EdSutra

Teaching guide

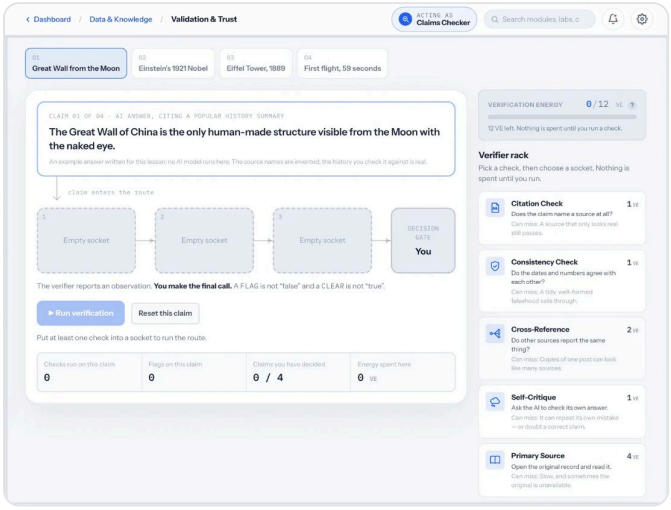
Module 04 · Data & Knowledge · Unit 02 · Stage 1, Foundations

Validation & Trust

The Truth Engine

Grades 8–12 | **25 minutes** | Role: **Claims Checker**

Grade 8: About age 13–14 · Year 9 in the UK · Class 8 in India



The big idea

A check gives you an observation, not the truth. Each check can miss some false claims or flag true ones, three websites can be one copied source, and checking costs time and effort. Learners build routes of checks, take their own results apart, and write rules that balance mistakes against delays. The person still makes the call.

The learner's job

Learners are the **Claims Checker** at Greymill Depot · Verification Bay. Every claim that leaves this bay carries the depot's name on it. Their task: build a checking rule. Then show what it costs at speed.

By the end, learners can say

- I can explain why a verifier gives you an observation, not the truth
- I can tell independent sources apart from copies of one original
- I can choose the right check for a claim, and say when the evidence cannot settle it
- I can judge a verification policy on its observed errors, delays, and effort

Before class

- One computer or tablet for each learner or pair, with EdSutra open (this Module is part of the full EdSutra studio).
- Open the studio once on each device before class, so the Unit still runs if the internet drops.
- Play the opening question and the first two claims yourself, so you know where learners will click.
- Write "FLAG is not false. CLEAR is not true." on the board. Point to it whenever a learner treats a check as the answer.
- Best after What is AI? and Data & Datasets.
- Units open in order, and Module 1 comes first. To start a class here, switch on Open every Unit in Settings → Teachers & parents.

Words to introduce

Check (verifier): A test run on a claim, such as Citation Check or Cross-Reference.

FLAG and CLEAR: What a check reports. FLAG is not "false"; CLEAR is not "true".

Primary source: The original record itself, such as the award citation, not a summary.

Independent source: A source that found the facts on its own, not by copying.

Verification Energy (VE): The Unit's pretend budget for checking effort, not money or real time.

False flag: A check stopping a claim that was actually correct.

Needs more evidence: Holding a claim back because the evidence cannot settle it yet.

Running the lesson 33 minutes

Open 4 min

"An answer names a source, and three websites repeat it. Is that enough to share it? What else would you want to see?"

Before anyone clicks, read out: "The Great Wall of China is the only human-made structure visible from the Moon with the naked eye." Ask: true or false, and how sure? Tally the class and return to it in Understand.

Step	What learners do	Ask the class	Listen for
1. Remember 2 min	The step bar starts at Understand. At its top, before the Truth Engine switches on, learners answer one question: what makes a claim trustworthy?	• Why is sounding confident not evidence? • Why might several websites that agree still not be enough?	Evidence you can open and inspect beats confidence and beats repetition.
2. Understand 7 min	Learners place checks from the verifier rack into three sockets, run the route, open the evidence and decide: Publish, Reject or Escalate. Claims 01 and 02 are required.	• If Citation Check said CLEAR, what did it actually look at? • What did opening the original record show that other checks missed? • Look back at our tally on the Great Wall. Were we right?	A check reports FLAG or CLEAR, not true or false. Opening the evidence, not the tool's report, changes the decision.
3. Apply 8 min	Claim Triage Shift: four new case files with 12 VE each. Learners choose checks, open what they find and decide at least three. One case cannot be settled either way.	• Which check told you most about the flood photo, and why? • Why was "Needs more evidence" the honest call on the AI essay?	Different claims need different checks. A picture needs its origin and date; some questions the evidence simply cannot settle.
4. Analyze 5 min	Verifier Autopsy: learners read their own runs as caught, missed and false-flag cells, group three copied articles into one source family, and name at least two failures with evidence.	• Three websites carried the claim. How many independent origins were there? • Why is a false flag a real cost, not extra safety?	Three copies of one post are one origin. Stopping correct claims holds up true information and wears down trust.
5. Evaluate 7 min	Trust Policy Room: twelve school messages, four of them wrong. Learners run a Fast and a Careful policy, open both energy ledgers, then build their own rules to meet the target on screen.	• Fast or Careful: which mistake costs more when a message is about a shelter? • What does your policy still let through, or hold back?	No policy is simply better. The right balance depends on what happens when a wrong message gets out.

Steps follow Bloom's revised taxonomy, in the order the Unit presents them.

Deepen the thinking

Critical thinking	Which check in the rack would you trust most, and what is the one thing it still cannot see?
AI thinking	Self-Critique asks the AI to check its own answer. Why might the same system repeat its own mistake?
Ethics and fairness	The AI essay case accuses a real person. Who is harmed if a detector is wrong, and how sure must we be before acting?
Connect to life	Think of something you shared, or nearly shared, online. Where did it first come from, and how could you have found out?

Misconceptions to listen for

"A citation proves a claim."
Citation Check only asks whether a source is named. It never opens it, so it costs 1 VE and catches about three in ten.

"Three websites said it, so it's confirmed."
In Analyze, three articles go into one source family and the count changes from three websites to one independent origin.

"A CLEAR means it's true."
The Einstein claim can pass several checks in a row. Only the award record shows the prize was for the photoelectric effect, not relativity.

In real life the card learners see at the end of the Unit

- Some AI tools list sources under their answers. A listed source still needs opening and reading.
- Three websites telling the same story may all copy one origin: that's one source, not three.
- Newspapers and TV newsrooms check facts before publishing, trading off mistakes against delays, like your publication policy.

Try it this week. Pick a surprising fact you heard this week. With an adult, count where it appeared, then how many independent origins those places really had.

Watch out for. A check that finds nothing doesn't prove a claim true, and a flag doesn't prove it false. You still make the call.

Talk about it. How much checking is enough before you share something, and when is waiting worth it?

Exit ticket

1. What is the difference between a FLAG and "false"?

   _____

2. Why can three websites still be only one source?

   _____

3. Name one check and one thing it cannot see.

   _____

Going further

For homework, learners take one claim they saw this week and plan a route: which check first, what it could miss, and when they would say "Needs more evidence". The In real life card's "Try it this week" activity fits well.