

UND's Quantitative Reasoning (QR) task was developed by a team of faculty volunteers as an assessment tool for one of our general education program learning outcomes. We had a need for information about how our graduating seniors were doing in this area, as defined by our institutional rubric for QR, and we recognized the importance of using an assessment tool that cuts across campus in two distinct ways: (a) the tool should allow us to collect work products from students graduating in any UND program of study rather than only or primarily from those in quantitatively-oriented fields, and (b) the work products collected should demonstrate the aspects of QR that are valued by all faculty – and thus be scorable by faculty from virtually any discipline – rather than only or primarily by faculty in quantitatively-oriented fields. Therefore, the task is intended to be engaging and accessible to students generally, to require the kinds of quantitative reasoning that we genuinely intend all our graduates to be able to demonstrate, and to represent an example of the ways in which an alum of our institution is likely to engage with quantitative information in his or her professional and civic life.

The QR task is administered on what is essentially a volunteer basis in that students are encouraged by their capstone professors to participate in an out-of-class general education assessment session, but most receive (at most) a small number of bonus points that are awarded for showing up rather than based on performance. In that context, one of the strengths of the task has been its ability to engage students, eliciting what genuinely appears to be their best work. The out-of-class, voluntary nature of the activity does mean that we cannot ensure an entirely representative sample, although our demographic data demonstrate that our sample is quite broad.

We have found that the task is a highly useful tool. Based on our two administrations of the assessment, we have concluded, for example, that our graduating seniors generally perform somewhere between the high end of “developing” and the low end of “accomplished,” using a 6-point scoring guide. We also noted that our ES program generally might be improved by ensuring that students gain more practice with “muddy, real world problems,” like those posed by a performance task. For QR classes in particular, we concluded that it would be helpful for students to gain more practice explaining and writing about conclusions, rather than primarily focusing on providing “answers”. One change to the task that might strengthen it is the addition of a reflective component, which could provide scorers with useful insight regarding student reasoning.

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