



Raising Doubts

being skeptical when presented with information

Learning outcomes

- understand the merits of being skeptical when presented with information
- appreciate the difference between cynicism and raising doubts
- develop probing questions about the credibility and adequacy of textual and visual information

☐ primary

☒ intermediate

☒ middle

☐ secondary

Introduce

Consider the statement

- Present the statement as a claim made in an advertisement. Ask students if they believe the statement. Suggest that it is often useful to question information before reaching a conclusion. Proceed with the brainstorm.
- Once students have generated questions, invite them to cluster the questions, using the following headings:
 - believable
 - understandable
 - comprehensive
 - supported

Student activity

Brainstorm what is not known about the statistic and the source or author.

***“9 out of 10 dentists recommend Peppo-mint toothpaste”
Advertising Agency Institute***

Possible responses

- *How many dentists were asked?*
- *Were the dentists paid to recommend the product?*
- *What question was asked?*
- *Who conducted the survey?*
- *Is it the only brand recommended?*

Believe it or not?

- Introduce and discuss each prompt. Suggest that the prompts are a tool to help students raise possible doubts. Distribute copies of *Believe it or not?* and invite students to work with a partner to raise doubts about each situation provided, or work through the examples collaboratively as a whole class.

Student activity

Discuss each of the prompts.

Use the prompts to help raise doubts about each situation presented in *Believe it or not?*

Factors	Prompts
Believable	Are the statements or contents accurate—did things likely happen as reported? Do they seem plausible or realistic?
Understandable	Is anything unclear or confusing? Are any parts misleading or exaggerated?
Comprehensive	What perspectives are shown? Would looking from another perspective change the representation? Have important parts of the situation been left out?
Comprehensive	Are reasons or supporting details included? Does the evidence seem relevant and convincing?

Assessment for learning

- Use the *Raising doubts rating scale* to assess for learning. Guide students in describing “excellent” for the first criterion.

Decide when to be skeptical

- Ask students to think about the questions, discuss their responses with a partner and then share their ideas with the class.

Student activity

What is the difference between being skeptical (raising doubts) and being cynical (disbelieving everything)?

Why is it important to be skeptical of information?

Should we be skeptical about everything? When is it important to be skeptical of information?

Possible responses

- *Being skeptical is being open to the possibility that everything may not be true; being cynical is deciding nothing is true.*
- *We need more information or evidence before making decisions or drawing conclusions.*
- *When a decision needs to be made.*
- *When others might be affected.*
- *When the author's purpose is to sell or convince.*

Explore

Review an example

- Discuss each of the components in the *Raising doubts data chart*. Reinforce the use of the prompts to raise doubts about observations and details. Explain that the data chart provides a guide for applying the *Raising doubts* strategy.
- If necessary, practise the strategy, using the following example.
“An advertisement for pop claims that, in a taste test, 100 percent of those tested chose their product.”

Student activity

Discuss the steps in raising doubts, using the *Raising doubts data chart*.

Read the *Stop the violence* article and review the *Sample use of the strategy*.

How well does the example meet the criteria for excellent?

SAMPLE
use of the strategy

STUDENT RESOURCE

Factors	Possible doubts
Reliability	Are the witnesses or sources reliable? Are they likely to be biased?
Understandable	Is the message or purpose clear? Are all parts contributing to the message?
Completeness	What perspective can I see? What's missing from another perspective?
Consistency	Are the sources consistent with each other? Do they all support the same message?

Summary of contents and overall message
The article is written by a local reporter and describes the fight of violence in the city of Chicago. The message is to stop the violence.

Observations/details	Possible doubts
The reporter is a local reporter.	Is the reporter a local reporter? Is the reporter likely to be biased?
The reporter is a local reporter.	Is the reporter a local reporter? Is the reporter likely to be biased?
The reporter is a local reporter.	Is the reporter a local reporter? Is the reporter likely to be biased?
The reporter is a local reporter.	Is the reporter a local reporter? Is the reporter likely to be biased?

Overall level of doubt very doubtful somewhat doubtful not at all doubtful

Assessment for learning

- Revisit the *Raising doubts rating scale*. Use the *Sample use of the strategy* to review and revise (if necessary) the descriptor for the first criterion. Guide students in describing “excellent” for the second criterion.

Examine an assigned article

- Find a relevant newspaper article or select a section from a textbook or novel. Instruct students to use the *Raising doubts data chart* to raise doubts about the assigned text.
- Alternatively, invite students to find an article or piece of text they believe may warrant skepticism and use the chart to record doubts.

Student activity

Use the *Raising doubts data chart* to record observations and raise doubts about the assigned or selected text.

Assessment for learning

- Invite students to use the *Raising doubts rating scale* to assess self- and peer-assess their work.

