SIFT Verification Method for GenAI Tools

Dan Metzger

Course Subject:	First-Year Writing (ENGW 1111)
Student Level:	Undergraduate (first-year)
Number of Students:	Approximately 38 (2 sections of 19)
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What the Students Did

Students in First-Year Writing applied the SIFT method (Stop, Investigate the source, Find better coverage, Trace claims to the original context) to evaluate content created by generative AI tools by tracing GenAI claims to authoritative sources, identifying when GenAI tools are and are not appropriate for research, and reflecting critically on research practices. Working in pairs across two class meetings, students prompted a GenAI tool (ChatGPT, Claude, or Google AI Overview) with a pre-written research question, then systematically fact-checked the output using library databases and other trusted sources. They documented their verification processes on a structured SIFT worksheet, completed pre-, mid-, and post-activity reflections, and participated in class discussions about what they observed. The activity was adapted from Mike Caulfield's SIFT framework, originally designed for evaluating online articles and websites, and was situated at the start of a unit in which students composed a researched, ghostwritten TED Talk.

Purpose

The purpose of this activity was to strengthen students' information literacy and source verification skills in the context of generative AI tools. The activity addressed Writing Program learning goals in the "Use of Sources and Evidence" category, including generating lines of inquiry, collecting and selecting effective sources, citing sources appropriately, using multiple forms of evidence, and practicing critical reading strategies. The activity provided students with a tested verification method that applies beyond GenAI and prepared them to find, evaluate, and document sources for the researched writing project that followed.

Assessment

The activity was assessed through three measures, prioritizing the learning process over the final product. First, the instructor observed group work and facilitated class discussions during the activity, using these interactions to gauge student understanding and guide the conversation toward constructive, critical engagement with the tools and

sources. Second, the completed SIFT worksheets documented how each pair engaged with the verification steps and what they noticed while checking the GenAI output. Third, students' pre-, mid-, and post-activity reflections provided insight into their learning trajectory, capturing prior knowledge and attitudes at the outset, in-process observations during the activity, and shifts in perspective afterward. Thirty-five students completed both parts of the activity (the group worksheet and the individual reflections).

Faculty Reflections

The SIFT method is a great approach to information literacy for GenAI tools or for evaluating any source. Student hesitancy or resistance to some of the SIFT steps opened a productive discussion about what stopping to follow the SIFT method allowed us to notice, and whether they would apply this level of scrutiny any time they used GenAI tools. For instance, a few students questioned why such rigorous verification was necessary, which led to a generative conversation about the difference between trusting a source and verifying it.

Long before GenAI tools existed, I have had my students engage in reflective writing, and I believe this is one of the most important components of the writing process in the age of GenAI. For this exercise, students' reflections in their journals were thoughtful and helped them (and me) understand what they knew at the start of the activity, how integrated Google and social media are engrained in their information-seeking lives, and how GenAI tools work, particularly in the ways they integrate and document sources.

My original plan did not give us enough time on Day 1, so SIFT Step 4 (tracing to the original source, one of the most important steps) was completed at the start of Day 2, followed by class discussion. I would advise instructors to plan for two class meetings rather than trying to fit everything into one session. I also recommend being flexible with timing: the mid-activity reflection and discussion are valuable but can extend beyond what you plan for, which is worth allowing if the conversation is productive.

This could work well in Advanced Writing in the Disciplines, and it could lead nicely into more direct instruction on AI-powered research tools such as Scite and Scopus.

Step-by-Step Directions

This activity spans two class meetings (approximately 60 minutes on Day 1 and 30 minutes on Day 2). Adjust timing as needed.

Day 1

Step 1	Begin with a warmup question in your journal: When you need information, an answer to a question, or advice, where do you go? Write your answer, then share with the class. (~10 minutes)

Step 2	Complete the pre-activity reflection in your journal. Write answers to the following prompts (~5 minutes): 1. How, if at all, do you currently use AI tools such as Google's AI Overview, ChatGPT, or Claude when looking for information, answers to questions, or advice? 2. When you get information from an AI tool, how do you decide whether to trust it? 3. Have you ever verified or double-checked information from an AI tool by checking other sources? How did you do this? 4. How confident are you in your ability to evaluate the accuracy of AI-generated information? Rate this on a scale of 1–5 (1 = not confident, 5 = very confident).
Step 3	Read a prepared paragraph of text generated by ChatGPT. The instructor will display this on screen. After reading, discuss: Do you trust this? How might you verify this information? (~5 minutes)
Step 4	Learn the SIFT method: Stop (check information before spreading it), Investigate the source (know what you're reading and where it came from), Find better coverage (look for trusted reporting and more credible sources), Trace claims to the original source (track down the original context). Note: SIFT was designed for articles and websites, but in this activity you will use it to verify GenAI tools. (~2–3 minutes)
Step 5	Sit with your assigned partner, identify your assigned GenAI tool (ChatGPT, Claude, or Google AI Overview) and a obtain a digital SIFT worksheet. (~2–3 minutes)
Step 6	Choose one of the pre-written research prompts on the SIFT worksheet. Paste the prompt exactly as written into your assigned GenAI tool. Copy the full response into the worksheet. Complete the first two SIFT steps: • **Stop**: Read the AI response carefully. Discuss with your partner: Should we trust this? Will this information help us learn about this topic? • **Investigate**: Note specific claims, dates, and sources mentioned in the response. Consider the tool's capabilities and limitations, including its access to current information. Record your findings on the worksheet. (~10 minutes)

Step 7	Pause for mid-activity reflection. Write in your journal (~5 minutes): 1. What has surprised you so far about the GenAI tool's response? 2. Describe the verification process so far. How is it similar to or different from what you expected? 3. What questions are coming to mind at this stage? Share observations with the class when invited. (~5 minutes)
Step 8	Continue the SIFT process with your partner. Complete the **Find better coverage step**: use trusted databases such as Snell Library's Scholar OneSearch, journal databases, and .gov websites to verify the GenAI tool's claims. Do not go directly to the sources the tool cited—look independently. Document the sources you find and any interesting findings on the worksheet. (~15 minutes)
Step 9	Receive the post-activity reflection prompt as homework: Revisit your pre-activity reflection and consider what, if anything, you might change about your answer to how you decide to trust GenAI tools. What is something you might do or change about how you use GenAI tools in your research and writing? What else does this activity make you think about? Write a minimum of 200 words.

Day 2

Step 10	Complete the final SIFT step with your partner: **Trace to the original source.** Find the original source(s) the GenAI tool used, compare what the information says in its original context with the GenAI's claim, and document any differences, missing content, or missing sources on the worksheet. (~10 minutes)
Step 11	Share one interesting finding with the class. Start by telling us which tool your group used and which prompt you selected, then describe what you could verify, what you couldn't verify, or your biggest surprise. (~10 minutes)
Step 12	Participate in class discussion. The instructor may focus on topics such as the tone and confidence of AI responses, other ways to adapt SIFT to GenAI tools, what factors to consider when using GenAI for research, and how your thinking may have changed since the pre-activity reflection. (~10 minutes)

Related Materials

- SIFT Worksheet