

TO: Traci Freeman, Colket Center Director
FROM: Steve Getty, Director, Quantitative Reasoning Center
RE: Annual report, 2015-2016, Blocks 1-8
DATE: June 17, 2016

**QUANTITATIVE REASONING CENTER (QRC)
ANNUAL REPORT, 2015-2016**

The Quantitative Reasoning Center (QRC) at Colorado College was open 40 hours per week during the regular academic schedule. During this time and into Summer Session, the QRC staff and Director:

- Recorded work with at least 737 students, or 37% of the CC student body,
- Supported at least 1,100 drop-in tutorials at the QRC,
- Assigned 207 individual tutor (one-on-one) over the course of a block,
- Provided 76 Learning Assistants to Block courses for 462 students,
- Assisted students in an array of disciplines: Mathematics and Computer Science, Chemistry, Physics, Biology, Economics, Geology, Psychology, Neuroscience, Sociology, IDM, thesis writing, MAT-Education and more.
- Continued and increased collaboration with college faculty in coursework development, thesis research, and faculty professional development programming.

QRC Usage, Academic Year 2015-2016

Drop-in Tutoring

During the academic year 2015-2016, a minimum of about 1,100 visits were recorded for staffed drop-in hours from about 413 individual users (Figure 1). About two-thirds of all visits were from first-year (326) and second-year (388) students, representing about $\frac{2}{3}$ of their respective classes (Figure 2). Many of these students plus juniors (132) coming to staffed drop-in hours are taking rigorous entry-level courses or an initial round of required math or science courses in their major.

Disciplinary support was most frequent in Mathematics, followed by Chemistry, Economics and Physics (Figure 3). This is broadly consistent with past patterns of QRC drop-in tutoring. A difference in comparison to previous years was a relative increase in disciplines such Economics, Computer Science, and thesis writing. Compared with two years ago, a trend continues for students coming to the QRC for courses at more advanced levels compared with 100-level courses (Figure 4).

Individual Tutoring (One-on-One)

Individual tutoring services (one-on-one tutoring over course of a block) continued to grow. During academic year 2015-2016, the QRC received 208 requests for individual tutoring, a 21% increase over the previous year. Block 3 and 6 had the most requests, largely driven by Chemistry and Math courses (Figures 5, 6).

Learning Assistant Program

In 2015-2016, QRC Learning Assistants (LA) were assigned to 76 courses largely among Mathematics, Computer Science, Chemistry, and Psychology. This program has grown substantially compared with 6-7 years ago (Figure 7). The average amount of time tutoring time was about 18 hours per course, and mostly split among working with small groups or most/all of the class. LA's responsibility largely focuses on study/homework sessions and prep for exams.

There were a minimum of 462 recorded students who attended review sessions and used help provided by Learning Assistants (note: this must be an underestimate, and likely reflects poor sign-in practices at review sessions). The majority were sophomore and junior students. Of this sample of 462 students, 221 students used Learning Assistant sessions, but not drop-in and individual tutoring.

Other Student/Faculty Collaborations

In addition to tutoring support, the QRC peer tutor staff and director engaged in other collaborations with students and faculty, including for example

- Course support and development (MAT thesis writing, Taber; Excel modeling in genetics labs, Hatton/Lostroh/Spahich; missing data analysis, Fenn; “Math Essentials” quizzes, Physics Department; bird banding and identification work, Wilson/Linkhart),
- Work investigating success in rigorous entry-level STEM courses, Quantitative Reasoning Assessment with first-year students,
- Convene QRC Committee meeting to critically evaluate progress, and role of QRC in academic support (Brown, Bruder, Burns, Hatton, Roberts, Redmont, Siddoway, Daugherty, Dounay, Lindeman)
- Academic support of various types for college programs
- Support on student research and theses for 4 disciplines.
- Hosted Visiting Scholar (Dr. Kenneth Barron, James Madison University) for 1-day Crown Center faculty development on promoting student motivation.

