DiAGnosing the Argumentation Level of Groups

Theoretical Framework

DiALoG

(Diagnosing Argumentation Levels of Groups)

Intrapersonal Arguments

Interpersonal Arguments

Reasoning

Evidence

Claims

Relevance

Co-constructing

Critiquing

Listening

Implementation

The DiALoG tool

Expected teacher workflow

Classroom pilots & teacher interviews:

- The DiALoG instrument helps teachers shift to a student-centered mindset.
- The DiALoG instrument alerts teachers to specific gaps in how they evaluate student discourse.
- Teachers could benefit from opportunities for metacognitive reflection as they develop proficiency with DiALoG.
- DiALoG improvements must focus on depth as well as ease of use.
- Teachers are partners in improving DiALoG.
- There is variation in how teachers interpret DiALoG scores.
- RML flexibility is important.

Findings So Far

Psychometric testing:
In lab conditions, we found high inter-rater reliability ($r^2 = .933$) for the total scores allocated by each of two raters to $n=28$ videotaped episodes of classroom group argumentation, eight weeks later the same video episodes were scored in the exact same order by the same two raters, yielding high test-retest reliability as well ($r(28) = .966$, $p < .001$). The interpersonal factor had a Cronbach’s alpha of .980, an initial eigenvalue of 7.611, and accounted for 63.42% of the total variance in scores. The interpersonal factor had a Cronbach’s alpha of .933, an initial eigenvalue of 2.683, and accounted for 22.35% of the total variance in scores. No other factors had initial eigenvalues above 0.6, with most below 0.3.