

Grades 9-12

Learning about evidence and interpretation

Overview

This lesson is one of a series that introduces six historical thinking concepts developed by Peter Seixas of the University of British Columbia. Each lesson supports teachers in using a video to introduce one of the concepts. The videos are available at <http://www.tc2.ca/videos.php>. The lessons are available in different versions for grades 6-8 and grades 9-12.

This lesson's written materials and seven-minute *Evidence and Interpretation* video offer an engaging way to introduce students to the concept of evidence and interpretation using the example of Chinese Canadian contributions to the Canadian Pacific Railway. Students consider how photographs of the "last spike" may be used appropriately and inappropriately as evidence. Interpretations of a telegram sent to Prime Minister Sir John A. Macdonald regarding the deaths of Chinese railway workers are discussed.

Historical evidence and interpretation

History is not simply a description of "what happened." All we learn about the past comes from clues that have been left behind and discovered, be they artifacts (e.g., tools, photographs, buildings, drawings), documents (e.g., wills, catalogues, posters) or written and oral descriptions. This evidence needs to be critically examined by asking the question, *Is the evidence adequate to support the conclusions reached?* Understanding the sources and limitations of historical evidence is necessary if students are to appreciate the tentative nature of historical knowledge.

Objectives

Students will understand that:

- evidence is information offered to establish a fact or support a position
- evidence can be found in primary and secondary sources
- whether we can trust evidence depends on its reliability
- the validity of evidence depends on whether it is used appropriately, and whether it is relevant to the questions being asked
- interpretations of evidence can be reasonable or unreasonable – the latter if they extend beyond what the evidence itself can reasonably support

This resource was developed with contributions from:



Learning about evidence and interpretation

Suggested activities

BEFORE THE VIDEO

Consider photographic evidence

Invite students to consider the four photographs on the information sheet, *Canadian teens in the 21st century*. Ask students whether evidence in these photos support the notion that “Canadian teens lead wholesome, active lives.” Allow students to discuss their thoughts in small groups.

Assess the quality of the evidence

Ask students how they determined whether the photographs support (or do not support) the statement. In other words, guide them in unpacking the criteria for the quality of evidence. For example:

- Is it **reliable or trustworthy**? (and how do we know?)
- Is it **relevant**? (does it answer the question we’re asking)
- Is the interpretation **reasonable**? (do the conclusions go beyond the evidence?)

Ask students to use the activity sheet, *Historical evidence and interpretation*, to assess the quality of the evidence found in the four photographs. Students should recognize that the photographs represent aspects of the Canadian teenage experience, but that they appear staged, perhaps developed for advertising purposes and they do not represent the diversity of Canadian teenagers or their experiences. Focus on student reasoning and consideration of the nuances of reliable, relevant evidence rather than on any one particular conclusion.

Connect to the lesson

Make the connection between this personal example and history by suggesting that evidence used to support historical ideas and interpretations should be similarly subject to such analysis. Tell students they will be analyzing evidence regarding the attitudes towards Chinese railroad workers in Canada in the late 19th century.



DURING THE VIDEO

Invite students to view the video, *Evidence and Interpretation*. Ask students to relate the decisions they made about the photos of teenagers in Canada to what they learn about evidence in the video. Pause the video at each of the three questions posed by the presenter (at approximately 2:07, 3:50 and 4:27 minutes). Ask students what aspects of evidence and interpretation they considered before the video and what new aspects the video introduced. Provide students with multiple opportunities for viewing at their own pace, if possible.

Learning about evidence and interpretation

AFTER THE VIDEO

Make connections

Give students the opportunity to discuss how the video's considerations of evidence relate to the photographs of teenagers. Invite students to explore the following questions. Sample responses are provided.

- Are the photographs authentic and to be trusted and how do they decide? (*Students are posed, looking at the camera.*)
- Are the photographs complete? (*No, they are not complete. All were taken outdoors, all the people are slim, good looking, smiling and well dressed. Racial bias evident overall.*)
- Are the photographs relevant to the questions asked? (*No, they do not reflect, or try to reflect, the range of experiences of Canadian teenagers in the 21st century. Some appear to be advertising related.*)
- Do the photographs support the interpretations? (*Not really. Photographs and writings and perhaps broad studies that reflect the real experiences of Canadian teenagers would be more appropriate evidence.*)

Ask students how this understanding of evidence and interpretation might change their thinking about evidence that focuses on Chinese railroad workers in the late 19th century.