QRC Peer Tutor Staff Academic Year 2015-2016

An important QRC goal for this past academic year was recruit (starting at about 100 students), interview (45), and then select and complete training with 27 new QRC peer tutors. This leads to a current staff of about 40 QRC peer tutors.

Figures:

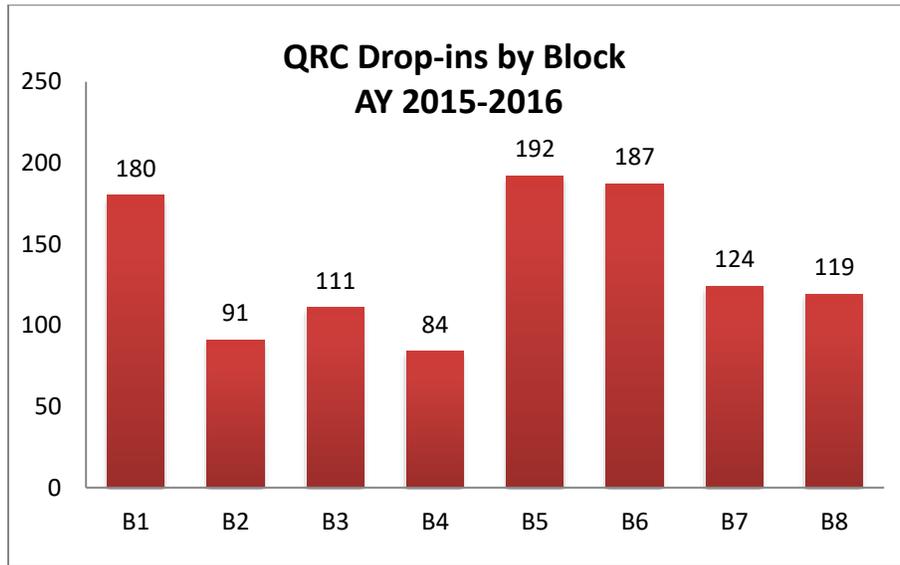


Figure 1: QRC Drop-ins by Block for AY 2015-2016.

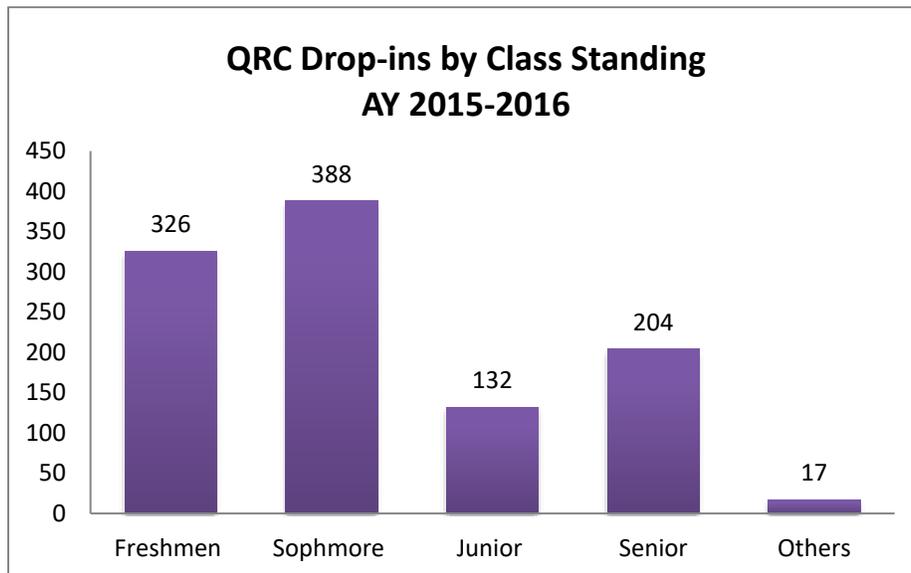


Figure 2: QRC Drop-ins by Class Standing for AY 2015-2016.

