C-SAIL Year 2 Convening: Measurement Study Presentation

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C-SAIL Year 2 Convening: Measurement Study Presentation

Abstract
Morgan Polikoff presents Year 1 progress on the Measurement Study at C-SAIL’s first annual “A Conversation on College- and Career-Readiness Standards” in Washington, D.C. on November 18, 2016. This PowerPoint presentation corresponds to a presentation video available at c-sail.org/videos.

Keywords
college and career-ready standards, implementation, professional development, assessment

Disciplines
Education | Educational Assessment, Evaluation, and Research

Comments
The Center on Standards, Alignment, Instruction, and Learning (C-SAIL), funded from July 2015 through 2020 by the Institute of Education Sciences, examined how college- and career-readiness (CCR) standards were implemented, if they improved student learning, and what instructional tools measured and supported their implementation.
Measurement Study

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Context

There is a need for high-quality measures of teachers’ instruction that align with expectations in new college- and career-readiness standards.

• These measures are needed for our intervention study later in the project.
• More common/standard measures of instruction would also benefit the field (both research and practice).
• The purpose of this portion of the work is to develop and provide initial validity and reliability evidence for survey and observational measures of teachers’ instruction.
Questions driving this study

• What is the validity of teacher reports of their instruction for a single lesson? Over a semester?
• What is the reliability of content analyses of assignments and assessments? Of classroom observations?
• Do any of the above differ based on subject area?
Data Sources

- **Teacher logs and surveys**
  - Based on revised Surveys of Enacted Curriculum content languages in mathematics and ELA
  - Instructional content defined at the intersection of topics and levels of cognitive demand
  - Also includes questions about standards for mathematical practice and text type/complexity

- **Teacher observation protocol**
  - Based on the logs and surveys
  - The rater breaks the lesson into smaller activities, of no more than 10 minutes a piece, and then codes each segment with the SEC topics and cognitive demands
The Revised SEC

• Convened expert three-day meeting in fall 2015
• Revised SEC surveys and content taxonomies against Common Core and TEKS standards
• Revisions included:
  – Cognitive demands revised from 5 levels to 3 (ELA) and 7 (math)
  – List of topics in each subject updated to be inclusive of all content in CCSS and TEKS grades K-12. Final: 137 topics in ELA, 228 topics in math
  – Math practices section added to mathematics SEC teacher survey
  – Text complexity section added to ELA SEC teacher survey
Data Collection

• Pilot of surveys in ~60 classrooms (30 math, 30 ELA)
  – Biweekly log surveys
  – End-of-semester surveys
  – Two weeks’ worth of student assignments and assessments (non-scored versions)

• Pilot of observations in ~40 classrooms (20 math, 20 ELA)
  – Video/survey of a single lesson’s instruction
Findings/ Anticipated findings

• Findings:
  – To what extent do teachers’ reports of their instruction based on a single lesson correspond to what an expert observer identifies in that lesson?
  – To what extent do teachers’ reports of their instruction on a biweekly log survey correspond with their reports based on an end-of-semester survey?
  – How reliably can expert raters evaluate teachers’ instruction based on our observational protocol?

• Anticipated findings
  – I expect that raters will be able to reliably code teachers’ assignments and assessments.

• Anticipated working paper date
  – January 2017
Connection to FAST Program

- For our intervention to work, we need to have good data on what and how teachers are teaching.
- The goal of the measurement study is to develop instruments that allow us to gather the information we need.
- Our instruments may also be able to be used by other researchers and school and district policymakers.