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A Skills-Based Approach for Navigating Misinformation and Disinformation in the Health Education Classroom

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A recent exchange with a seventh-grade student highlighted the pervasive reach of misinformation in the classroom. After validating the student's input and cross-referencing their claims with Centers for Disease Control and Prevention data, it became clear they had been misled by inaccurate sources. This incident, emblematic of the challenges posed by artificial intelligence and social media, raises an urgent pedagogical question: How can educators effectively counter misinformation and model accuracy? Additionally, as addressed in a recent survey by the News Literacy Project (2025), how can we help students become critical consumers of information, especially given that a recent study shows that most adolescents view the news media negatively?

Importance

Many young people obtain news and health information from social media. If they are not receiving this information directly, they often hear it from their families, who are also exposed to misinformation on social media. According to the Pew Research Center, 20% of adults regularly get their news from TikTok, and more than half of TikTok users report receiving news from the platform. Younger consumers report even higher news consumption on TikTok (Tomasik & Matsa, 2025). Reports on how many adolescents and school-age children access news on TikTok vary, but the Pew Research Center finds that 63% of adolescents report having used the platform at one time or another (Tomasik & Matsa, 2025).

The quality of the information available on social media is concerning. Analysts at NewsGuard found that 19.4% of videos, including those about health, contained false or misleading claims (Brewster et al., 2022). In a systematic review by researchers at the World Health Organization (WHO), the proportion of health misinformation on social media reached 28.8% (Borges do Nascimento et al., 2022). For health-specific topics, the percentage of misinformation can be even higher, approaching 50% for issues like vaccines (Niewijk, 2024). It is crucial to teach young people to critically evaluate health information because "there is an abundance of misinformation on social media surrounding diets and eating disorders, smoking or substance use, chronic diseases and medical treatments" (Wang, 2023, para. 1).

In a classroom setting, these forms of misinformation may surface in the form of student questions, comments, and peer interactions. For example, a student may state that vaping is safe or question how harmful it is because they heard it is just flavored water vapor. Disinformation may sound like a student telling another student they cannot get in trouble for bullying if it happens outside of school. Educators need to take special care when students use misinformation or disinformation to bully or manipulate others.

Defining Misinformation and Disinformation

The WHO defines *misinformation* as false information shared without intent to mislead and *disinformation* as information that is knowingly false and deliberately spread to cause harm (WHO, 2024). Facing History and Ourselves (2025) offers similar, although not identical, definitions emphasizing intent, manipulation, and influence. These variations illustrate why students cannot rely solely on definitions but must instead learn to critically examine sources, context, and purpose.

The existence of multiple definitions from dependable organizations demonstrates the need to teach students to check and compare their sources rather than accepting information at face value. When credible organizations define the same terms differently, it becomes clear that understanding health information requires evaluation. Students must learn to ask who created the definition, for what purpose, and how it is being applied. Developing this habit supports health literacy by helping students navigate information where meaning, intent, and impact are not always clearly labeled.

Alignment with the SHAPE America National Standards and Skill-Based Instruction

Evaluating the validity, reliability, and accessibility of health information is a health-literacy skill, as well as a SHAPE America National Health Education Standard (SHAPE America – Society of Health and Physical Educators, 2024). National HE Standard 3, together with state and local mandates, supports teaching that addresses misinformation and disinformation and equips students to distinguish between the two. This article examines how to do this differentiation while using the skill development model (Benes & Alperin, 2026, p.24).

Skills-based health education is a pedagogical framework that teaches and guides students through practice to acquire health literacy skills, as outlined in the National Health Education Standards. Instructors use a skill development model that leverages relevant, up-to-date health information to support skill practice. This approach prioritizes student engagement over traditional teacher-led content

delivery, empowering learners to take greater ownership of their education and apply skills in meaningful, real-world contexts. As a result, students build self-efficacy, enabling them to perform these skills successfully and more effectively maintain and improve their own health and the health of others. The skill development model outlined by Benes and Alperin has five steps (2026, p. 24-25):

- *Step 1: Importance of the skill*—Establish why accessing valid and reliable health information matters.
- *Step 2: Present skill cues and critical elements*—Clearly define the skill and essential components.
- *Step 3: Model the skill*—Demonstrate the skill and skill cues for students.
- *Step 4: Provide Practice and Feedback*—Offer structured opportunities to practice the skill.
- *Step 5: Assess the skill and support transfer*—Invite students to apply the skill and transfer it to their own lives or to other content.

Steps 2 through 5, along with suggestions for educators, will be described next.

