Critical Doing: SIFT for AI

UL Workshop, Adapted from Mike Caulfied (Verified, SIFT)

OVERVIEW

Is this what people think it is?

"…the core question of personal fact-checking as "Is this what people think it is?" There's actually some deep epistemological insights under that shift, but the simplest way to conceptualize it is being misinformed (either by yourself or others) is not about the relation between something you are looking at and the truth. Being misinformed is usually about *bad evidence*. The most common pattern is this: without context something looks like good evidence of something. Once you have the context of that evidence it does not."

Mike Caulfield's prototype method was developed over the last three years to address the fact that we focus too much on "critical thinking" with AI without really knowing what that *means* or how it should be *defined*. Instead, this new method focuses on "critical doing" by focusing on a SIFT-like framework of "moves" around AI and improving AI input through well-crafted, evidence-based follow up questions.

SIFT

Where it all started.

- Stop
- Investigate the source
- Find better coverage
- Trace claims, quotes, and media to the original context

The method is not simply knowing the verbs– it is the interaction between verbs and the curricula (which is still nascent in the context of AI). Be mindful of techniques and tips for each peg.

SIFT is a list of things to do, the "doing before the thinking." When students engaged in

critical doing and then started thinking, they turned out to be just fine at critical thinking. Also: it is short– the core is memorable and active.

SIFT for AI

NOT a replacement for SIFT, but consider a few AI habits around information-seeking that are:

- Big enough to be generally applicable
- Concrete enough to be action-driven
- Consistently effective enough to be worth it

“Let’s skip showing 18 slides about brain scan studies that discover that people who automate things don’t remember them well, and that companies that provide AI without educational support don’t benefit…

…What needs to happen in education right now is this: we need to a) figure out what effective use of these tools might look like, then b) try to break that into understandings, skills, and habits, c) attempt to teach that, and d) measure the result.”

This workshop is steps a/b.

Three Moves, Seven Tips

1. **Get it in** (put in the broad claim first): Get the claim into AI Mode in the fastest and most convenient way – don’t worry about the perfect prompt yet, you will sculpt this afterwards. The first step is the hardest part of the journey.

   Tip #1: just select the whole claim or upload the whole image

   Tip #2: use “AI mode inception” to drill into new areas

2. **Track it down** (use follow-ups to drill down on specific aspects): Follow sources, check citations. Ask for the first appearance of the claim or the best source to critique it. If an event, find the original reporting. AI has made you the map – now head to your destination.

   Tip #3: click the link nearest the claim you want to verify

   Tip #4: to explore/source individual points, feed them back into AI mode

3. **Follow up**: Does it look more complex? No clear source answering your

question? Use a neutral “sorting statement” or other technique to get the bigger picture or deeper analysis – from the narrative you’re not seeing to the questions you didn’t know to ask.

Tip #5: use an evidence-focused prompt for better accuracy

Tip #6: ask it to lean into sources you value

Tip #7: keep a follow-ups file

FOLLOW-UPS

Evidence, argument, and reputation-focused!

New:

- Is this what people think it is?
- What are some common misconceptions about this, and what are some settled facts?
- Evaluate the evidence for the claim that ____ and provide a table that matches evidence to rebuttals and rates the strength of evidence
- Give me the background to this claim and the discourse on it that I need to understand its significance (and veracity)
- Read the room: what do a variety of experts think about the claim that ____? How does scientific, professional, popular, and media coverage break down and what does it tell us?

Simple:

- Can you find the best sources to cite on the actual claim?
- Can you link me to a picture of ___?
- What's the best source to look for information on ___? Can you link it?
- Can you source the image of [blank] that I uploaded and find the most reliable caption?
- What are some common misconceptions about this, and what are some settled facts?
- Facts and misconceptions and hype about what I posted
- What is the evidence for and against the claim I posted? (sorting prompt)
- Look at the most recent information on this issue, summarize how it shifts the

analysis (if at all), and provide links to the latest info
- Where did this claim come from? Use the I in Caulfield's SIFT method (I for investigate the Source) to do a lateral reading analysis of what the various people involved with this tell us about the claim. Find better coverage (F) to see what those most "in the know" say about the claim, subclaim, and assumptions of the original post, highlighting and commenting on any disagreement in the sources.
- Find me a link to the original source. If not available, find a link to the closest thing to the original source.
- Give me background to this claim and the discourse on it that I need to understand its significance (and veracity).
- Categorize the elements of this event as unprecedented, unusual, noteworthy, or normal. It's okay to have empty categories

Complex or niche:

- What's the overarching claim of what I posted? What is the evidence for and against?
- Are there any definitional or metrics/measurement issues I should be aware of to interpret this event, study, or evidence? any terminological confusions to flag for the public?
- Identify presuppositions of the claim that ___ and attempt to source evidence for (or against) them. List them out in a chart with the evidence in one column, and rebuttals in another, and categorize the strength of the evidence (e.g. weak, strong, etc.)
- List all compelling evidence and expert/witness testimony and categorize it as being either for or against the claim
- What did the study or article actually say, what evidence did it present, and what can the evidence show or not show?
- Are there differences in industry funded research on this topic and independent or government funded studies?

Format statements:

- Five bullet points, short sentences, summarizing the above with sources

Reflect:

- Quiz me on this

- Ask me another question

EXAMPLE

You see this come across your feed:

“Think I might be losing my keys on purpose in a minute: "A Bite Of Dark Chocolate Could Sharpen Your Memory For The Next Hour: Eating flavanol-rich foods like dark chocolate or berries may boost memory performance."

Track it Down #1

Go to AI mode on Google, enter the claim/photo

Prompt: *Find me a link to the original source of this information. If not available, find me a link to the closest thing to the original source.*

Click through the links, and the links in the linked items until you find the study.

Teacher: Ask what people found and how they got there (what did they click?), then do front of class walkthrough

Follow up #1

In AI mode, prompt:

Evaluate the evidence for the claim that ___ and provide a table that matches evidence to rebuttals and rates the strength of evidence.

Fill in the blank with the claim you are interested in– memory benefits? Cognitive benefits? Enter and review the evidence chart.

Students/Participants: Once done reviewing, turn and talk to your classmate. Compare the results you got with the results they got and note differences. Then discuss how the different types of evidence impact your confidence that chocolate improves memory in humans and why.

Follow up #2

In AI mode, prompt:

How does the research that is industry funded compare to the research that is not industry funded when it comes to findings around this category of outcomes around ____?

OR

Is this ____ study industry funded?

Fill in the blank with the claim or study topic.

Follow ups

evidence-based follow ups!

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