

Digital Detective's Lessons for Elementary Age Learners

his chapter consists of four lessons designed to help elementary age learners assume the role of Digital Detectives by applying the Four Lenses to a broad array of news stories from various information sources.

These lessons are supported by tools and resources to help you implement them as soon as you feel your Digital Detectives are ready to start cracking cases. As noted earlier, we encourage you to think outside the grade spans we've identified. For example, if you teach elementary learners, we hope you'll explore the cases designed for both middle grade and high school learners, too. With your experience brought to bear, we're betting some of those lessons could be reworked for your Digital Detectives as well.

Contents

Lesson 8.1: The Case of \dots The Bodacious Blue Strawberries! \dots	92
Lesson 8.2: The Case of The Greatest PIG of All Time?	101
Lesson 8.3: The Case of Chew On This!	111
Lesson 8.4: The Case of The 450lb Dog!	121

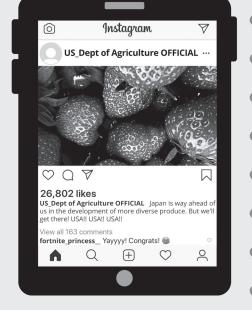
The Case of ... The Bodacious Blue Strawberries!

The Scene

Do plain old red strawberries leave you feeling blue? Don't worry; soon you may have access to a genetically modified version of the popular fruit with one major, eye-popping difference!

According to this story, Japan has developed a new variety of strawberry that will come in different colors, including blue. With the goal of developing more diverse produce, Japanese scientists appear to have reached this gardening milestone before their American colleagues.

With nearly 30,000 likes already, it looks like this story is gaining traction on social media platforms. But the question remains. Is this



attempt to make sure all the colors of the rainbow have a place on our dinner plates real, or are these bodacious blue strawberries a hoax?

Possible Clues (Questions to Think About)

- Triggers: Are there any potential triggers embedded in text that accompany this photo?
- Access: Does the format of the story affect its credibility or the ways we must detect clues?
- Forensics: Is the source of this information a potential clue?
- Motives: If this story turns out to be false or misleading, what kind of person would create/spread it?

Is this story about a new variety of strawberry too blue to be true?

₩ Big Ideas

This lesson focuses on the Access and Triggers Lenses. While the source of information is often not the last word in determining credibility (in today's fast-paced, click-driven information landscape, even the most reputable and ethical sources sometimes get things wrong), learning more about the person behind the information can help us better understand the motivations that guide their choices as a creator. In this case, the mobile device and app through which the information is accessed adds extra layers of complexity to this work. Ultimately, we want learners to think deeply about the clues that give us pause about the credibility of the source sharing the information. Despite the fact that the source identifies as an "official account," learners should have questions about whether or not the source's creative choices support that claim. The objectives below were created to help learners a) peel back the layers presented by mobile devices and social media that may stand between them and the source of the information they are consuming, and b) think deeply about how those layers might be used by nefarious actors to both deceive and influence us.

SEL Spotlight

Although this case is about a modified fruit, it could easily be used as a metaphor for the kids you teach. As your learners grow and their experiences with the world and other people (both online and in person) increase, so too does their awareness of how they fit into the larger world around them. Whether on the playground, in the cafeteria, or online, these interactions are opportunities for our kids to learn two important truths: They are unique and complex, and they are a part of a whole, a collective that is influenced and shaped by the actions of individuals.

CASEL defines social awareness as "the ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures" (2020). This definition includes such teachable skills as perspective-taking, empathy, appreciating diversity, and respect for others. The activities in this lesson provide a safe access point for learners to:

- ♥ Consider how different perspectives influence how different people perceive the same event in different ways
- Povelop skills for using empathy to view information from a perspective that is different from their own
- [§] Consider the ways that differing perspectives and opinions benefit us as a society
- Number of being an alternate perspective

Curricula Connections

Target Audience

4th–5th (As with all lessons in this book, this grade span is a suggestion only. With a few adaptations, this lesson could easily be introduced to other learners.)

Potential Content Area Connections/Collaborations

- Science: Color variants in foods, genetically modified foods
- Social Studies: History of competition between America and Japan

ISTE Standards

Students

- Knowledge Constructor (3b): Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
- Knowledge Constructor (3d): Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.
- Creative Communicator (6c): Students communicate complex ideas clearly and effectively by creating or using various digital objects such as visualizations, models or simulations.
- Creative Communicator (6d): Students publish or present content that customizes the message and medium for their intended audiences.

