

Evidence essay · Observation and data

An evidence session with room for a better question

Kaisa Lehtinen · 29 September 2026

Fictional author and institute · Editorial demonstration, not peer reviewed

ABSTRACT

An effective school or community evidence session can concentrate on one answerable Arctic question rather than an exhaustive presentation. This essay proposes a session around the difference between a record-low winter sea-ice maximum and a summer minimum, using NOAA's resource kit and sea-ice chapter. Participants inspect an accessible figure, identify observations, check definitions, and test a claim before writing a supported finding, a limit, and a next question. Daily and monthly statistics provide a second opportunity to practise reading captions and tables. The discussion separates factual corrections from value disagreements and uses the National Inuit Strategy on Research to respect attributed authority without asking individuals to represent a people. Its intended outcome is traceable reasoning and continued questions, not pledges, recall, or manufactured agreement.

Keywords: evidence education · sea ice · source literacy · accessible participation · question-led learning

Adapted from the Still North field journal. Original article. A source-based editorial text, not a report of original Still North research. Examples and imagery are illustrative.

A school or community evidence session does not need to cover the whole Arctic. It needs to leave people better able to ask and answer one worthwhile question. A room can be impressed by a film, concerned by a headline, and still unsure what the evidence actually shows. Design for a useful act of reasoning, not a succession of striking slides.

A manageable starting question is: how can one year have a record-low winter sea ice maximum without a record-low summer minimum? It invites participants to examine a seasonal cycle, distinguish statistics, and separate a long-term pattern from one year's variation. Nobody needs to pretend to be a climate scientist, and the facilitator need not promise a discussion that settles every climate-policy disagreement.

Choose one source and make it available

The NOAA Arctic Report Card resource kit offers ways to observe, question, discuss, and investigate the report, including small-group work with indicators. Use it as a source of materials rather than an obligation to show everything. For this session, select one figure and the relevant definitions from the 2025 sea ice chapter.

Provide the caption, source, axes, unit, and reference period with the figure. Prepare a readable printout and an accessible text or table alternative; do not make a small projected graph the only evidence. Say which material comes from NOAA and which questions the facilitator has written. Illustrative images from this fictional site are not records of a class visit or an institute expedition.

Spend the first minutes noticing

In an hour-long session, allow roughly the first ten minutes for quiet inspection and questions before explaining the result. Ask people to note one feature they can point to and one thing they cannot yet interpret. "The line falls during this period" is an observation about the chart.

"That happened because of a particular weather event" is an explanation requiring further evidence.

Give participants a way to contribute without speaking to the whole room. Pairs, written notes, and a private question channel can widen participation. For younger learners, reduce the reading load and work with the annual rise and fall before introducing anomalies or ranks. Keep the reasoning real while changing the complexity of the task.

Let groups test a claim

Use the next twenty minutes for a small task: find evidence for the claim that the winter maximum and summer minimum answer different questions. Ask groups to identify the relevant months, define extent, and explain what the figure cannot tell them about ice thickness or local travel conditions. Let them consult the caption and chapter rather than rewarding recall.

A second prompt can compare the chapter's September daily minimum with its September monthly average. The point is not to catch people out with two rankings. It is to practise checking what a number represents. When a group changes its initial interpretation after reading the table heading, treat that as successful evidence use, not a mistake to conceal.

During discussion, distinguish a factual correction from a value disagreement. A participant may reasonably care most about a different consequence, but that does not alter the unit on an axis. Conversely, a correct graph does not decide whose priorities should govern a policy. Keep space for both kinds of conversation without pretending they are the same task.

Do not ask anyone to represent a people

The Arctic is home, not only a teaching example. Use named, attributed sources for accounts of Indigenous

monitoring and governance. Do not ask an Indigenous pupil or visitor to validate a general account or speak for a community. If inviting a contributor, agree the purpose, payment, accessibility, recording, and use of their contribution in advance. An invitation should be genuinely optional.

The National Inuit Strategy on Research is an appropriate primary source when discussing Inuit research priorities and authority. It is not a script for impersonating an Inuit perspective. Our [Communities and livelihoods](#) page explains that boundary within this fictional site.

End with a traceable answer

Reserve the final part of the session for a short response: one supported finding, one limit, and one next question, with the source identified. Participants might explain why the winter record does not determine the summer rank, then ask what thickness observations add. This is more informative than collecting pledges or asking only whether people enjoyed the event.

Keep unanswered questions and agree how any promised answers will return. Offer [Arctic change in 2025](#) for further reading without requiring homework. A meaningful session does not end with everyone repeating the facilitator's conclusion. It ends with people able to locate evidence, describe its limits, and recognise a better question when it appears.

References

1. NOAA Arctic Report Card resource kit (globalocean.noaa.gov)
2. 2025 sea ice chapter (arctic.noaa.gov)
3. National Inuit Strategy on Research (itk.ca)