

# ADST Lesson Template

*ADDING LITERACY AND NUMERACY SUPPLEMENTS TO TINKERS LESSONS*

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*“Education is all a matter of building bridges.” ~ Ralph Ellison*

This unit is designed to supplement the Cranky Contraption section of the 9 Applied Design, Skills and Technology (ADST) Lessons found at <https://digmore.prn.bc.ca/helpful-resources/adst/>. ADST support exists for SD60 teachers, including materials, tools and training. Please contact your administrator if you'd like to access this support.

## LESSON TITLE: THINKING CRITICALLY ABOUT RESEARCH SOURCES

**Learning Intention:** Applied Design Skills and Technology (ADST) projects embrace **Design Thinking** and foster a growth mindset, creativity, innovation and problem-solving. The innovative mind behind Cranky Contraptions was Sir Isaac Newton, one of humankind's most brilliant thinkers. Today we're going to pay homage to Sir Isaac Newton and great thinkers like him by flexing our critical thinking muscle: Our big ol' brains.

LESSON TITLE	LITERACY/ NUMERACY TASKS	BRIEF OVERVIEW OF LESSON
<i>THINKING CRITICALLY ABOUT RESEARCH SOURCES COMPLEMENTS “CRANKY CONTRAPTION” ADST LESSON</i>	<p><b>Literacy Task: Compare &amp; Contrast Media, Fiction &amp; Non-Fiction sources of information</b></p> <p><i>Curricular Competency (Gr 6):</i> Access information and ideas for <a href="#">diverse purposes</a> and from a <a href="#">variety of sources</a> and evaluate their <a href="#">relevance</a>, <a href="#">accuracy</a>, and <a href="#">reliability</a></p> <p><i>Grade 5:</i> Access information and ideas from a variety of sources and from <a href="#">prior knowledge</a> to build understanding</p> <p>Grade 5 &amp; 6: Use writing and design processes to plan, develop, and create engaging and meaningful <a href="#">literary and informational texts</a> for a variety of purposes and <a href="#">audiences</a></p>	<p>Students will compare and contrast fiction and non-fiction sources of information related to the ADST theme of innovation, invention &amp; critical thinking. They will research, compare and write about how innovative thinkers help inspire critical thinking in today's "Information Overload" world.</p>

**TARGET AUDIENCE:** Grade 5 & 6 students (English Language Arts – Accessing information for diverse purposes from a variety of sources & evaluating their relevance, accuracy and reliability).  
*This lesson is adapted from “[5 Essential Media Literacy Questions for Kids](http://www.common sense.org/education)” – [www.common sense.org/education](http://www.common sense.org/education)*

### PREP WORK:

- Print worksheets for students. 2 copies per person.
- Get a fiction book about a noteworthy figure (Suggestion: Magic Treehouse – Monday with a Mad Genius)
- Get a non-fiction book about the same figure (anything non-fiction about Leonardo DaVinci. For example, “Leonardo DaVinci, by Walter Isaacson)

- Attendance List, numbered.

## MATERIALS LIST:

- Access to digital information
- Access to library books (fiction & nonfiction)

## QUESTION:

How does questioning what we hear, read & view contribute to our ability to be educated & engaged citizens?

## GRADE # CURRICULUM:

- **Big Idea:** Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.
- **Curricular Competency:** Think critically, creatively, and reflectively to explore ideas within, between, and beyond texts
- **Content:** forms, functions, and genres of text

## VOCABULARY:

- **Media:** Media are **the communication outlets or tools used to store and deliver information or data.** The term refers to components of the mass media communications industry, such as print media, publishing, news media, photography, cinema, broadcasting (radio and television), digital media, and advertising.
- **News:** newly received or noteworthy information, especially about recent or important events.
  - a broadcast or published report of news.
- **Fake News:** false news stories, often of a sensational nature, created to be widely shared or distributed to generate revenue, or promote or discrediting a public figure, political movement, company, etc.:

## INTRODUCE THE LESSON:

Prompt: “When you’re in school, we teach you about sources of information. We take you to the library and show you fiction books like this (hold up Magic Treehouse – Monday with a Mad Genius) and non-fiction books like this (holds up Walter Isaacson’s “Leonardo DaVinci”). These are both about Leonardo DaVinci, by the way. We teach you that when you do research projects, non-fiction books are what you turn to for good information. But most people search for their information online now. When I look up “DaVinci” these days, I get stuff like [this](#) →

## TEACH THE LESSON:

Prompt: “Today we’re going to look at digital sources of information with a critical eye and see if we can spot the telltale signs of “fake news” and misinformation. It’s really hard to find the fake news out there when you aren’t paying close attention! It’s super important to notice when a site isn’t legit, however. One day you won’t be writing reports for your school teacher! You’ll be trying to decide if you should share your credit card