Educators

- Citizen (3b): Educators establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency.
- Citizen (3c): Educators mentor students in safe, legal and ethical practices with digital tools and protect intellectual rights and property.
- Designer (5b): Educators design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning.
- Analyst (7a): Educators provide alternative ways for students to demonstrate competency and reflect on their learning using technology.

Learning Objectives

By the end of this lesson:

- The learner will apply the Four Lenses to information as a step in determining credibility.
- The learner will discover ways to identify "official" accounts on social media.
- The learner will explore ways in which images can be altered to fool viewers.
- The learner will understand the concept of hoax news.
- The learner will develop and share a hypothesis related to information credibility.
- The learner will synthesize learning by suggesting "official" social media accounts that could be followed by their teacher, librarian, or principal.

Resources Needed for This Lesson



Reminder: A variety of resources related to this chapter can be found in the Digital Detective's Evidence Locker. Use the QR code to the left, or visit evidencelocker.online. Then navigate to Chapter 8.

Time Needed for This Lesson: 2-4 hours

Case File

The following supplemental resources from the Digital Detective's Evidence Locker may be given to students to examine the case:

- [IMAGE] Hi-res version of the image shared in the student case file
- [INFOGRAPHIC] Is This an Official Social Media Account?
- [PDF] Amazon Ad: Seeds for "Climbing Blue Strawberries"
- [ARTICLE] Are All Strawberries Red?

Process

1. Activating Prior Knowledge/Hook:

▼ Step/Tasks

- a. Review the Four Lenses (see Chapters 1-4).
- b. Review what students know about strawberries and how they are grown.
- c. Review what students remember about a social media account's anatomy and how to investigate the account for clues.

Suggested Resources

For this step, check in the Digital Detective's Evidence Locker for links:

- [VIDEO] Clip depicting strawberry harvest in California
- [TEMPLATE] The Anatomy of a Social Media Account (a tool that may support students as they detect and document clues about a source's credibility)

2. Guided Practice Part 1: The Initial Hypothesis

▼ Step/Tasks

- a. Working individually (or in pairs), have students review the one-sheet for The Case of . . . The Bodacious Blue Strawberries!
- b. As they review the case, students should record and classify clues related to the Four Lenses.
 - ▶ Note: If you're using a traditional information literacy protocol (see Chapter 3) with students, now is the time to refer to it. However, remember that we recommend that these only be used as jumping-off points for learners: kindling to help spark their own investigations.
- c. Product: By the end of this part of the lesson, student detective teams should generate an initial hypothesis or theory of the case.
- d. Optional: Have students share their initial hypothesis with the group.

Suggested Resources

For this step, check in the Digital Detective's Evidence Locker for:

- [TEMPLATE] Evidence Log (a tool that may support students as they detect and document clues from the case)
- [TEMPLATE] Case Synopsis (a tool that may support students as they present their final verdicts in the case)

3. Guided Practice Part 2: The Case File

▼ Step/Tasks

- a. Give students access to selected items from the case file.
- b. Working in the same pairs and using the infographic Is This an Official Social Media Account (from the case file), students should consider what aspects of the account itself are potential credibility red flags.

Suggested Resources

For this step, check in the Digital Detective's Evidence Locker for:

• [INFOGRAPHIC] Is This an Official Social Media Account?

4. Assessment

▼ Step/Tasks

a. Individually, have students report their findings, including their final verdict regarding the story's credibility.

Suggested Resources

For this step, check in the Digital Detective's Evidence Locker for:

• [TEMPLATE] Case Synopsis

5. Whole Group Debrief

▼ Step/Tasks

- a. Together, as a whole group, have students debate the various theories of the case.
- b. Individually, or as a group, have students rate their own confidence in their verdict of the case.
 - ► We recommend using a Likert Scale for capturing this information. Digital tools such as Google Forms and Mentimeter are great options for creating this scale.

Suggested Resources

For this step, check in the Digital Detective's Evidence Locker for:

[VIDEO] How to Use Likert Scales

6. Solution: Reveal the Facts of the Case! (See Below!)

▼ Step/Tasks

- a. At this point, it's time to let students know where this story falls on the credibility spectrum. To do this, use the document The Facts of the Case (see the following section) to reveal the evidence associated with each lens that students should have uncovered.
- b. We recommend that you also provide students with the opportunity to add evidence to the facts of the case. Students may have found other clues under each lens that can help their classmates think more deeply about credibility detection.