Steps 2–5 of the Skill Development Model

Step 2: Present Skill Cues and Critical Elements

As educators, we need to practice the skill ourselves. We can do this by using critical elements of the skill while researching health information ourselves, especially if we will be using it with students. Teachers can use the ACCESS—accurate, credible, current, ease of use, situations, supports—skill cues to critically evaluate health information they gather for teaching students (Benes & Alperin, 2026, p.111):

Accurate: Check the source for credibility and bias. If the source is found in a journal, check to see that the journal is peer-reviewed. Funding sources may also influence producers to falsify or misrepresent health information. Wang (2023) suggested comparing information to other credible sources. It might take some time, but it can be beneficial to go directly to the original source if a wellness influencer repeatedly shares information or to trace the funding source. Even reliable sources may present information in a misleading way. Wang (2023) also suggested consulting a healthcare professional for personal health information; however, this approach could also be a good practice for teachers. Building strong relationships with community experts can enhance information distribution in schools, benefiting both students and the wider community.

- *Credible:* Verify the author's qualifications, including their credentials and professional affiliations. Exercise caution if insufficient information is available about them (Wang, 2023).
- *Current:* Health information can become outdated within 6 months to 5 years, depending on the topic.
- *Ease of use:* If the information is confusing or difficult to understand, it is worth finding a similar source that is easier to interpret. For example, rather than reading the whole report, a summary may suffice.
- *Situations:* If something seems too good to be true, it may be exaggerated or sensationalized, which can affect its accuracy. It is essential to focus on more objective sources that present only the facts. Health information shared for entertainment purposes, such as on social media or in certain news outlets, often aims to provoke an emotional response in the audience, leading to overdramatized content.
- *Supports:* Teachers must ensure that the information they provide is relevant to their students. For instance, health information suitable for adults may not be appropriate for younger individuals, leading to misinformation. Take sleep, for example; specifically, the amount of sleep a student needs varies by age (Cleveland Clinic, 2024). Adults typically require 7 to 9 hours of sleep, whereas a fifth-grade student needs 9 to 12 hours (Cleveland Clinic, 2025). Therefore, educators must consider these differences when sharing information.

Step 3: Model the Skill

When misinformation or disinformation arises, educators should stay calm and nonjudgmental and approach corrections with sensitivity. Ignoring misinformation and disinformation that arise in the classroom can allow false beliefs to persist unchallenged, whereas engaging with such claims helps students develop critical thinking, evaluative skills, and the ability to assess sources and navigate complex information environments. Ensure a safe and supportive classroom environment, and, if needed, review confidentiality guidelines.

Educators can model the skill of accessing health resources while teaching or reviewing information, or by addressing misinformation and disinformation as they arise in the classroom. Solidifying immediate responses followed by evaluating the source is a habit worth establishing. It is essential not to repeat the misinformation unless also providing accurate information.

Here are some examples of immediate responses:

- "Thank you for sharing. That is a common misconception. Let's review why that is not entirely true."
  - This approach allows the student to maintain integrity while receiving the correct information.
- "I haven't heard that before. Let's investigate together."
  - This approach is suitable when there is sufficient time and safe methods to explore the information. It is essential to preview sources in advance. Tools such as FactCheck.org, Politifact.com, and Google Fact Check tools can help model this skill. Additionally, a checklist outlining the criteria to consider can enhance the process.
- "That doesn't sound like what I know to be true, so I am going to look into this and get back to you."
  - The key is to maintain the student's integrity, maintain instructional focus, and follow through once the information has been verified.
- "Thanks for sharing. Let's explore a little more. Why might folks believe this to be true? Who else has heard it? Why would people want you to believe this information even if it isn't true? How can we find out whether it is true?"
- "Let's see what _____ (insert credible source/tool here) says about that information."

Here are ways educators can model the skill in real time:

- *Questions:* Create questions for each skill cue. Ask the questions and invite students to provide the answers while everyone reviews the source together.
- *Sentence starters:* Provide sentence starters for students, especially in younger grades, to help them begin reviewing the source.
- *Checklists:* Create and rely on checklists with criteria for valid and reliable health information. Refer to them frequently when sharing resources and include them in formative assessments for other skills.