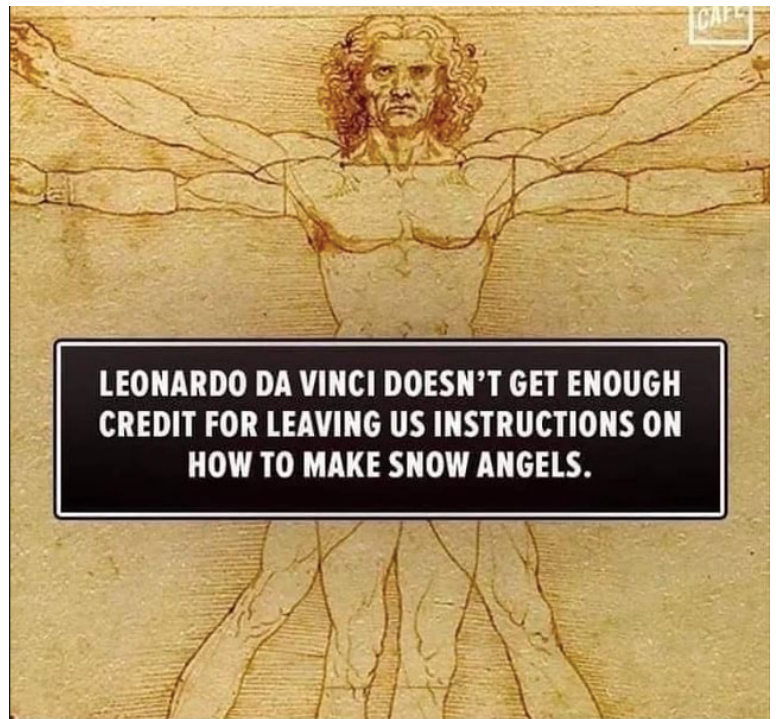


Image Credit: funvizeo.com

information with someone who seems to be from your favourite shoe store. Or perhaps you'll be trying to determine if a vaccine is a good choice for you. Either way, we live in an age of information overload and scammers, so we need to be critical consumers of digital media.

1. Let's watch [this video](#) before we start: <https://www.commonsense.org/education/videos/5-essential-media-literacy-questions-for-kids>
2. Hand out the worksheet ([originally found here at www.commonsense.org](#)).
3. Your job is to look up information on COVID-19 immunization vaccines. Find one source and fill in the worksheet.
  - a. A Caveat: Everyone needs to have a unique source of information. That means only one person in class can access Facebook, for example. Only one person can access CBC news, and so on. Let's generate a list of possible sources of information. (Here are some examples!)
    - i. Facebook
    - ii. CBC News
    - iii. CTV News
    - iv. Fox News
    - v. BBC News
    - vi. Government of BC News
    - vii. Instagram
    - viii. Twitter
    - ix. Alaska Highway News
    - x. CJDC TV
    - xi. Forbes News
    - xii. The New York Times
    - xiii. BuzzFeed
    - xiv. Al Jazeera
    - xv. Defence Blog
    - xvi. Global Issues
    - xvii. Huffington Post
    - xviii. Yahoo
    - xix. Google Search
    - xx. Associated Press
    - xxi. TikTok
    - xxii. Family Conversations
    - xxiii. Recess Gossip
    - xxiv. Keep going!!!

## BEFORE THE ACTIVITY

Make sure your students have access to web browsers, as they'll need to do some online research.

Model how to use the worksheet for your whole class before having students work individually or in small groups. Choose one example of media and walk your class through the worksheet, answering questions together as you go.

Consider giving students some instruction on how to dig for these kinds of information online (i.e., "scroll to the bottom of a home page and look for the 'About' link").

4. OK, we're going to number the list we just made and let the [Random Number Generator](#) determine who gets what for their information source!
  - a. Person number 1... you get (insert # from random number generator here! Remember, no duplicates allowed!) Repeat the process until all students have an information source (credible or not).

## TEACHING TIPS DURING THE ACTIVITY

Before students start analyzing their media example, give them time to briefly write down some initial impressions about it:

- What background knowledge do they already have (if any)?
- What assumptions (if any) do they have about it?
- Have students write the name of their Media News Source on a post-it note. Have them rank the source with a red, yellow or green dot to indicate if they think the source is a poor, adequate or excellent source of information.

