# EVALUATING INFORMATION: THE CORNERSTONE OF CIVIC ONLINE REASONING

EXECUTIVE SUMMARY

STANFORD HISTORY EDUCATION GROUP

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## EXAMPLE

## HOME PAGE ANALYSIS

## ASSESSMENT

Here is a sampling of items that have appeared on the home page of Slate.com. Some of the things that appear on Slate.com are news stories, and others are advertisements.

### Item 1

Banner: includes a Gotham Writers logo, and text including, "We know you've got a story," "Save $20," "Use Code: SAVE20," and "Limited Time Only." Has control buttons in the top right to stop seeing this content.

Based on this, would you say this is or is not an advertisement? (Student answers yes or no.)

Why would you say it is or is not an advertisement? (Student explains why their answer was yes or no.)

### Item 2

Graphic link with text. Photo of an almond. Text reads, "Should California stop Growing Almonds? The nut has been vilified for drinking up the state's water supply. It doesn't deserve such a bad rap. By Eric Holthaus."

Based on this, would you say this is or is not an advertisement? (Student answers yes or no.)

Why would you say it is or is not an advertisement? (Student explains why their answer was yes or no.)

### Item 3

Graphic link with text. Graphic of a young woman standing amidst visuals of equations, charts, and unlabeled computer statistics. Text reads, "Sponsored Content," and, "The Real Reasons Women Don't Go Into Tech."

Based on this, would you say this is or is not an advertisement? (Student answers yes or no.)

Why would you say it is or is not an advertisement? (Student explains why their answer was yes or no.)

## OVERVIEW

Many news organizations have turned to native advertising as a source of revenue. By definition, native advertising tries to sell or promote a product in the guise of a news story. Native advertising makes it difficult for unsuspecting readers to know if and when there is an ulterior motive behind the information they encounter.

In this assessment, students are presented with the home page of Slate magazine’s website, which includes both news items and advertisements. The task assesses students’ ability

to distinguish between an article and an advertisement. Students must evaluate three different sections of the web page—a traditional advertisement, a news story, and a native advertisement—and determine the nature of each. Successful students understand the different forms that advertising can take and identify both traditional and native advertising. They are also able to explain the features that distinguish a news story from an ad.

We piloted several drafts of this task with 350 middle school students. We completed final piloting with 203 middle school students. Results indicated that students were able to identify traditional news stories and traditional advertisements: more than three-quarters of the students correctly identified the traditional advertisement and the news story. Unfortunately, native advertising proved vexing for the vast majority of students. More than 80% of students believed that the native advertisement, identified by the words “sponsored content,” was

a real news story. Some students even mentioned that it was sponsored content but still believed that it was a news article. This suggests that many students have no idea what “sponsored content” means and that this is something that must be explicitly taught as early as elementary school.

## RUBRIC

MASTERY: Student correctly identifies the item as an ad or non-ad and provides coherent reasoning.

EMERGING: Student correctly identifies the item as an ad or non-ad but provides limited or incoherent reasoning.

BEGINNING: Student incorrectly identifies the item as an ad or non-ad.

## SAMPLE RESPONSES

### Item 1

TRADITIONAL AD: GOTHAM WRITERS

#### MASTERY

These students correctly categorized this as an ad based on several of its features.

"It has the 'Ad Choices' and 'Stop Seeing this Ad' buttons in the top right corner."

"It has a coupon code, a big company logo, and has the words, 'Limited Time Offer.'"

"In the left side there is something that says, 'Save $20,' and usually money is involved if people are selling something."

#### EMERGING

This student engages in circular reasoning.

"It is an advertisement because it advertises something."

This student chooses an irrelevant factor: how "useful" the content seems as a reason it is an advertisement.

"IT is an advertisement because there's no "really useful" think on it."

### Item 2

NEWS ARTICLE: CALIFORNIA ALMONDS

#### MASTERY

Student correctly identifies this story as an article and identifies several features of the article helped her categorize it as an article.

"There is no little blue X, it has an author of the article, and it doesn't say it is sponsored content."

#### EMERGING

Student identifies a feature that may or may not indicate its status as an ad.

"It is not an advertisement because it does not have a blue button on top."

#### BEGINNING

This student argues that the story is an advertisement.

"It is an advertisement because they are trying to persuade people that almonds aren't bad and that you should buy them."

### Item 3

NATIVE AD: WOMEN IN TECH

#### MASTERY

The student explains that the words "sponsored content" signify that the story is an advertisement.

"Despite that the advertisement takes the form of an article, it is an ad as it states 'Sponsored Content,' meaning the content is created by a company who paid money to the publication."

#### EMERGING

This student correctly identifies the story but offers an inaccurate idea about what being "sponsored" means.

"It is being sponsored by the website to promote their company."

#### BEGINNING

This student argues that this story must be an article because it lacks traditional features of an ad.

