growth of national and international approaches to digitization and access to cultural materials, increasing the use of digital collections in learning environment at all levels, and current outreach practices in academic digital libraries to support the use of collections in public libraries, schools, and museums.
Survey

Seeking Social Science Teachers to Participate in a UBC Library Survey

Delivered - September 24 to October 25th, 2017

BCSSTA | COSSTA | The History Education Network | UBC-O Faculty of Education | UBC Faculty of Education Alumni Engagement | Social Media

Table 2: Demographics of Participants (n=37)

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Teaching Status</th>
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<tr>
<td>0 years</td>
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<td>1-5 years</td>
<td>Long-term occasional contract</td>
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<td>6-10 years</td>
<td>Teacher-on-call/Supply/Substitute</td>
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<td>11-15 years</td>
<td>Grade Level*</td>
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<td>16-20 years</td>
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<td>2</td>
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<td>+20 years</td>
<td>6</td>
<td>3</td>
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<tr>
<td></td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>British</td>
<td>32</td>
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<td></td>
<td>Alberta</td>
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<td></td>
<td>Manitoba</td>
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<td></td>
<td>Nova Scotia</td>
<td>1</td>
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<td></td>
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Table 3: Demographics of Schools (n=37)

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<td>Urban</td>
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<td>Suburban</td>
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<tr>
<td>Rural</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>1 (on reserve)</td>
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<table>
<thead>
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<th>Size</th>
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<tr>
<td>&lt;500 students</td>
<td>7</td>
</tr>
<tr>
<td>500-1500 students</td>
<td>25</td>
</tr>
<tr>
<td>&gt;1500 students</td>
<td>4</td>
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</table>
Survey Results

46% use primary sources to support student engagement in historical inquiry

44% use web-based lessons and activities requiring online engagement with a tool or resource

75% feel that finding resources is too difficult

75% feel there are too many sources to sift through to find relevant sources

92% are finding digital primary sources through general web searching (e.g. Google)

100% believe there is limited time to engage with sources available
Tool Evaluation

Step 1: Gauging tools broadly with Bates’ modified SECTIONS model
- **Students**: Transferable skills being developed?
- **Ease of Use**: Learning curve? Documentation?
- **Cost**: Time/money costs?
- **Teaching Functions**: Built-in assessment functionality?
- **Interactivity**: Facilitates interactivity?
- **Organizational Issues**: Is there support provided?
- **Novelty**: Different from what’s found in classrooms?
- **Security/Privacy**: Requires/protects personal information?

Step 2: Evaluating specific functionality
- UBC CTLT SECTIONS guide
- Nielsen’s “10 Usability Heuristics for Interface Design”
- Marchionini’s “Information Seeking in Electronic Environments”
- Electronic Frontier Foundation’s report on HTTPS

[https://open.library.ubc.ca/](https://open.library.ubc.ca/)
Tool Evaluation Results - Common Functionality

Search functionality - search bars, filters, graphic search results

Searching as Learning - provided institution-curated content, topic-based metadata (broader and narrower), linked metadata

Learning Functionality - designed for student use, designed to facilitate engagement with primary sources, a “shopping cart,” low learning curve, placing the primary source in wider historical context

Safety/Security/Privacy - HTTPS was a major weakness

Usability & Other - Clean & fast interfaces, minimal jargon, consistent style across platform. Free!
Top Tools

Historica Canada

NARA DOCSTeach

Smithsonian Learning Lab

Choose from Thousands of primary sources for use in classroom activities

Canada

Sort By: Relevance Title Date Popularity

Map of the United States of America with the British Possessions in Canada, New York, New England, the West Indies and the South Sea Islands, 1795. 

"Fish-Eye" Camera View of the United States-Canada Rainbow Bridge, 1954.

www.thecanadianencyclopedia.ca/en/learningcentre/

https://www.docsteach.org/

https://learninglab.si.edu/
Assessment - Part 1
Simulated Work Task Scenario

“...a short textual description that presents a realistic information requiring situation that motivates the test participant to search the [information retrieval] system.”
(Borlund 2016 p. 395)

Task: Use UBC Open Collections to find digital primary sources to use in lesson plans covering discriminatory policies against Asian Canadians (e.g. Chinese head tax, Japanese internment) for social studies students at your grade level.

Functionally, a supervised usability test of UBC Open Collections. Results are still being analysed.

9 participants grades 4 through 12
Average 9 ¾ years teaching experience
High: 28 years Low: 1 ½ years

Harry Bullock Webster Collection, Travel Diary 1880 - December Snow - Misery
12441 results found.

1 to 20 of 12441

Report of the Royal Commission on Chinese and Japanese Immigration
BC Historical Books
Canada. Royal Commission on Chinese Immigration — 1902
Show Details

BC Historical Books
Canada. Royal Commission on Chinese Immigration — 1880

Genre
Legislative proceedings

Subject
Chinese—Canada. Chinese—California

Description

Printed by order of the commission. — Title page.

