There is widespread agreement that Quantitative Skills (QS) are essential for graduate competence and preparedness in the sciences (NRC, 2003; Bialek and Bostein, 2004; AAAS, 2010), and this is not limited to just those students pursuing a career in scientific research. For example, medical schools (the destination of choice for many science undergraduates) are also emphasising quantitative skills (AAMC, 2009). While many institutions are responding to the ‘calls for action’, evidence of student learning is now needed to determine the success and on-going implementation of these responses.

A large research-intensive university in Australia aims to instil greater QS through implementation of a new science curriculum, including introductory science-mathematics courses, undergraduate research courses, and final year capstone courses that require biology majors to integrate and apply their QS. This paper will present findings from the first cohort of students graduating from the new curriculum, focusing on the preparedness and abilities of graduates going on to study medicine. Data will be presented from student-self reporting via a graduating skills inventory and performance data from a QS assessment task. (Received September 21, 2010)