Provide context

Introduce the basic context of Chinese railroad workers in the late 19th century:

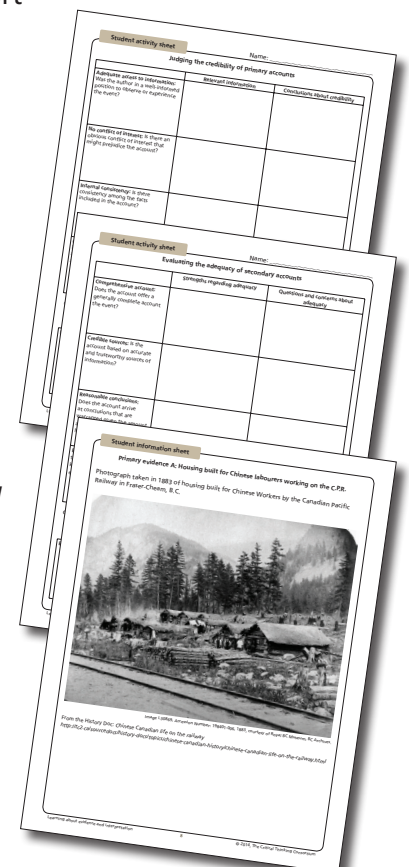
American contractor Andrew Onderdonk was hired to complete construction of the Canadian Pacific Railway in British Columbia in 1779. Between 1880 and 1881, he hired over 1500 experienced Chinese railroad workers from the United States. Then he began hiring people to transport workers directly from China. In total, over 17 000 Chinese immigrants arrived between 1881 and 1884, of which over 10 000 came directly from China. At the peak of railway building, Onderdonk employed 6000 Chinese workers and 3000 white workers.

Introduce and assess sources of evidence

Primary sources need to be assessed for their credibility while secondary accounts need to be evaluated for the justifiability of their claims. The student activity sheets, *Judging the credibility of primary accounts* and *Evaluating the adequacy of secondary accounts*, are designed to help students with these kinds of assessments. Provide students with four sources, included as student information sheets in this document, regarding attitudes in late 19th century Canada toward Chinese railroad workers:

- two examples of primary evidence, *Housing built for Chinese labourers working on the C.P.R.* and *Newspaper account of Chinese deaths*
- two examples of secondary evidence, *The National Dream* and *Rereading Chinese Head Tax Racism*. You may wish to provide students with access to additional primary and secondary evidence regarding attitudes in late 19th century Canada toward Chinese railroad workers.¹

Depending on your students' experience, you may wish to introduce the two activity sheets through teacher modeling with a gradual release of responsibility to enable independent use.



¹ For additional primary and secondary sources go to <http://tc2.ca/sourcedocs/history-docs/topics/chinese-canadian-history.html>
www.tc2.ca

Learning about evidence and interpretation

Evaluate an interpretation

Once students have assessed the sources, ask them to use the student activity sheet, *Evidence and interpretation*, to evaluate the following interpretation regarding attitudes toward Chinese railroad workers: *In late 19th century Canada, Chinese workers were respected for their contributions to the TransCanada railway.* Inform students they are to critique each piece of evidence for its reliability, relevance and how well it supports the conclusion.

Rewrite the interpretation

Ask students in pairs or small groups to share their conclusions and come to a consensus about the interpretation supported by this evidence. Give students the challenge of rewriting the interpretation so it is corroborated by all the evidence to the satisfaction of the group.

Share interpretations

Invite students to share their rewritten statements with the class and discuss the differences such as the addition of qualifiers. For example, it may be more accurate to say, "Chinese workers were not well respected for the contributions," than, "Chinese workers were not respected for their contributions," as there were some people who did respect their contributions.

Choosing terms carefully to avoid ambiguous meanings is another strategy. For example, the term "respect" may be interpreted merely to mean recognition of a contribution or it might have deeper connotations of both recognizing and valuing the contributions.

Assessment for understanding

You may wish to ask students to use the rubric *Assessing understanding of evidence and interpretation* with this activity. This self-assessment can be used to help further identify what aspects of the concept students understand and what aspects need review.

Student activity sheet Name: _____

Evidence and interpretation

Interpretation: In late 19th Century Canada, Chinese workers were respected for their contributions to the TransCanada railway.

Write each piece of evidence according to the three criteria using the following scale and provide brief explanations for your ratings:

	1	2	3	4	5
Does not support the interpretation at all					Completely supports the interpretation
Reliable? Explanation:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Relevant? Explanation:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Supports interpretation? Explanation:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Considering all these factors, write the evidence that best supports the interpretation?	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Rewrite the interpretation so it is supported by at least three pieces of evidence listed above.