7. Synthesis

✓ Step/Tasks

To help students synthesize their learning, we want them to think more deeply about what kind of information makes them feel as though a source is credible and should be trusted.

- a. Using a digital tool like Buncee, have students create their own social media profiles for an author, historical figure, or scientist. Challenge them to use as much credible information about the person as possible in creating the profile.
- b. Then have students share their profile using a collaborative online space like Padlet.
- c. Finally, have students review all profiles, indicating which they would follow by liking the post.

Suggested Resources

For this step, check in the Digital Detective's Evidence Locker for links to:

- [VIDEO] Tutorial for Buncee
- [WEBSITE] "Fakebook" Profile Creator
- [VIDEO] Tutorial for Padlet

8. Reflection

▼ Step/Tasks

- a. We recommend the "I used to think... but now I think..." reflection protocol, combined with a "think, pair, share" for this activity.
 - ► First, individually, students compare what they used to believe about social media accounts before this activity with what they currently know to be right about judging their credibility.
 - ► Then, in pairs, have students share and discuss their responses with a partner.

9. Scaffolds

Chapters 1 and 2 offer mini-lessons that may be helpful as scaffolds for this unit.

- Seek and Find: Community Reading Experience (Chapter 2, Access)
- Finish This Comic! 1 (Chapter 2, Access)
- Speed or Brake Activity (Chapter 1, Triggers)

10. Potential Extensions

Using the picture book I See, I See. by Robert Henderson, have students consider how
different people, from different backgrounds, with different perspectives, might view this
story differently. Have students create a list of potential viewers of the story. Then, working
in pairs, have them predict each potential viewer's likelihood to fall for the story of the
bodacious blue strawberries, based on their unique perspectives.

THE FACTS OF THE CASE

Verdict **RED** / **FALSE** [Do Not Share]



Lens



LENS 1: TRIGGERS

Clues related to how elements of the story are designed to elicit, or trigger, an extreme emotional response.

Evidence

- While triggers are not the primary method of deception in this story, there are some elements that are worth noting as having the potential to trigger a strong emotional response:
 - ► The use of the ALL CAPS
 - ► The repeated chant of "USA!! USA!! "may trigger patriotism or other feelings toward Americans that could influence a person's perception of the information and/or their urge to trust or share the information.
- Asking learners to share what they think they know about the person who typed these words can help them understand how such elements trigger emotions that affect our work as Digital Detectives.

Lens



LENS 2: ACCESS

Clues related to the device upon which the story is being viewed and how that access might change the way a Digital Detective locates evidence.

Evidence

- Access plays a vital role in determining the credibility of this information and is the primary lens through which we should look at this case.
- Mobile devices add layers to the steps we may ask students to consider when parsing this story's accuracy.
 - ► Learners should consider the various steps required to locate information, such as the biographical information of the source.
- Additionally, because apps like Instagram add like/view counts to this story, learners should consider how those numbers influence their view of the information.

Lens



LENS 3: FORENSICS

Clues found in the details of the story, including (but not limited to) the URL, date published, authorship, and authority.

Evidence

- Considering whether or not this is an "official" account is also an integral part of determining whether the information is factual.
- Even though the account name includes the word *official*, clues like a lack of a profile photo should hint to students that the account may not be real.
 - ► Clicking the user ID gives us more information.
 - ► Additionally, since some sites offer badging to indicate whether an account has been verified, understanding what those markers are and how to find them can help learners identify valuable clues.

Lens



LENS 4: MOTIVES

Clues found in the motivations of potential suspects and how the story is created, shared, etc.

Evidence

- Although subtle, Motives is another critical lens for learners to consider as they evaluate
 this case.
 - ▶ Not only does the creator of this information masquerade as an official account sanctioned by the U.S. government, but they also make an attempt to spark competition between the U.S. and Japan. Ultimately, the creator of this information is hoping to influence our view of genetically modified produce by linking it to patriotism.
- Lineup: If you choose to do a lineup activity for this lesson, we suggest the following suspects: The Click Chaser, The Mimicker, The Troll, and The Wannabe. While The Mimicker is, ultimately, the correct answer, students will be able to make a compelling case for The Grifter as well. The distinction will be in The Grifter's goal of obtaining personal information, which is not present in this case.