Offer assistance as needed:

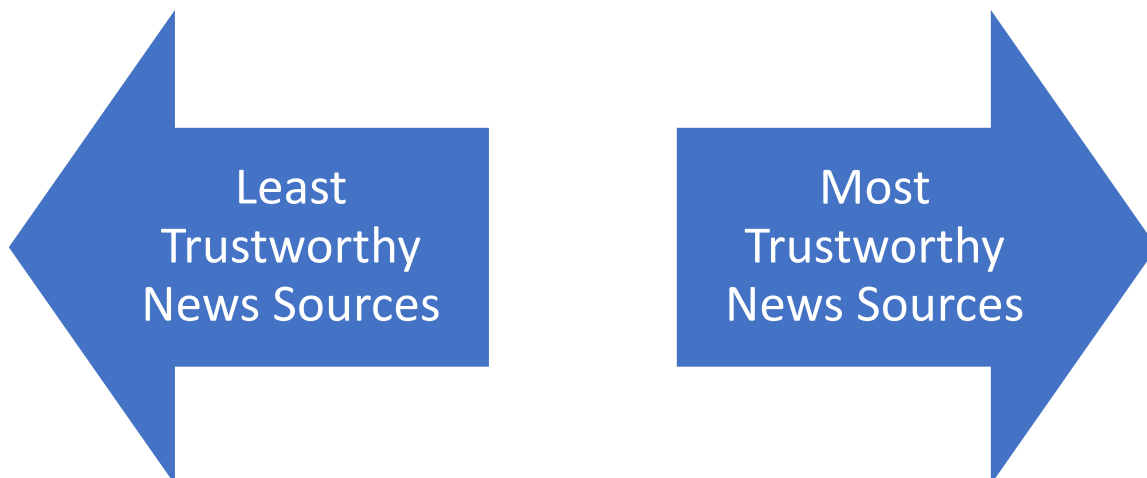
- Question 3: Help students find information about how media is funded. (*Suggestion, google “How is Facebook-funded? How is CBC Funded? How is Fox News Funded? Etc.”*)
- Question 4: Help students look at aspects of the message like word choice, imagery, connotations, visual design, tone, repetition, and so on, and discuss why they think the message's author made these choices.
  - For example – when watching News Anchors, what demographic do you think they are trying to connect to?
- Question 5: Help students consider factors like race, gender, ethnicity, sexual orientation, socioeconomic status, geographic location, etc. Have students question whether or not stereotypes are used and how different audiences may perceive them.
- Questions 6 and 7: Guide students toward creating their questions. You can also refer them to the [NAMLE's "Key Questions..."](#) grid.

5. Prompt: “You now have 10 minutes to locate a COVID-19 Immunization/Vaccine article from that source! Go!”

6. Once students have located an article, facilitate the completion of the worksheet by keeping the Teaching Tips (Above) in mind.

7. After the worksheet is complete, have students present their findings in a class discussion. Rank their news source as “Trustworthy” or “Not Trustworthy” number-line with -10 being the least trustworthy news source and +10 being the most trustworthy news source.

- a. You might draw something like the arrows below on your classroom whiteboard and have students write the name of their news source (i.e. Facebook, Recess Gossip, CBC, Fox News, BuzzFeed, etc) on post-it notes. They could then stick them to the arrows where they feel it’s appropriate. [Here’s a Canadian ranking of trusted news sources for your reference.](#) (c/o Statista.com)



#### AFTER THE ACTIVITY

- Have students return to their initial red, yellow or green impressions of their media examples. Has the activity changed their thinking about this media example? How?
- Ask students to share their findings with partners or in small groups. After that, ask for a few volunteers to share with the whole class and explain their thinking.

## Extension

Empower your students to move beyond merely consuming media. Have them create their own COVID-19 Immunization media example. Every time your students write a paper or create a presentation, video, or other media project, have them reflect on their work with these same questions in mind.

## END THE LESSON:

Exit Slip: We tried to enhance our Critical Thinking Skills as applied to COVID-19 Media sources. I want you to channel your inner DaVinci or Newton every time you interact with media. Now fill out your exit slips! The more you learn to think critically about media, the more it will become second nature for you to ask questions! Always question what you're being told!

- **Assessment: Self Assessments of Critical Thinking Core Competency:** Students can highlight the statements that describe them.

### Profile 4

**I can gather and combine new evidence with what I already know to develop reasoned conclusions, judgments, or plans.**

I can use what I know and observe to identify problems and ask questions. I explore and engage with materials and sources. I can develop or adapt criteria, check information, assess my thinking, and develop reasoned conclusions, judgments, or plans. I consider more than one way to proceed and make choices based on my reasoning and what I am trying to do. I can assess my own efforts and experiences and identify new goals. I give, receive, and act on constructive feedback.

### Profile 5

**I can evaluate and use well-chosen evidence to develop interpretations; identify alternatives, perspectives, and implications; and make judgments. I can examine and adjust my thinking.**

I can ask questions and offer judgments, conclusions, and interpretations supported by evidence I or others have gathered. I am flexible and open-minded; I can explain more than one perspective and consider implications. I can gather, select, evaluate, and synthesize information. I consider alternative approaches and make strategic choices. I take risks and recognize that I may not be immediately successful. I examine my thinking, seek feedback, reassess my work, and adjust. I represent my learning and my goals and connect these with my previous experiences. I accept constructive feedback and use it to move forward.