Results on pages: 12 13 34 96 97 100 110 118 123 132
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<td>Creator</td>
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<td>Publisher</td>
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<td>Date Issued</td>
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<tr>
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Simulated Work Task Scenario - Results

Still being analyzed, but broadly:

- Users *expect* Open Collections to function like Google (it doesn’t)
  - Searching for general terms like “head tax”
  - Frustration with nothing *apparently* meaningful in the first few pages of the results
  - Delayed recognition of filters

- Users have domain and topic knowledge
  - They know dates, places, and ideas and apply these to their searches

- Users have preference for images over text in search results
  - A thumbnail of a photo is more likely to be received positively than the cover of a book
  - Object metadata that shows up in search results (title, collection, publish date) wasn’t well-received; teachers would have preferred a narrative description
  - Images are sought as a way to reinforce the teacher’s knowledge or student’s interest
Assessment - Part 2
Interviews

Sample Questions

1. Tell me about the activity/lesson plan you were thinking of developing when you reviewed the scenario.
2. What was your experience using Open Collections to find sources for your activity/lesson plan?
3. Were there any tools, functionalities, or information that was helpful when thinking through developing your activity/lesson?

A qualitative "approach" is a general way of thinking about conducting qualitative research. It describes, either explicitly or implicitly, the purpose of the qualitative research, the role of the researcher(s), the stages of research, and the method of data analysis.

Descriptive | InVivo | Process | Simultaneous | Patterns
Interview Themes

[Hooking the Students] … I would want my students to get lost in there [Open Collections]. I’d want them to just kind of go down the rabbit hole, so to speak, and just find what they find in it.

[Historical Literacy] … maybe reading letters that they’ve written and trying to really see the event through their eyes and possibly maybe comparing it to news articles written from non-Japanese people and then try to compare how the story might have been different.
[Time] Sometimes I plan my units in a 50-minute prep, or I start a unit that I planned and then the kids need more information. In that situation where they've led the learning to a new place, I wouldn't go to here to try and find them that new information only because there was so much available, and I felt like I had to click on everything to actually see what it was.
**Teachers** So, someone needs to come to my school and say, “Bring a laptop. We’re going to learn how to use the library.” And then, honest to goodness, I know it’s going to sound crazy….you literally have to walk people through things, like first do this, next click here, right.?

**Students** I’m going to be honest with you. As much as they use technology - they have phones and they watch YouTube and whatever, Instagram, Snapchat - they don’t know how to use computers.
Interview Themes - Search System

[Filters] I think when I typed in a date to the -- I typed it from 1941 to 1949, and then the article or newspaper from 1983 were popping up.

[Collection Searching] The newspaper one was a little but confusing just because it needed a lot of extra searching after you searched.

[Boolean] ...(teachers) would just come in and just type in, “Chinese internment camp” … instead of doing, “Chinese + Vancouver + whatever” …
Interview Themes - Electronic Display

[Context]

…I clicked on one that says it’s a leather book. I don’t care. As a teacher, I don’t care, right. I would like if it actually said something of what was in the book. Almost like a description that’s on a back of a book when you pick it up.

Some of them (primary sources) didn’t have the previews so it was harder to tell what they were going to be.
Interview Themes - Emotional

So maybe it’s just the way that I was searching. It probably is.

And maybe I didn’t do a very good search because I haven’t been in university in a while, so I had to really think.
Interview Themes

[Education Use]
...as a teacher, I want the 10 best ones.
.... Ways you can search through, either grade-level or group concept.
...make those connections to the curriculum.

[Training]
...teachers would really like PD where you kind of introduced the basics of the tool.
...you know sometimes you go to some websites, they have a little video and it says, “hey do you want to learn how to use this?”, something like that would be useful, right.
Initial Impressions - Peter

Keep Teachers in Mind:

- Curation of collection materials
- Rethinking metadata: linked, relevant, & obvious
- Designing interfaces with the user in mind
- Developing robust training & documentation

Source: Uno Langmann Collection
Initial Impressions - Erin

- Communications & Marketing Strategies
- Supports & Services within Open Collections
- Instructional Programs in Faculty of Education
Resources

UBC Open Collections:
https://open.library.ubc.ca/

Primary Sources for K-12 Educators LibGuide:
http://guides.library.ubc.ca/PrimarySourcesEducators

UBC Education Library:
https://education.library.ubc.ca/

Contact us:
Erin Fields (erin.fields@ubc.ca) and Peter Musser (pmusser@gmail.com)
Thank You!

Questions?
Bibliography

- Hicks, P., Doolittle, P. & Lee, J. (2004). Social Studies Teachers’ Use of Classroom-Based and Web-Based Historical Primary Sources, Theory & Research in Social Education. 32(2). 213-247


Friedman, A. (2009) The Effect of Teacher’s Conceptions of Student Abilities and Historical Thinking on Digital Primary Source Use in Research on Technology in Social Studies Education. Information Age Publishing. P189-204 (print)


Wynne, Ann. (April 1999) History Instruction and the Internet: A Literature Review. Journal of the Association for History and Computing 2(1), 1-10