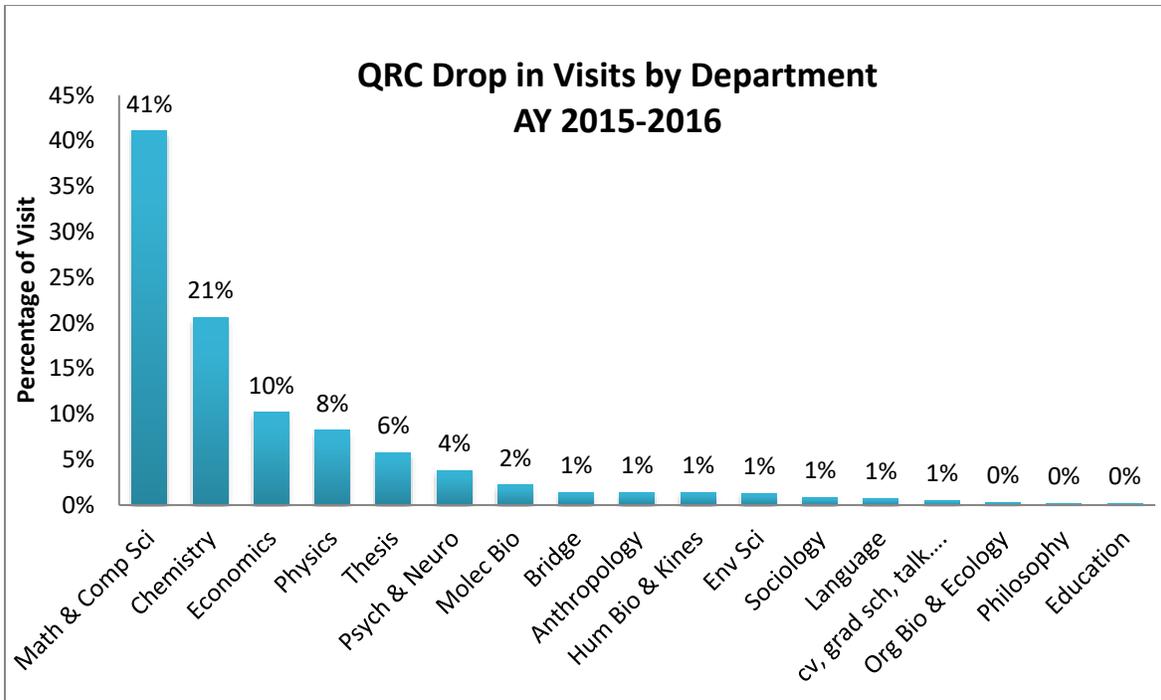


Figure 3: QRC Drop-in Visits by Department or program for AY 2015-2016.