# QUESTIONS TO ASK ABOUT MEDIA

Name: \_\_\_\_\_

Date: \_\_\_\_\_

All media have an author—and an agenda. It's important to know how to analyze and critique any type of media, from social media posts and online articles to books, TV shows, advertisements, works of art, and beyond. Use this sheet to help you think critically about how media are made and consumed.

**Directions** Answer the questions below to help you analyze and critique *one* example of media related to COVID-19 immunization.

## INFO ABOUT YOUR MEDIA EXAMPLE

**Title** *No title? Explain what it is.*

TYPE OF MEDIA: \_\_\_\_\_

### Questions to Ask:

#### 1. WHO CREATED THIS MESSAGE?

- a. Was it created by an individual, a group, an organization, or a company?

#### 2. WHY WAS THE MESSAGE MADE?

- a. Is the message's purpose to inform? To entertain? To persuade? (Or some combination?)  
b. Who's the message's intended audience?

3. WHO PAID (OR IS PAYING) FOR THIS MESSAGE?

- a. Money motivates a lot of media—who paid to have this message made?
- b. What else have they paid for? What other agendas might they have?

4. HOW IS THE MESSAGE TRYING TO GET YOUR ATTENTION?

- a. What techniques are being used to grab people's attention?
- b. What techniques are being used to *keep* people's attention?

5. WHO'S REPRESENTED IN THE MESSAGE? AND WHO'S MISSING?

- a. Whose points of view and values are represented (or being appealed to)?
- b. Whose points of view and values are missing?

6. IS WHAT'S BEING SAID FACT OR OPINION? HOW DO YOU KNOW? HAVE YOU CHECKED SNOPE.S.COM TO SEE IF THE ARTICLE HAS BEEN DEBUNKED?

7. WHAT DO I STAND TO GAIN OR LOSE IF I ACCEPT THIS AS TRUE?

\* Need some help or inspiration? **Check out this longer list at** <http://bit.ly/2Am8Dvi>



**EXIT SLIPS:** The more our students learn to think critically about media, the more it will become second nature for them to ask questions.

## Exit Slip

Name: \_\_\_\_\_

Today I learned that...

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I have questions about; or, I am confused about...

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## Exit Slip

Name: \_\_\_\_\_

What do you like most about your news source?

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Is there anything you dislike? Explain.

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## Exit Slip

Name: \_\_\_\_\_

Create a critical thinking question that relates to being a careful consumer of media:

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What is the answer?

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## Exit Slip

Name: \_\_\_\_\_

Who can you trust to tell you the truth about vaccines and Corona Virus?

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## MEDIA EXAMPLES FOR THE ACTIVITY

Here's a brief and incomplete list of some other media examples you and your students can use. Of course, you're welcome to adapt this list or create your own altogether!

- Magazine article or advertisement
- A viral post on Facebook or Twitter (image, story, video, etc.)
- Snapchat story
- Instagram post
- Popular song
- Movie
- TV show
- TV commercial
- Video game
- Mobile app
- YouTube video
- Advertisement preceding an online video
- Billboard advertisement
- Pamphlet or flyer
- Music video
- Pop-up or a banner advertisement on a website
- Song
- Blog post
- Podcast
- Email
- Letter
- Historical speech
- Political stump speech
- Online editorial "news" story
- Political campaign advertisement
- Love letter
- Social media post of a viral rumour
- Artwork
- Poem
- Book

## MORE MEDIA LITERACY RESOURCES TO EXPLORE

- **Common Sense Education**—**News and Media Literacy Toolkit** <http://bit.ly/2ztIb3O>
- **NAMLE**—**Key Questions to Ask When Analyzing Media Messages** <http://bit.ly/2Am8Dvi>
- **Center for Media Literacy**—**Media Lit Kit** <http://bit.ly/2iGP0qJ>
- **The Lamp**—**A Guide to Understanding the News and Making Good Choices** <http://bit.ly/2AkMmOE>
- **Media Spot**—**Media Literacy Scope and Sequence Template** <http://bit.ly/2hmIf0G>
- **Media Education Lab**—**What Is Media Literacy?** <http://bit.ly/2zH7n9T>
- **Media Smarts**—**Media Literacy Fundamentals** <http://bit.ly/2zHFvIX>
- **Project Look Sharp** <https://www.projectlooksharp.org/>
- **The News Literacy Project**—**The Sift (Weekly Newsletter)** <http://bit.ly/2zoQf8w>

Name: \_\_\_\_\_

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Highlight the statements that describe you. You do not need to highlight everything. 😊

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Name: \_\_\_\_\_

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