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ASEE Engineering Libraries Division, June 25, 2018

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The How-to of Biased Information: Teaching engineering students about knowledge creation and the scholarly conversation

ASEE Engineering Libraries Division June 25, 2018 Susan Boyd Engineering/Math Librarian





Instruction for Civil Engineering Class

CENG 161/261 – Sustainable Water Resources

Addressed professor's concern that students have difficulty differentiating between factual vs. biased sources.

Professor and librarian collaborated on selecting sources - used climate change websites and a document from Turning Point USA for evaluation exercises.

Provided evaluation criteria for both exercises.

Publication produced by a controversial campus organization captured students' initial attention, and sparked lively discussion.





Teaching Plan

- Students are introduced to the evaluation process using climate change websites with standard criteria such as authority/trustworthiness, credentials, purpose, factual/opinionated, etc.
- Then each student takes one of the arguments supporting fossil fuels in the Turning Point document, reads it through, and checks on the references used to make the each point.
- Students answer questions on a worksheet (Google forms).
- The teachable moment: Students discovered how bias can derail the creation of factual knowledge, and "stack" the scholarly conversation to agree with organizational beliefs.





Setting Up Your Own Bias Evaluation Session

- Provide evaluation guidelines.
- Evaluate websites from differing perspectives.
- Evaluate a document from a controversial source.
- The document must have references for students to analyze.





For Slides, Resources & Worksheet

LibGuide: http://libguides.scu.edu/CENG161 Questions: skboyd@scu.edu

