Christopher S Shaw* (cshaw@colum.edu), Department of Science & Mathematics, Columbia College Chicago, 600 S Michigan Ave, Chicago, IL 60605. The Unsuspecting Analyst: Mathematics That Needs No Introduction.

Confronting a new topic in a traditional mathematics class often requires an array of new definitions and techniques, all of which must be introduced before students can begin to work on the material in that topic. Spending time covering definitions before work can begin is not ideal in a typical college-level Quantitative Literacy course, where the audience may be unwilling to become invested in the material. Inquiry-Based Learning is a natural pedagogical response to this challenge, but it comes with its own challenges: in particular, the nontraditional nature of an IBL classroom makes it difficult to replicate in multi-section courses.

This talk describes the author’s continuing quest to develop a multi-section Quantitative Literacy course influenced by IBL philosophy, where lists of definitions are kept to a minimum and student participation is maximized. The key element to this quest has been developing problems that can be read, understood, and even attempted, without any prior formalization; these problems then lead naturally to the development of formal definitions. In particular, we present several modules on problem-solving that have been successful at engendering enthusiastic learning in the classroom. (Received September 16, 2014)