Raising doubts data chart

Factors	Possible doubts
Reliability	Are the witnesses or sources reliable? Are they likely to be biased?
Understandable	Is the message or purpose clear? Are all parts contributing to the message?
Completeness	What perspective can I see? What's missing from another perspective?
Consistency	Are the sources consistent with each other? Do they all support the same message?

Summary of contents and overall message

Observations/details	Possible doubts

Overall level of doubt very doubtful somewhat doubtful not at all doubtful

Examine an image

- Suggest to students that images are also sources of information that require careful examination before reaching conclusions.
- Show students a copy of Image #1, available at http://tc2.ca/images/raising_doubts/image1.jpg. Provide students with a copy of the *Raising doubts data chart*. Guide students in summarizing the contents or message of the image, recording observations and generating questions or statements that indicate their possible doubts. Encourage students to use the prompts to help them raise doubts.

Student activity

Look at the picture and talk to a partner about what you see.

Use the *Raising doubts data chart* to summarize the content, record observations and raise doubts about the picture.

Assessment for learning

- Invite students to use the *Raising doubts rating scale* to assess self- and peer-assess their work.



Examine the image again

- Explain to students that the previous picture was cropped. Show students Image #2 (the complete image), available at http://tc2.ca/images/raising_doubts/image2.jpg
Discuss the impact of the new information on the previous doubts raised.

Student activity

Look at the complete picture.

How does this change:

- the overall message
- the doubts you raised
- your level of doubt for either picture?



Assessment for learning

- Invite students to use the *Raising doubts rating scale* to assess self- and peer-assess their work.

Reflect

Consider the purpose

- Explain to students that *Raising doubts* is a strategy that could be used independently both in and out of school.
Use the suggested activities to review the purpose of the *Raising doubts* strategy and reinforce its independent use.

Student activity

Which of these purposes is the most relevant for raising doubts?

- showing that I am smart
- questioning information before I reach a conclusion.
- questioning everything

For one minute, think about places to raise doubts in and out of school.

For one minute, share your ideas with a partner.

Share your ideas with the class.

For one minute, share your ideas with a partner.

Possible responses

- question any text or visual resource, including textbooks
- -think about advertisements, political stories and campaign information, pictures on posters, and music videos

Apply the strategy on your own

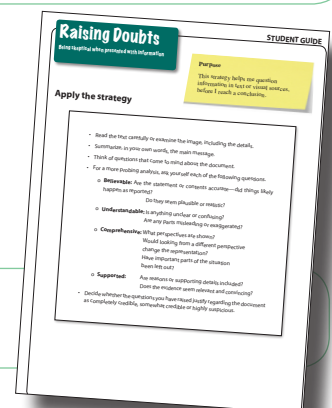
- Encourage students to discuss the steps in the Raising doubts strategy. Following the discussion, provide students with a copy of the *Student guide* and compare their sequence to the suggestion in this resource.
- Explain that the *Student guide* is a document that reminds students how to use

Student activity

Arrange the steps in a logical order to apply the *Raising doubts* strategy.

Assessment for learning

- Introduce the rubric *How well do I raise doubts?* Suggest to students that the rubric is useful in assessing their ability to raise doubts after they have practised the strategy for some time and are learning to use it independently.





Believe it or not?

Factors	Possible doubt
Believable	Are the statements or contents accurate—did things likely happen as reported? Do they seem plausible or realistic?
Understandable	Is anything unclear or confusing? Are any parts misleading or exaggerated?
Comprehensive	What perspectives are shown? Would looking from another perspective change the representation? Have important parts of the situation been left out?
Comprehensive	Are reasons or supporting details included? Does the evidence seem relevant and convincing?

What they said	Possible doubts
A headline in the entertainment section of the newspaper says "The Vikings have returned!"	
You find a brochure in a hotel lobby that shows a tropical island. The caption says that it is always sunny and warm, children can do whatever they want and they never have to go to school. The title of the brochure is "Tell your parents you wanna go!"	
You go to a restaurant and see a long lineup at the door. The people close to the front of the line tell you that they have been waiting for a long time and suggest that you go to a different restaurant. The hostess takes your name and says it will be just a few minutes before you are seated.	



Raising Doubts

RATING SCALE

Describe "excellent" for each criterion. Use the *Sample use of the strategy* to identify the features of excellent. When reviewing examples of raising doubts record specific evidence from the work under "evidence for rating".

I can think of many possible doubts or reasons to be skeptical.

Excellent

Not yet

"Look fors" (evidence of excellent):

Evidence for rating:

I can judge the overall level of doubt.

Excellent

Not yet

"Look fors" (evidence of excellent):

Evidence for rating:



Raising doubts data chart

Factors	Possible doubt
Believable	Are the statements or contents accurate—did things likely happen as reported? Do they seem plausible or realistic?
Understandable	Is anything unclear or confusing? Are any parts misleading or exaggerated?
Comprehensive	What perspectives are shown? Would looking from another perspective change the representation? Have important parts of the situation been left out?
Comprehensive	Are reasons or supporting details included? Does the evidence seem relevant and convincing?

