General Education Requirements
Quantitative Literacy and Oral Communication

In summer 2012, a working group was brought together by the Senate Chair of Educational Policy Martin Johnson and Vice Provost Steven Brint to discuss general education assessment at UC Riverside. The group identified potential learning outcomes for the general education assessment by consulting the Goals for an Undergraduate Education section of the UCR General Course Catalog. Of the several objectives listed in this section, the committee elected to focus on quantitative literacy and oral communication.

In a society in which data collection and data analysis plays such an important role, quantitative literacy is essential not only in jobs that require it but to remain a well-informed citizen and participant in community life. Confidence in oral communication is equally important. Following graduation, many students take jobs that require the ability to communicate clearly not only in writing, but also orally.

We surveyed faculty who taught the most popular general education courses over the past three years about opportunities for quantitative literacy and oral communication in their courses. Popular general education courses surveyed for this study were lower division courses that satisfy requirements and enrolled at least 1000 students over the past three years (e.g. ENTM 010, HIST 020, PHIL 001, and SOC 001). One hundred thirty-eight faculty responded; some responded for more than one course. We received a total of 176 responses for 60 general education courses.

Findings show that 70% of courses require students to do calculations and 66% require students to use equations. Over 90% of math and science courses surveyed require students to perform calculations and/or use equations. We also found that 75% of courses required students to interpret the meaning of numbers presented in tables or the results of calculations. These findings suggest our students have ample opportunities to develop quantitative literacy through the fulfillment of general education requirements.

The findings related to oral communication are not as bright. We asked faculty to report whether oral communication opportunities were required, optional, or not offered in their courses. Oral communication opportunities, both required and optional, were most frequent in the Humanities (69%) and Social Sciences (71%). Overall, 51% of courses either required oral communication assignments (27%) or offered optional oral communication opportunities (24%) in the form of individual presentations, group presentations, video presentations, debates, or interviews.

When asked if they offered any other oral communication opportunities in their courses, faculty responded that students participate in group work, discussions, and question and answer sessions in the classroom. Other faculty members responded that course sizes prevent them from offering oral communication opportunities.

This survey suggests that students at UC Riverside are likely to take a course that will provide them with opportunities to develop their quantitative literacy skills but may not have sufficient opportunities to develop their oral communication skills as they complete their general education requirements. The general education assessment working group will meet this quarter to discuss these findings. We conducted a separate evaluation of the University Writing Program to investigate student achievement in written expression. This study will be the subject of a forthcoming Survey Brief.