IMPROVING THE QUALITY OF MATHEMATICS ASSESSMENT

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ABSTRACT

Little has changed over the last decades around mathematics assessment practices. The criteria by which mathematics assignments are graded are usually only implicit through the number of marks assigned to steps in the solution to problems, with the accumulation of marks—rather than the overall quality of the student work— determining the grade. Though mathematics assignments often involve higher order skills and appropriate use of mathematical notation, these factors are rarely articulated in the marking scheme or in the assessment criteria communicated to students. Within the current focus on student achievement standards, such practice is no longer defensible.

We will report on the progress of a project funded by the Office of Learning and Teaching to begin addressing the issue of undergraduate mathematics assessment. The project is engaging the mathematics community in a conversation around assessment standards, building on the mathematics threshold learning outcomes. We aim to influence assessment practices in mathematics departments, to move away from idiosyncratic marking and grading approaches that favour procedural mastery towards practices that measure the quality of all aspects of student work against external anchors ensuring comparability of standards within and across mathematics departments. The ultimate goal is to improve student learning.

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