

Lehman College Writing Across the Curriculum
Quantitative Reasoning Task Force
Learning Objectives for Students in Quantitative Reasoning Courses

Thinking across the disciplines, what should Lehman students be able to do as quantitative thinkers and writers?

1) Understand quantitative information:

Perform the mechanics of analysis
Understand intuitively the relevance of the information
Use and understand abstract models that stand in for complex realities
Express understanding of variables (for ex. the relationship between income and education)
Restate meaning in own words
Understand the types of studies and the difference in data from these studies (correlational studies vs. random clinical trials)
Understand why particular kinds of studies are useful
Express understanding about how this data helps make sense of the world

2) Synthesize information, drawing conclusions:

Apply quantitative information in order to understand social relations
Use data to support a hypothesis/thesis
Apply statistical concepts to analyze and describe relationships
Use graphs, charts, or tables to describe tendencies, trends, and patterns
Make projections on how data could be applied
Have confidence about their ideas and interpretations
See relevance of the study
See relevance of quantitative material in *all* disciplines
Synthesize quantitative material with other course ideas

3) Articulate understanding of quantitative information:

Use writing to help interpret abstract data
Talk in pairs or groups about complex data
Be able to discuss different ways of interpreting quantitative material
Present information in a precise way
Be able to use the same information in different disciplines

4) Think critically about quantitative information, evaluating and critiquing/questioning the data:

Evaluate the worthiness of data, identify its shortcomings
Base own work on evidence, engage in an evidence-based practice
Be able to answer the question “who would care about these results?”
Question the conclusions drawn from a study
Question the accuracy of data
Research and evaluate studies in order to answer one’s own research question
Both believe and doubt quantitative material
Use quantitative material to speculate about meaning, to raise questions

Fall 2007 Task Force Members:

Andrea Boyar (Health Sciences), Judith Duncker (Political Science), Robin Kunstler (Health Sciences), Mario Gonzalez-Corzo (Economics, Accounting & Business Administration), Tyler Schmidt (WAC)