Spotting Fake News
and Images on the Web

A Lesson Plan Using the Backwards
Design Instructional Model

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Target Audience

High school freshmen (e.g., in classes such as current events, social studies, English or any other course
in which students might conduct research on current or controversial issues)

Student Learning Outcomes

By the end of the lesson, students will…

1. Understand why it's important to question the truthfulness of articles and images found on the web.
2. Define confirmation bias and understand how it impacts a person's decision-making.
3. Develop strategies for identifying "fake" news and images.

AASL Standards Framework For Learners

I. Inquire: Build new knowledge by inquiring, thinking critically, identifying problems and developing
strategies for solving problems.

Learners display curiosity and initiative by:

> ‣ **I.A.2.** Recalling prior and background knowledge as context for new meaning.

Learners engage with new knowledge by following a process that includes:

> ‣ **I.B.1.** Using evidence to investigate questions.
> ‣ **I.B.2.** Devising and implementing a plan to fill knowledge gaps.

Learners participate in an ongoing inquiry-based process by:

> ‣ **I.D.1.** Continually seeking knowledge.
> ‣ **I.D.2.** Engaging in sustained inquiry.

II. Collaborate: Work effectively with others to broaden perspectives and work toward common goals.
Learners participate in personal, social and intellectual networks by:

> ‣ **II.B.1.** Using a variety of communication tools and resources.
> ‣ **III.B.2.** Establishing connections with other learners to build on their own prior knowledge
> and create new knowledge. Learners actively participate with others in learning situations by:
> ‣ **II.D.1.** Actively contributing to group discussions.

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III. Engage: Demonstrate safe, legal and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.

Learners follow ethical and legal guidelines for gathering and using information by:

‣ **III.A.2.** Understanding the ethical use of information, technology and media.

‣ **III.A.3.** Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

Learners engage with information to extend personal learning by:

‣ **III.D.1.** Personalizing their use of information and information technologies.

‣ **III.D.2.** Reflecting on the process of ethical generation of knowledge.

Rationale

In 2017, AASL unveiled its new National School Library Standards. The Standard's Framework for Learners is organized into six shared foundations: Inquire, Include, Collaborate, Curate, Explore and Engage. Within each of these foundations, students must demonstrate competencies in four domains: Think, Create, Share and Grow.

This lesson supports several of the competencies, including the development of critical thinking skills and the responsible and ethical use of information, technology and media. This lesson serves as the first in a series of lessons designed to develop information and media literacy skills in freshmen high school students. While many students might already have a basic understanding of "fake news," this lesson takes the topic a step further by asking them to consider their own personal role in the spread of misinformation and examine the negative consequences of such behavior. The lesson introduces the concept of *confirmation bias*, defines and provides examples of *clickbait* and shows how images can also be manipulated to send false messages. It also provides strategies for spotting fake news; students will employ these strategies when they begin research on a current issue for class. Finally, this lesson asks students, in a blog discussion post, to relate the spread of misinformation and "fake news" to research.

Subsequent lessons in this unit should relate the evaluation of web sources to individual research and include an introduction to library databases.

Materials

To deliver this lesson, the instructor must have a computer, internet access, PowerPoint and a SMART board. Students must also have a computer and internet access.

Procedure

1. Review learning goals of the session (Slide 2).

2. **Warm up:** "What are the different ways we experience the news?" Invite students to respond verbally or by using SMART Board tools (Slide 3). This taps into prior knowledge.

3. Present "Spectrum of News Sources" infographic, reminding students that news sources have varying levels of credibility that must be considered (Slide 4).

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4. **Exercise 1:** How can the spread of misinformation have negative consequences (Slides 5-7)? Invite students to respond using SMART Board tools.
   Scenario #1: "News" reports tell of alleged gas shortage in the wake of Hurricane Harvey
   Scenario #2: "Legal advisory" flyers distributed on Bates College campus in Maine a few days prior to the 2016 election telling students that if they wanted to vote in Lewiston, they would have to pay to change their driver's licenses and re-register any vehicle in the city.
   Scenario #3: You hear a rumor about a classmate at school and tell it to several others. You later learn the rumor is not true, but you had a hand in spreading it around school.

5. Define confirmation bias. Share personal anecdote (Slide 8).

6. Assess understanding with brief quiz question asking students to identify which article they would share on social media if they believed left-handed people are more creative than right-handed people (Slide 9).

7. Evaluating the credibility of images: Present image of George W. Bush reading a book "upside down" (Slide 10). Share additional images and explain the ways they have been manipulated (Slides 11-12).

8. **Exercise 2:** Present image of Fukushima "nuclear" flowers. Ask students to respond verbally to question posed (Slide 13).

9. Present slides on the use of artificial intelligence to generate fake media (Slides 14-20). For the class discussion question on Slide 15, student responses should include: spread misinformation, create fake news and damage a person's reputation. Review tips for spotting AI-generated images and have students apply those strategies to sample images on Slides 18 and 19. Take the quiz on Slide 20 together as a class or assign to students to take individually.

10. Define clickbait (Slide 21).

11. **Exercise 3:** Present sample headlines and ask students to identify whether they are examples of legitimate news or clickbait (Slide 22).

12. Review strategies for recognizing fake news and images (Slides 23-24).

13. Review resources, e.g., 10 Tips for "Ferreting Out" Fake News (Slide 25).

14. **Discussion Post Assignment:** How does the spread of misinformation (including fake news and images) relate to research? (Slide 26)?

Assessment: Several interactive components invite students to participate verbally or by using SMART Board tools. The facilitator can assess understanding throughout the instruction session based on student responses. A class blog discussion post is assigned as a summative assessment.

References: American Association of School Libraries (AASL). (2017). National School Library Standards. Retrieved from **http://standards.aasl.org/framework/**

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