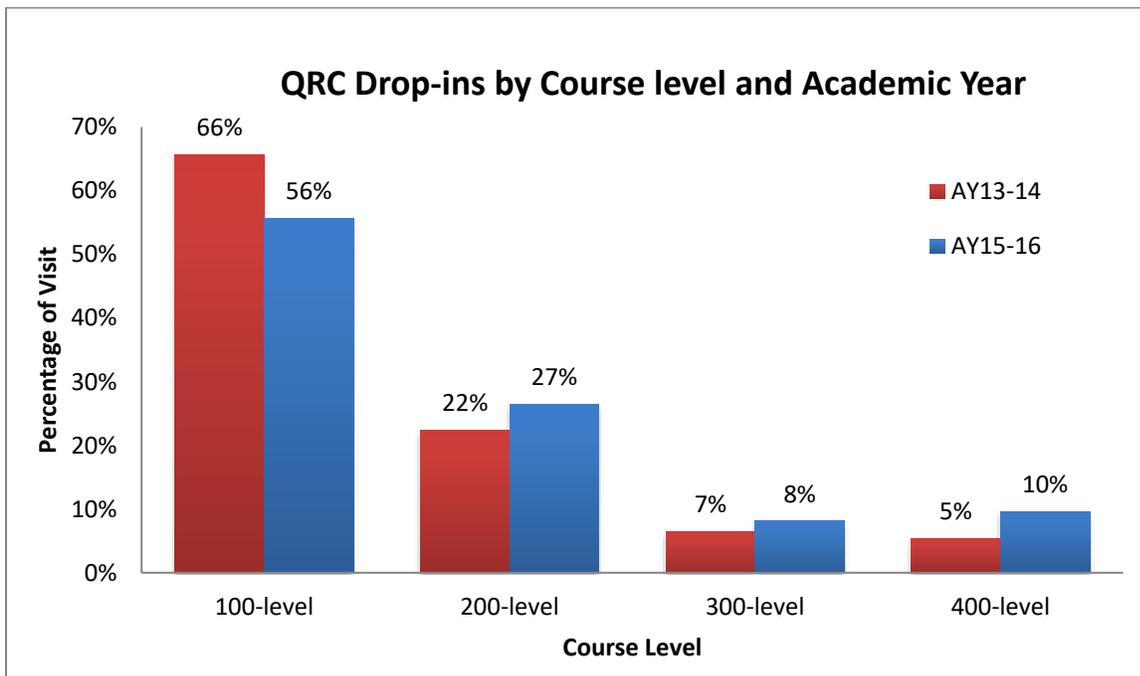


Figure 4: QRC Individual Tutoring for AY 2013-2014 and AY 2015-2016.

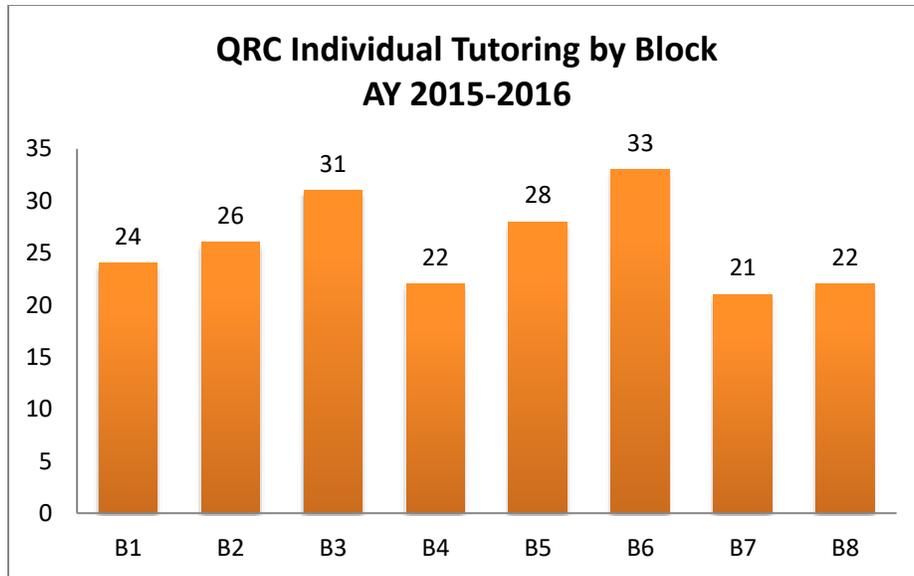


Figure 5: QRC Individual Tutoring by Block for AY 2015-2016.

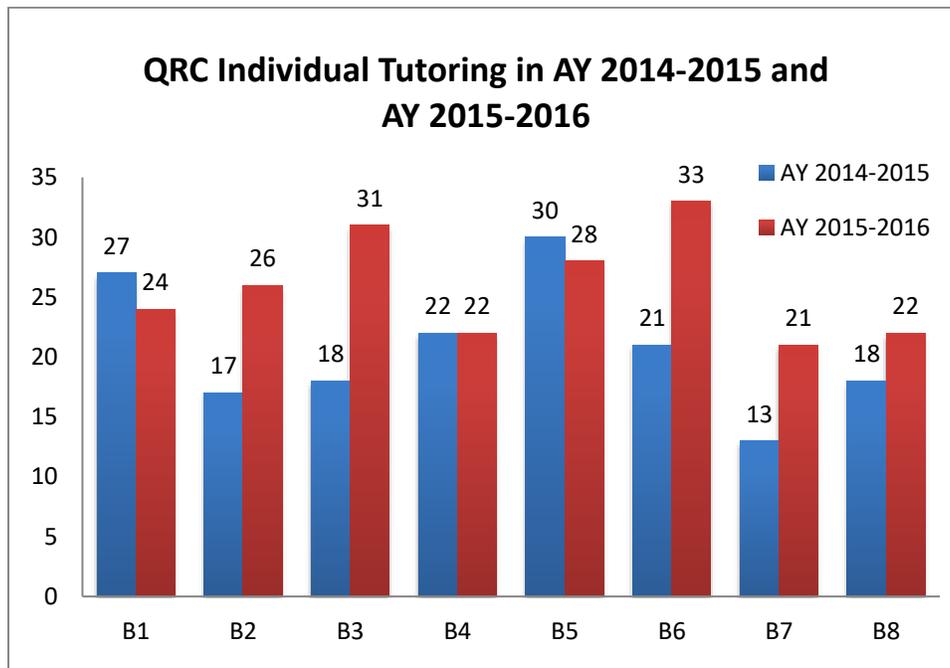


Figure 6: QRC Individual Tutoring for AY 2014-2015 and AY 2015-2016.

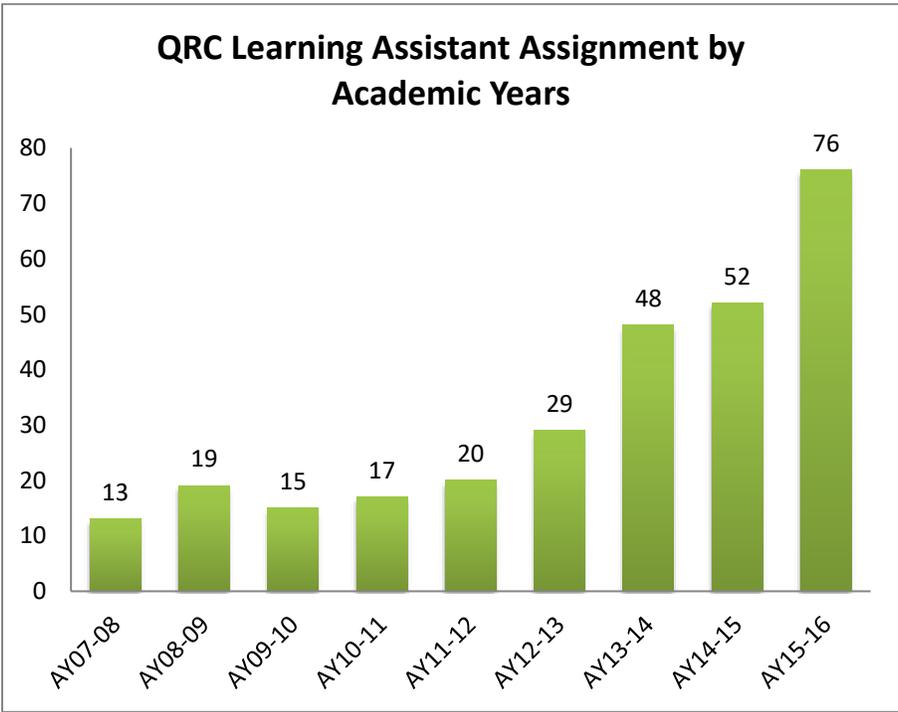


Figure 7: Assignment of Learning Assistant for Academic Years between 2007-2016.