Learning about evidence and interpretation © 2014, The Critical Thinking Consortium™ www.ctc2.ca

Self-assessment rubric Name: _____

Assessing understanding of evidence and interpretation

Rate your level of understanding for each aspect using the following scale:

Complete confusion	1	2	3	4	5	Total understanding
To rate your understanding consider the extent to which you are able to:						
- accurately explain the relevant concepts in your own words						
- give specific and substantive examples and evidence to support your ideas						
Aspect of understanding						
Understand what it means to use evidence to create historical interpretations.	Level of understanding:		Evidence/Explanation:			1 2 3 4 5
Use literary primary and secondary sources.	Level of understanding:		Evidence/Explanation:			1 2 3 4 5
Can judge the credibility of primary sources using the following criteria: <ul style="list-style-type: none">- Adequate access to media: Who the author is or a well-defined position to observe or experience the event?- No conflict of interest: Is there a conflict of interest that might prejudice the accuracy?- Internal consistency: Is there consistency among the facts included in the account?- Consistency with other information: Does the account align with or contradict other accounts?	Level of understanding:		Evidence/Explanation:			1 2 3 4 5
Can assess the reliability of a secondary account using the following criteria: <ul style="list-style-type: none">- Credible: Does the account offer a generally complete picture of the event?- Credible: Does the account being interviewed?- Reasonable conclusions: Does the account give an account of what are supported by the record and nature of the available evidence?- Balanced perspective: Does the account fairly represent key aspects of the event?	Level of understanding:		Evidence/Explanation:			1 2 3 4 5

Learning about evidence and interpretation © 2014, The Critical Thinking Consortium™ www.ctc2.ca

Learning about evidence and interpretation

TAKING IT FURTHER

The following activities might be used to further develop the concept of evidence and interpretation:

- Invite students to examine photos and other primary sources offered in textbooks or online resources. Some questions to ask include: Is this complete? What is missing? Where did the image or document come from? Is the evidence authentic? Does this portray what it is proposed to portray? Is this photo staged? If so, by whom?
- Regularly evaluate textbooks for evidence and conclusions. When conclusions are reached are they backed up with evidence? If so, is the evidence offered adequate? Relevant? Reliable?
- Develop historical arguments. Regularly invite students to use collections² of primary and secondary evidence to develop historical arguments; or provide students with a choice of historical arguments and invite them to research sources. (e.g., To what degree is Billy Bishop a hero?)
- Develop alternate explanations. Similarly, students may be provided with an historical interpretation and asked to revisit the interpretation by reassessing the evidence cited in the original argument, or in light of new evidence. (e.g., Ask students to assess Billy Bishop's heroic status from the German point of view.)
- Assess competing arguments. Competing interpretations of evidence are common. Provide students with two different textbooks and ask them to evaluate their coverage of a relevant event, with particular focus on their interpretations of the evidence.

² A wide variety of Canadian history primary and secondary documents is available at <http://tc2.ca/sourcedocs/>

Canadian teenagers in the 21st century

As these photographs show, Canadian teenagers lead wholesome, active lives.

1.



2.



3.



4.



Historical evidence and interpretation

Do the photographs support the notion that “Canadian teens lead wholesome, active lives according to the following criteria?

Photograph 1

Is the evidence reliable?	Is the evidence relevant to the question being asked?	Is the interpretation reasonable?
---------------------------	---	-----------------------------------

Photograph 2

Is the evidence reliable?	Is the evidence relevant to the question being asked?	Is the interpretation reasonable?
---------------------------	---	-----------------------------------

Photograph 3

Is the evidence reliable?	Is the evidence relevant to the question being asked?	Is the interpretation reasonable?
---------------------------	---	-----------------------------------

Photograph 4

Is the evidence reliable?	Is the evidence relevant to the question being asked?	Is the interpretation reasonable?
---------------------------	---	-----------------------------------

Student information sheet

Primary evidence A: Housing built for Chinese labourers working on the C.P.R.

Photograph taken in 1883 of housing built for Chinese Workers by the Canadian Pacific Railway in Fraser-Cheam, B.C.



Image I-30869, Accession Number: 198401-006, 1883, courtesy of Royal BC Museum, BC Archives.

From the History Doc: *Chinese Canadian life on the railway*

<http://tc2.ca/sourcedocs/history-docs/topics/chinese-canadian-history/chinese-canadian-life-on-the-railway.html>

Primary evidence B: Newspaper account of Chinese deaths

Excerpt from an 1883 newspaper article that discusses the lack of medical care for Chinese workers on the C.P.R.

