

Researching Rarely Occurring Teaching Practices by Reusing Large-Scale Video Data

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Abstract (207 of 300 words)

Many teaching practices of high research interest occur rarely during normal teaching, such as practices associated with conceptual understanding and higher-order skills in mathematics. Because such practices are scarce, they are hard to study during naturally occurring instruction. This presentation reports on an attempt at analyzing a rarely occurring teaching practice by carefully sampling videos from a large-scale video study. The videos were sampled by using ratings from a standardized observation instrument as sampling criteria. The practice investigated was “responding conceptually to student thinking”. We sampled both teachers proficient in the practice, and comparison teachers. We used this matched comparison sample to find distinguishing features of instruction in classrooms where teachers responding conceptually to student thinking. Results show that teachers responded conceptually when “moments of confusion” arose while working on cognitively demanding tasks; comparison teachers also included demanding tasks in their teaching, but they handled “moments of confusion” differently. We suggest that rarely occurring teaching practices can fruitfully be researched by sampling from existing video-studies using standardized observation instruments. Adding comparison teachers to the analysis allowed cleaner identification of what distinguishes teachers that are adept at the rarely occurring practice. However, this approach demands other (stronger?) reliability and validity assertions than the observation instruments were designed for.