Scientific and Information Literacy in Online Discussion Forums

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Scientific and Information Literacy in Online Discussion Forums

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**Scientific Literacy**
- identify a valid scientific argument
- analyze scientific evidence including graphical representations of data
- use mathematical information, and critical thinking in decision-making processes

**Information Literacy**
- conduct research using 1º and 2º sources
- synthesize source material effectively
- report information accurately and ethically
- Evaluate sources for credibility, authority, accuracy, relevance, and currency

**Scientific Arguments**
1. Uses multiple pieces of appropriate evidence
2. Assumptions and inferences are explained
3. Contains only true claims
4. Conclusions follow from claims
5. No logical fallacies
6. Biases are checked (e.g., confirmation bias, halo effect)

**Literacies in Action**

**Design**
- Task: Craft an evidence-based opinion on controversial issue
- Rubric with line items for literacies and scientific arguments

**Facilitation**
- What should be a priority for conservation – biodiversity hotspots or cold spots?
- Do we have a human population problem?
- What should the role of government be in regulating greenhouse gases?
- Do plastic product bans work?