Here in British Columbia along the line of the railway, the Chinese workmen are fast disappearing under the ground. No Medical attention is furnished nor apparently much interest felt for these poor creatures. We understand that Mr. Onderdonk declines interfering, while the Lee Chuck Co. (labour contractors), that brought the Chinamen from their native land, refused, through their agent Lee Soon, who is running the Chinese gang at Emory, to become responsible for doctors and medicine.

Yale Sentinel (1883), quoted in Berton, Pierre. *The Last Spike*. Toronto: Anchor Canada, 1971.

Secondary evidence A: The National Dream

Excerpts from popular historian Pierre Berton's 1974 book, *The Great Railway*, that describes the construction of Canada's transcontinental railway.

Chinese coolies ... could be employed for one dollar a day. In addition, they did not require all the paraphernalia of a first-class camp. The coolie was prepared to move about in the wilderness, set up his own camp and pack all his belongings, provisions, and camp equipment on his back. Michael Haney, who went to work for Onderdonk in 1883, discovered that it was possible to move two thousand Chinese a distance of twenty-five miles and have them at work all within twenty-four hours.

Many inflammatory incidents occurred because of accidents along this line, for which the Chinese blamed the white foremen. On one such occasion, about ten miles below Hope, a foreman named Miller failed to give his gang warning of a coming explosion; a piece of rock thrown up by the subsequent blast blew one coolie's head right off. His comrades took off after Miller, who plunged into the river to save himself Deaths appeared to happen oftener [sic] among the Chinese labourers than in the white group.

Source: Berton, Pierre. *The Great Railway*. Toronto: McClelland & Stewart Inc., 1974, p. 296-298.

Secondary evidence B: Rereading Chinese Head Tax Racism

In an essay written in 2002, historian Lily Cho questions the more common explanations and reasons given for the introduction of the Chinese Head Tax.

Generally, critics have understood the head tax as a racist instrument of restrictive immigration policy, one that sought to limit Chinese immigration once Canada no longer needed cheap Chinese labour... a policy of state-sanctioned discrimination motivated by repugnance [strong dislike] for Chinese immigrants in Canada.

[...]

My investigations reveal that the contributions of Chinese immigrants were recognized from the beginning, suggesting that the head tax might have been more ambivalent [hesitant/of two minds] in its intention than one of simple and outright exclusion. From the first report of the Royal Commission on Chinese Immigration in 1885 and throughout the head tax debates, the desirability [importance] of Chinese labour in Canada surfaced frequently. The evidence submitted for the 1885 report ...turned again and again to the importance of Chinese labour to an emerging nation... To suggest -- as many writers have -- that the head tax functioned as an example of Canada's hatred of Chinese is to ascribe [assign] a uniformity [sameness] to the Canadian body politic [people] that simply did not exist. The 1885 report and the House of Commons debates on the head tax reveal deep divisions along the lines of class and geography within the white Canadian community on the question of Chinese immigration. Chapleau ... marked out this division... "In general, the wealthy class, the best-educated class, is favorable to the Chinese" (Canada, *Parliament Debates 1885*, 3006). For the authors of the 1885 report, and throughout the House of Commons debates, anti-Chinese sentiment was consistently attributed to working- and lower-class Canadians in British Columbia.

[...]

Although most discussions of the head tax refer to it as a policy designed to restrict Chinese immigration, these discussions do not question the contradiction between the stated purpose of the legislation (to keep Chinese out) and its effect (an increase in Chinese immigration during the head tax years)... [T]he Chinese were not expendable [unessential] in 1885, nor was the railway a completed project. The last spike was driven in on 7 November 1885, but it was more a photo opportunity than a sign of the actual completion of the railway.

[...]

One of the clearest indications that the head tax functioned as a tool for pacifying fear and anxiety in Western Canada lies in understanding an often overlooked fact of accounting. Many writers have assumed that the revenue [profits] from the head tax went straight into Ottawa's coffers [treasury]. This was not the case. During the 1903 parliamentary debates, just before the bill to raise the head tax to five hundred dollars was read for the third time, Prime Minister Wilfrid Laurier stated that, "Under the old law the proportion of the poll tax to be paid to the province [of British Columbia] was one-quarter, and now it will be one-half" (Canada, *Parliament Debates 1903*, 2399)... Clearly, British Columbia was meant to benefit from the head tax more so than other provinces. What is more, it had always received more benefit from the head tax. The basic facts of accounting point directly to the way in which the head tax functioned as a means of appeasing an increasingly angry BC population.