Summary of contents and overall message

Observations / details	Possible doubts

Overall level of doubt very doubtful somewhat doubtful not at all doubtful



Stop the violence!

Imagine that the following article appeared in a local newspaper. Use the Raising doubts *data chart* to think about this piece of text and decide whether you need more information.

Stop the violence!

by Daisy M.

He shoots ... he scores ... he bleeds! We never hear the last part of that phrase but, unfortunately, it's happening more and more often in our community hockey leagues. Already this year, our league has witnessed three concussions, a dislocated shoulder, and many bloody noses—and hockey season isn't even half over!

Last Sunday's game in the Hometown Arena was no exception. One of the star players of the Ourtown Orioles received an uncalled-for check when she wasn't looking and lay injured on the ice for several minutes before she could get up again and make her way to the bench. She has been diagnosed with a concussion, and will not be able to play in next week's tournament because of a shoulder injury.

As NHL hockey becomes more and more violent, we are seeing the same type of play among our girls and boys on the ice. Even the NHL's general managers are beginning to admit how serious hockey injuries can be and are working on guidelines to restrict the use of certain plays that have been known to cause serious injury. When the president of our hockey association was asked for his opinion, he replied, "This is a physical sport and the kids need to get used to it if they want to advance. Of course, we always put our players' safety first and we do all that we can to make sure that the game is played fairly and penalties are called when rules are broken."

An informal survey of parents after last Sunday's game shows that 90% of parents would like to see less violence in the sport. Maybe it's time for parents to start demanding change or threatening to pull their kids from the league. Something's gotta give.

Daisy M. is a regular contributor to the sports section of the Ourtown News. Her daughter is a member of the Ourtown Orioles. Check out Daisy's blog, Journal of a Hockey Mom, and read her column in this space every Monday.

Raising Doubts

Being skeptical when presented with information

Purpose

This strategy helps me question information in text or visual sources, before I reach a conclusion.

Apply the strategy

- Read the text carefully or examine the image, including the details.
- Summarize, in your own words, the main message.
- Think of questions that come to mind about the document.
- For a more probing analysis, ask yourself each of the following questions.
 - o **Believable:** Are the statement or contents accurate—did things likely happen as reported?
Do they seem plausible or realistic?
 - o **Understandable:** Is anything unclear or confusing?
Are any parts misleading or exaggerated?
 - o **Comprehensive:** What perspectives are shown?
Would looking from a different perspective change the representation?
Have important parts of the situation been left out?
 - o **Supported:** Are reasons or supporting details included?
Does the evidence seem relevant and convincing?
- Decide whether the questions you have raised justify regarding the document as completely credible, somewhat credible or highly suspicious.

Factors	Possible doubt
Believable	Are the statements or contents accurate—did things likely happen as reported?
Understandable	Is anything unclear or confusing? Are any parts misleading or exaggerated?
Comprehensive	What perspectives are shown? Would looking from another perspective change the representation? Have important parts of the situation been left out?
Comprehensive	Are reasons or supporting details included? Does the evidence seem relevant and convincing?

Summary of contents and overall message

The article is written by a hockey mom and describes the level of violence in the local hockey league. She compares it to the NHL. She wants parents to demand change.

Observations / details	Possible doubts
She reports the number of injuries.	Are the number of injuries increasing? Are there a lot of injuries for the size of the league?
Parents need to demand change.	What kinds of change is she suggesting; i.e., changing the rules, the penalties, the coaching?
90 percent of parents would like to see less violence.	How many parents were surveyed? What questions were asked? What do referees, coaches and players think?
The president of the local hockey association is quoted.	Does the president really support changing the rules? His comment seems to say two things: get used to it, and safety is important. What does he really believe? think?

Overall level of doubt very doubtful **somewhat doubtful** not at all doubtful

The author uses local references that are believable, but her opinion is not supported by strong evidence. There are a lot of people involved in hockey that are not mentioned. This author could just be an angry mom of an injured player.



How well do I raise doubts?

Excellent	Very good	Competent	Basic	Not yet able
I am skeptical, but not cynical, and find many possible doubts or relevant reasons to be skeptical.				
I always examine information carefully and can easily think of relevant reasons to be doubtful about information.	I usually examine information carefully and can often think of several relevant reasons to be doubtful about information.	I am beginning to examine information more carefully and can often think of several relevant reasons to be doubtful about information.	I am trying to examine information more carefully and can sometimes think of the most obvious reasons to be doubtful about information.	
Evidence				
I can judge the overall level of doubt.				
I can reach a conclusion about the credibility of information and provide many relevant reasons for my decision.	I can usually reach a conclusion about the credibility of information and provide some relevant reasons for my decision.	I can sometimes reach a conclusion about the credibility of information and provide some relevant reasons for my decision.	I can sometimes reach a conclusion about the credibility of information, but I struggle to provide good reasons.	
Evidence				