"There is nothing to suggest that something is sold. No money, deals, etc. It sounds like an article."

This student notices the words "sponsored content" but still argues that it is an article.

"It is another article. Even if it's marked 'sponsored content' it is another article."

## EXAMPLE

## EVALUATING EVIDENCE

## ASSESSMENT

On March 11, 2011, there was a large nuclear disaster at the Fukushima Daiichi Nuclear Power Plant in Japan. An image was posted on Imgur, a photo sharing website, in July 2015.The image was titled, "Not much more to say, this is what happens when flowers get nuclear birth defects," and the photo itself was of several flowers whose center portion were growing into two halves rather than a single circular center. One of the flowers in the photo looks "normal" in contrast to the others. The post was by a user with the username pleasegoogleShakerAamerpleasegoogleDavidKelly.

Does this post provide strong evidence about the conditions near the Fukushima Daiichi Power Plant? Explain your reasoning. (Student then enters answer.)

## OVERVIEW

Given the vast amount of information available online, students need to be able to distinguish between legitimate and dubious sources. Students need to ask a basic question: Where did this document I’m looking at come from? This task assesses whether students will stop to ask this question when confronted with a vivid photograph. Students are presented with a post from Imgur, a photo sharing website, which includes a picture of daisies along with the claim that the flowers have “nuclear birth defects” from Japan’s Fukushima Daiichi nuclear disaster.

Although the image is compelling and tempting to accept at face value, successful students will argue that the photograph does not provide strong evidence about conditions near the nuclear power plant. Students may question the source of the post, arguing that we know nothing about the credentials of the person who posted this photo (especially since it appears on a site where anyone can upload a photo). Alternatively, students may point out that the post provides no proof that the picture was taken near the power plant or that nuclear radiation caused the daisies’ unusual growth.

Various drafts of this task were piloted with 454 high school students. The final version was given to 170 high school students. By and large, students across grade levels were captivated by the photograph and relied on it to evaluate the trustworthiness of the post. They ignored key details, such as the source of the photo. Less than 20% of students constructed “Mastery” responses, or responses that questioned the source of the post or the source of the photo. On the other hand, nearly 40% of students argued that the post provided strong evidence because it presented pictorial evidence about conditions near the power plant. A quarter of the students argued that the post did not provide strong evidence, but only because it showed flowers and not other plants or animals that may have been affected by the nuclear radiation.

## RUBRIC

MASTERY: Student argues the post does not provide strong evidence and questions the source of the post (e.g., we don’t know anything about the author of the post) and/or the source of the photograph (e.g., we don’t know where the photo was taken).

EMERGING: Student argues that the post does not provide strong evidence, but the explanation does not consider the source of the post or the source of the photograph, or the explanation is incomplete.

BEGINNING: Student argues that the post provides strong evidence or uses incorrect or incoherent reasoning.

### SAMPLE RESPONSES

#### MASTERY

This student questions the source of the photo, arguing that there is no way to know whether the photo was actually taken near the plant or if the mutations were a result of nuclear radiation.

"No, it does not provide strong evidence about the conditions near the Fukushima Daiichi power plant. It does not provide strong evidence because it could just be a mutation in the plant. There also isn't evidence that this is near the Fukushima Daiichi power plant."

This student questions the source of the post, arguing that we know nothing about the poster's credentials or whether the evidence was doctored.

"No, it does not really provide strong evidence. A photo post by a stranger online has little credibility. This photo could very easily be Photoshopped or stolen from another completely different source; we have no idea given this information, which makes it an unreliable source."

#### EMERGING

This student begins to question both the photo and the source of the post but does not fully explain his thinking.

"This post does not provide strong evidence about conditions near the power plant. They just put a picture of a flower. Plus the poster has a strange username."

This student critiques the evidence by arguing that it could have been digitally altered but does not offer any further explanation or critique of the evidence.

"No, because this picture could be Photoshopped."

#### BEGINNING

This student accepts the evidence at face value, arguing that it provides visual proof of the effects of the nuclear disaster.

"This post does provide strong evidence because it shows how the small and beautiful things were affected greatly that they look and grow completely different than they are supposed to. Additionally it suggests what such a disaster could do to humans."

Although this student argues that the post does not provide strong evidence, she still accepts the photo as evidence and simply wants more evidence about other damage caused by the radiation.

"No, this photo does not provide strong evidence because it only shows a small portion of the damage and effects caused by the nuclear disaster."

## EXAMPLE

## CLAIMS ON SOCIAL MEDIA

## ASSESSMENT

The following tweet appears in your Twitter feed:

"Https://twitter.com/MoveOn/status/66772893846675456?lang=en

Why might this tweet be a useful source about NRA members' opinions on background checks? List any sources you used to make your decision (Answer field follows.)

Why might this tweet not be a useful source about NRA members' opinions on background checks? List any sources you used to make your decision. (Answer field follows.)"