Table 1.
Breakdown of Performance Indicators for Grades 3–5

Standard 3: Access valid and reliable resources to support health and well-being of self and others (SHAPE America, 2024).
3.5.1 Determine which trusted adults, other individuals, and other health resources are appropriate in various situations.
• Identify trusted adults. • Identify trusted health resources. • Explain why they are trustworthy. • Describe reasons why the trusted source is appropriate for various situations.
Activities to practice: 1. Students will identify at least 3 trustworthy adults and list 3 reasons each is trustworthy. 2. Students will identify at least 2 trustworthy resources for a specific health topic and provide at least 4 reasons each is trustworthy.
3.5.2 Locate home, school, and community resources to support health and well-being.
• Locate trusted resources at home that support health and well-being. • Locate trusted resources at school that support health and well-being. • Locate trusted resources in the community that support health and well-being.
Activity to practice: Students participate in a scavenger hunt to locate health-supporting resources and explain why each is trustworthy and appropriate for a particular health topic.
3.5.3 Determine the validity and reliability of health information, products, services, and other resources.
• Determine the validity of health information. • Determine the validity of health products. • Determine the validity of health services. • Determine the validity of other health resources. • Determine the reliability of health information. • Determine the reliability of health products. • Determine the reliability of health services. • Determine the reliability of other health resources.
Activities to practice: 1. Students locate a health information source on a specific health topic in response to a question. Students determine the validity and reliability of a health information source for a specific health topic. Students compare the sources they gathered with those gathered by other students in the class. 2. Students highlight characteristics of two different resources (one trustworthy and one not) that provide clues, based on ACCESS (i.e., accurate, credible, current, ease of use, situations, supports), that indicate whether or not it is valid and reliable.
3.5.4 Explain how misinformation and disinformation affect health and well-being.
• Define misinformation. • Define disinformation. • Distinguish between misinformation and disinformation. • Explain how misinformation affects health and well-being. • Explain how disinformation affects health and well-being.
Activities to practice: 1. Students distinguish misinformation from disinformation from a selection of sources about a particular health topic and describe how it would affect health and well-being. 2. Students provide character scenarios to analyze how misinformation and disinformation can affect health and well-being.
Note. Each subskill can be practiced and assessed in a formative way through various activities.

Step 4: Practice and Feedback

National Health Education Standard 3 provides multiple opportunities to practice accessing valid and reliable resources. Performance indicators can be broken into subskills appropriate for different grade levels. Table 1 shows how the performance indicators (for Grades 3–5) can be broken down.

Accommodations for students may include developing a culturally responsive learning environment that removes barriers to learning and provides multiple ways to receive and convey information. For students with unique educational needs or an individualized education plan, invite full participation in their educational journey, with appropriate accommodations, to maximize participation. For example, assisting students with disabilities in *reading* health-related texts and source materials provides a pathway to using Braille, screen-reader technology, or other assistive devices, as necessary. *Writing* accommodations may include using a scribe, a personal

whiteboard, a computer, or speech-to-text technology to access health and wellness literacy. In a similar approach, *speaking* and *listening* should be interpreted broadly to include sign language, signage, and other visual aids (CAST, 2024).

Step 5: Assess and Transfer

The ability to critically consume health information is essential for achieving for achieving all the SHAPE America National Health Education Standards. Educators can use assessment tools to further facilitate skill acquisition. This facilitation can occur at the summation of the skill unit or within a subsequent skill unit. For example, students can analyze how they might be influenced to choose specific health resources, which is National HE Standard 2, analyzing influences. The skill of critically evaluating health resources can also be assessed within the communication unit when students practice finding a trustworthy adult and asking for help, like with Standard 5, decision-making. One step in the decision-making process is having students provide reliable resources to inform their decisions. Students need to practice making informed decisions about whether to act on misinformation that could impact their health behaviors. They should also know how to locate and use valid, reliable health information to make their health decisions. Standard 6, goal-setting, and Standard 7, health-promoting practices, also require the student to create action plans and routines based on accurate information. Finally, an essential step in the skill of advocacy, Standard 8, is to ensure that the health resource that is being promoted is valid and reliable.

Conclusion

As students navigate a complex, digital information landscape, the ability to critically evaluate health information and resources has become even more essential to health literacy. Students must be able to develop the skill to critically evaluate health resources, especially health information they consume online and from those around them, including the ability to detect misinformation, disinformation, and accurate information. This skill can be taught and reinforced through a skills-based approach to health education and is supported by the 2024 SHAPE America National Health Education Standards. These standards, together with the skill development model of teaching, equip students with the tools necessary to make informed health decisions and to protect both their own health and the well-being of others.

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Submissions Welcome!

Health Tips features health-related activities and lessons that practitioners can readily implement. Articles should contain a brief introduction, followed by very practical, quick-hitting information such as bullet points or lists. Submissions should adhere to the SHAPE America National Health Education Standards and the Appropriate Practices in School-Based Health Education. Send articles to department editor Sarah Benes at beness1@southernct.edu.