

Electronic Seminar on Mathematics Education

Reliable classification of classroom practices using lecture recordings



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I will describe the development of a new classroom observation protocol, FILL+, which generates a timeline showing the type of activity taking place at each second ("lecturer talk", "student question", etc). This provides much finer detail about classroom practices than other protocols (such as COPUS, which notes activities taking place in 2-minute intervals). The timeline can be summarised quantitatively, for instance by computing the proportion of time spent on lecturer talk compared with other activities, or counting how often lecturers pose questions to the class and how often students respond. I will present some of the insights gained from applying FILL+ to recordings of 220 STEM lectures, including 94 in mathematics. A key finding was that the FILL+ protocol can be applied reliably by novice coders, following minimal training.

To join the seminar, go to <https://cornell.zoom.us/j/169462410>

For more information on ESME: <http://math.mit.edu/seminars/esme/>