A Submit button is located at the bottom.

The assessment directs students to a MoveOn.org webpage. The page has copy reading, "New polling shows the @NRA is out of touch with gun owners and their own members amp.gs/1Pyw4qg #NRAfail" and "Two out of three gun owners say they would be more likely to vote for a candidate who supported background checks."

## OVERVIEW

Twitter is filled with individuals and groups seeking to further their agendas. In order to navigate this sea of information, students need to be able to weigh the relative strengths and weaknesses of tweets as sources of information. Specifically, students need to consider the sources of tweets and the information contained in them.

This task presents students with a tweet from the liberal advocacy organization MoveOn.org that reads: “New polling shows the @NRA is out of touch with gun owners and their own members.” The tweet includes a graphic that asserts, “Two out of three gun owners say they would be more likely to vote for a candidate who supported background checks.” The tweet contains a link to a press release by the poll’s sponsor, the Center for American Progress, another liberal advocacy organization. Both the news release and the tweet indicate that Public Policy Polling conducted the poll in November 2015. Students are asked why this tweet might and might not be a useful source of information. Strong responses will note that the tweet may provide useful information given that it is based on a poll conducted by a professional polling firm. At the same time, students must acknowledge how the political motivations of the Center for American Progress and MoveOn.org, both of which support stronger gun control measures, may have shaped the structure of the poll and how its results were publicized.

We piloted this task with 44 undergraduate students at three universities. Results indicated that students struggled to evaluate tweets. Only a few students noted that the tweet was based on a poll conducted by a professional polling firm and explained why this would make the tweet a stronger source of information. Similarly, less than a third of students fully explained how the political agendas of MoveOn.org and the Center for American Progress might influence the content of the tweet. Many students made broad statements about the limitations of polling or the dangers of social media content instead of investigating the particulars of the organizations involved in this tweet.

An interesting trend that emerged from our think-aloud interviews was that more than half of students failed to click on the link provided within the tweet. Some of these students did not click on any links and simply scrolled up and down within the tweet. Other students tried to do outside web searches. However, searches for “CAP” (the Center for American Progress’s acronym, which is included in the tweet’s graphic) did not produce useful information. Together these results suggest that students need further instruction in how best to navigate social media content, particularly when that content comes from a source with a clear political agenda.

## RUBRIC

Question 1: Why might this tweet be a useful source?

MASTERY: Student fully explains that the tweet may be useful because it includes date from a poll conducted by a polling firm.

EMERGING: Student addresses the polling data and/or the source of the polling data but does not fully explain how those elements may make the tweet useful.

BEGINNING: Student does not address the polling data or the source of the polling data as a reason the tweet may be useful.

### SAMPLE RESPONSES

#### MASTERY

This student identifies the polling firm and provides evidence of the firm's reliability.

"The polling information which the tweet references was collected by Public Policy Polling, which appears to have a fairly strong accuracy record, though with a Democratic bent (e.g., Wall Street Journal article: http://www.wsj.com/articles/SB122592455567202805)"

#### EMERGING

This student references the poll but does not explain why that makes the tweet a useful source of information.

"The photo used in this tweet was compiled from a public policy polling survey."

#### BEGINNING

This student focuses on the tweet’s appearance rather than its content.

"It could be useful because a graphic with a strong message can be enlightening or more likely thought provoking."

This student equates Twitter followers with trustworthiness.

"MoveOn.org has a large following on Twitter."

### Question 2: Why might this tweet not be a useful source?

MASTERY: Student fully explains how the political motivations of the organizations involved may have influenced the content of the tweet and/or poll, which may make the tweet less useful.

EMERGING: Student addresses the source of the tweet or the source of the news release but does not fully explain how those elements may make the tweet less useful.

BEGINNING: Student does not address the source of the tweet or the source of the news release as reasons the tweet may be less useful.

#### MASTERY

This student explains how MoveOn.org’s work as a political advocacy organization might influence the tweet’s contents.

"According to the MoveOn.org Wikipedia page, MoveOn.org is a “progressive public policy” group and thus will most likely be against most any media or information distributed by the NRA. The criticisms section of the Wikipedia page cited more than one instance of MoveOn.org distorting the truth and even attempting to alter Google searches for their own benefit. I would seek a different source to know NRA members’ opinions on background checks."

#### EMERGING

The student suggests that the tweet is politically motivated but does not explain how this might influence the content of the tweet.

"Although MoveOn.org claims to be independent, they also were paid to work on Obama’s campaign so are clearly Democrat-oriented, and the NRA members tend to be Republicans (http://front.moveon.org/about/#.V0NYK5MrLBI)."

#### BEGINNING

This student focuses on the nature of Twitter rather than the source of the tweet.

"Twitter is a social platform built for sharing opinions, and though there are plenty of news organizations sharing facts on Twitter, I’d be more likely to trust an article than a tweet."