Notes from iPAL Webinar

October 22, 2020

1) **Frontiers Paper**
    a. Use framework to distinguish iPAL from others. This could help in selling iPAL! Need more discussion on how to get the word out.
    b. What are essential attributes of CT (generic and in a domain)?
        i. We need more empirical research regarding generic vs. subject-specific CT.
        ii. It might help us to consider how we know when CT is NOT occurring.
    c. One extension of the Frontiers paper is providing examples of how the framework could be applied in particular disciplines.
    d. What depth of disciplinary knowledge is needed (can vary with purpose of assessment and target population)?
    e. Disciplines can provide rich context for storyline.
    f. Ultimately disciplines do differ in approaches to deep CT (e.g. medicine relies more on inductive reasoning, while physics relies more on deductive reasoning).
    g. Finland. CLA+ data. Observe some discipline-specific differences in responses. Strongly related to gender (esp. CR vs M/C).
    h. Distinction between "instantiation" and "iterative" (??).
    i. Look at Problem-solving in PISA. Weak methods.
    j. Comparing novices and experts (cf, Newell and Simon).
2) **PA Construction**
    a. Need to define terms. We need to be very specific about what we are asking students to do in their response.
    b. What is trustworthy may depend on culture and society.
    c. Colombia Pilot Study (54 students from diverse academic fields/7 domains). Many answers based on prior beliefs rather than engaging with documents. There was also little evidence that students engaged in document analysis, ethical reasoning, and quantitative reasoning. Students did not seem to discriminate between the reliability and relevance of documents.
    d. Spencer Proposal: Lots of anecdotal (and other) evidence that students don't know how to engage in argument-based thinking (vs. conduct an argument).

e. AHELO experience and lessons.
f. One member discussed a course on "multiple source documents". Students don't know what argumentation means. Need to scaffold precursor skills. Students tend to focus on proving they are "right" and ignoring evidence to the contrary. They therefore select their source material to align to their point of view.
g. Another member agreed that students need a lot of scaffolding. Have to work against "confirmation bias". Even sharing the scoring rubric and exemplars had little impact.
h. Have to counter strongly held "narratives."

3) PA Scoring

a. How explicit are the evidence models and the scoring rubrics?
b. Colombia: Many respondents scored 0 on many indicators. Now refining scoring rubric based on data from pilot.
c. Finland: Cog labs show that thinking of many students is more "versatile?" than is represented in their answers. Therefore, it is very important to be clear in what we are asking students to do.
d. What constitutes ethical reasoning in this context? Beyond logical reasoning. How does one justify an ethical position (e.g. by reflecting on consequences for others)?
e. Too much scaffolding can complicate interpretation of results.
f. Scoring is labor-intensive and costly.

4) IP

a. Good discussion based on guidelines document.
b. Will modify as needed.

5) Funding

a. Spencer Fdn? Teagle Fdn?
b. Mellon Fdn? Building on grants to UIC as a Hispanic Serving Institution.
c. IADB: Interested in PAs to certify certain competencies (21st century skills). Discussions to continue.
d. Germany: Hard to get money for higher ed. Think about shifting focus to transition from high school to tertiary ed.
e. Finland: Part of a consortium receiving 3.6 million euros.

6) Next Steps

a. Discussed having another group meeting in early December. Focus on scoring.