Source: Cho, Lily, "Rereading Chinese Head Tax Racism: Redress, Stereotype, and Antiracist Critical Practice" in *Essays on Canadian Writing*. Toronto: ECW Press. Winter 2002, Issue 75.

Judging the credibility of primary accounts

	Relevant information	Conclusions about credibility
Adequate access to information: Was the author in a well-informed position to observe or experience the event?		
No conflict of interest: Is there an obvious conflict of interest that might prejudice the account?		
Internal consistency: Is there consistency among the facts included in the account?		
Consistency with other information: Does the account align with or contradict other accounts?		

Overall conclusion

Highly credible

Probably credible

Questionable

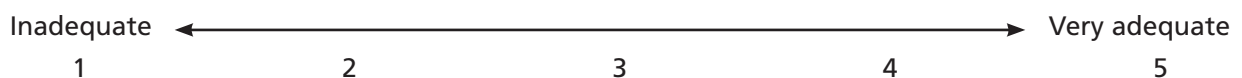
Not at all credible

Explanation

Evaluating the adequacy of secondary accounts

	Strengths regarding adequacy	Questions and concerns about adequacy
<p>Comprehensive account: Does the account offer a generally complete account the event?</p>		
<p>Credible sources: Is the account based on accurate and trustworthy sources of information?</p>		
<p>Reasonable conclusions: Does the account arrive at conclusions that are warranted given the amount and nature of the available historical evidence?</p>		
<p>Balanced perspective: Does the account fairly represent key perspectives of the events?</p>		

Overall evaluation of the account:

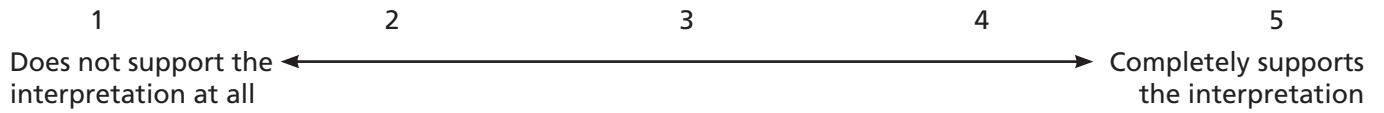


Explanation:

Evidence and interpretation

Interpretation: *In late 19th Century Canada, Chinese workers were respected for their contribution to the TransCanada railway.*

Rate each piece of evidence according to the three criteria using the following scale and provide brief explanations for your rankings:

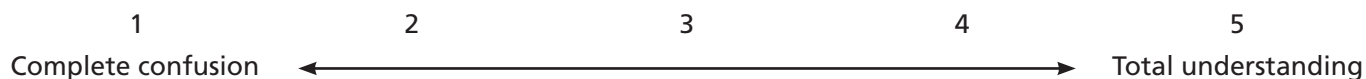


	Evidence:	Evidence:	Evidence:	Evidence:
Reliable? Explanation:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Relevant? Explanation:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Supports interpretation? Explanation:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Considering all three factors above, is the evidence adequate to support the interpretation?	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Rewrite the interpretation so at least three pieces of evidence support it:

Assessing understanding of evidence and interpretation

Rate your level of understanding for each aspect using the following scale:



In rating your understanding consider the extent to which you are able to:

- accurately explain the relevant concept(s) in your own words
- give specific and informative examples and evidence to support your ideas

Aspect of understanding	Ratings
I understand what it means to use evidence to create historical interpretations.	Level of understanding: 1 2 3 4 5 Evidence/explanation:
I can identify primary and secondary sources.	Level of understanding: 1 2 3 4 5 Evidence/explanation:
I can judge the credibility of primary accounts using the following criteria: <ul style="list-style-type: none"> • Adequate access to event: Was the author in a well-informed position to observe or experience the event? • No conflict of interest: Is there a conflict of interest that might prejudice the account? • Internal consistency: Is there consistency among the facts included in the account? • Consistency with other information: Does the account align with or contradict other accounts? 	Level of understanding: 1 2 3 4 5 Evidence/explanation:
I can assess the adequacy of a secondary account using the following criteria: <ul style="list-style-type: none"> • Comprehensive account: Does the account offer a generally complete account the event? • Credible sources: Is the account based on accurate and trustworthy sources of information? • Reasonable conclusions: Does the account arrive at conclusions that are warranted given the amount and nature of the available evidence? • Balanced perspective: Does the account fairly represent key perspectives of the events? 	Level of understanding: 1 2 3 4 5 Evidence/explanation: