Actions agreed upon by Quantitative Reasoning (*Mathematical and Technological Literacy as of 2006*) for the coming academic year (2004 – 2005):

1. Curricular Issues:
   
   a. The Quantitative Reasoning Advisory Committee will work closely with the Scientific Inquiry domain to determine the extent to which ISP 120 is serving the needs of this domain and to plan further articulation and coordination.

   1a. This is done and is continuing. We have ensured greater communication between the two committees by making it a regular practice to have faculty members who sit on both committees and act as liaisons. We currently have two faculty members (Jeff Bergen and Lynn Narasimhan) who are on both committees.

   b. The Advisory Committee will continue collaboration with CTI and the Mathematics department in designing a mathematical and technological literacy sequence which will increase the level of challenge to students in the Liberal Studies Program while continuing to support students who enter DePaul with deficiencies in these areas.

   1b. This is done. The Mathematical and Technological Literacy Proposal was approved by Faculty Council in April 2006. This work consumed most of our time and energy.
2. Instructional Issues:
   a. The Quantitative Reasoning Advisory Committee will pilot instructional
approaches to percentages using activity-based instruction (including data-based
computer activities) to continue addressing concerns regarding student ability to
solve complex percentage problems in context.

   b. The Advisory Committee will assess student learning of complex percentage
problems.

2a and b. This was done in academic year 2005-2006. A report on this work was
submitted to the Liberal Studies Council in Autumn 2006. The pilots were
successful overall, and the curricular material and curricular approaches have
been adopted in the latest curriculum of the course. The approaches
demonstrate some improvement in students’ learning of complex percentage
problems and also suggest the further work could be done as well.

3. Enrollment and Prerequisite Issues:
   a. The Committee will collaborate with the Academic Resource Center and
relevant college offices to increase knowledge of the Quantitative Reasoning
exam, which can exempt students from ISP 120. Through this collaboration and
other appropriate steps reduce the number of students who, on their course
evaluations, indicate being over-prepared for the course from 8% to 4% within
the next two years.

3a. The quantitative goal was accomplished. Curricular changes were piloted and
eventually adopted to make ISP 120 more rigorous. Communication occurred
with the LAS College Office, the School of Music, and the Theatre School on this
issue, although there was no communication with ARC. A careful analysis of
1140 end of course evaluations from the 2005-2006 academic year, using a
methodology identical to the one used in the study that lead to the 8% figure,
indicated that the number of students who felt they were over-prepared for the
course dropped to 3% (32 out of 1140, approximately 2.8%). We feel we can
reduce the figure a little further with continued efforts, and we will continue to
address this issue. Significant progress has been achieved.

   b. The Quantitative Reasoning Advisory Committee will determine current levels
of upper classmen taking ISP 120 and investigate the reasons for their having
delayed taking this course. If appropriate, the Committee will develop a plan to
reduce the numbers of students who wait until their junior or senior year to take
ISP 120.

3b. We have some incremental progress on this issue. In 2001-2002 and 2002-
2003, fully 31% of the students taking ISP 120 were juniors or seniors. In 2003-
2004 it dropped to 29%; in 2004-2005, it dropped to 28%; in 2005-2006 it
dropped to 25%. At a meeting in May 2005 with College of LAS advisors, the
importance of this issue was again emphasized.

| ISP 120 Enrollment by Class Status |
|-----------------|----------------|----------------|-------------|
| Acad. Freshman | Sophomore | Junior |

- **ISP 120 Enrollment by Class Status**

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<th>Acad. Freshman</th>
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We have not done a formal study to investigate the reasons for students’ having delaying taking ISP 120.

c. The Advisory Committee will determine if students are enrolling in Quantitative Reasoning without taking the required prerequisite, as determined by the math placement test. If appropriate, the Committee will investigate the relationship between taking ISP 120 with and without the prerequisite, and student success in the course.

3c. We have not done this. One reason is the difficulty of determining, using the PeopleSoft datasystems to which we have access, whether a particular student has met the prerequisites for ISP 120. A student can meet the prerequisites for QR in a number of very different ways (by placement test results, by courses taken at DePaul, by courses taken elsewhere, by AP exams). We might need to work with OIPR to help us get this data. Anecdotally, the number of students who take ISP 120 without taking appropriate prerequisites is relatively small.