

Selected Quantitative Literacy Programs in U. S. Colleges and Universities

March, 2005

(Send additions and corrections to Lynn Arthur Steen <steen@stolaf.edu>.)

Alverno College (Milwaukee, WI). A two-stage requirement: first, a course taught by mathematics instructors to develop mathematical skills and habits of thinking, then a discipline-based course where students interpret and evaluate discipline-specific quantitative information. *Contact:* Sue Mente <sue.mente@alverno.edu>.

Augsburg College (Minneapolis, MN). Two parallel programs. The older is a project supported by the W.M. Keck Foundation on statistical literacy (see www.statlit.org). *Contact:* Milo Schield <schield@augsborg.edu>. URL: www.augsburg.edu/statlit. The other is a new program focused on mathematical (or quantitative) literacy. *Contact:* Tracy Bibelnieks <bibelnie@augsborg.edu>.

Bowdoin College (Brunswick, ME). An established "Q-Skills" program assesses each first-year students' quantitative literacy; advises students regarding appropriate quantitative courses; and establishes study groups and provides individual tutoring in support of a new graduation requirement in quantitative reasoning. *Contact:* Linda Kirstein <lkirstei@bowdoin.edu>.

Carleton College (Northfield, MN). A new FIPSE-supported initiative intended to prepare students to evaluate and use quantitative evidence. Redesigned first-year courses will emphasize quantitative inquiry and reasoning; assessment will be through use of quantitative evidence in papers that students submit to meet an existing writing portfolio requirement. *Contact:* Neil Lutsky <nlutsky@carleton.edu>.

Central Washington University (Ellensburg, WA). A broad program designed to develop and assess students' capabilities in "analytical thought, symbolic reasoning, and quantitative analysis." *Contact:* Stuart Boersma <boersmas@cwu.edu>, Aaron Montgomery <montgoaa@cwu.edu>, or Linda Beath <beathl@cwu.edu>. URL: www.cwu.edu/~avpugrad/assessment.html.

Colby Sawyer College (New London, NH). A developing program based on designing more than one first mathematics course in quantitative literacy and developing amplifications in the majors and throughout the curriculum. *Contact:* Semra Kilic-Bahi <skilic-bahi@colby-sawyer.edu>.

Dartmouth College (Hanover, NH). Extensive online QL resources at the Center for Mathematics and Quantitative Education. *Contact:* Dorothy Wallace <dorothy.i.wallace@dartmouth.edu> or Kim Rheinlander <kim.rheinlander@dartmouth.edu>. URL: math.dartmouth.edu/~mqed.

DePauw University (Greencastle, IN). An established "competence program" in quantitative reasoning is supported by a Q-Center for students and regular workshops for faculty who teach Q-courses. Assessed through surveys of faculty and students. *Contacts:* Mark Kannowski <kannowski@depauw.edu> or Rich Martoglio, <rmartoglio@depauw.edu>. URL: www.depauw.edu/admin/arc/q_center/index.asp.

Hamilton College (Clinton, NY). A quantitative literacy requirement which includes passing either a QSkills Exam, a designated "Q" course, or a non-credit QLit Tutorial. A QLit Center offers drop-in peer tutoring to support quantitative courses. *Contact:* Mary O'Neill <moneill@hamilton.edu>.

Hollins University (Roanoke, VA). Two quantitative reasoning requirements (q and Q) are required for graduation and are supported by a QR-Center; an NSF grant supported development of Q courses across the curriculum. *Contacts:* Caren Diefenderfer <cdiefenderfer@hollins.edu> or Phyllis Mellinger <pmellinger@hollins.edu>. URL: www1.hollins.edu/depts/qr/index.html.

Hood College (Frederick, MD). A college-wide Quantitative Reasoning Task Force charged with developing recommendations to improve students' quantitative reasoning skills is using a BlackBoard site where task force members can post links to resources and hold online discussions. *Contacts:* Betty Mayfield <mayfield@hood.edu> and Kimber Tysdal <tysdal@hood.edu> (mathematics), and Kerry Strand <strand@hood.edu> (sociology).

James Madison University (Harrisonburg, VA). A systemic, institution-wide approach to quantitative literacy, including assessment and development of a QR instrument and a curriculum designed for elementary and middle school teachers. *Contacts:* David Brakke <brakkedf@jmu.edu> (for program); Donna Sundre <sundredl@jmu.edu> (for assessment); David Carothers <carothdc@jmu.edu> (for teacher curriculum).

Lawrence University (Appleton, WI). A "Mathematical Reasoning or Quantitative Analysis Requirement" has stimulated discussion about what quantitative reasoning means and how to foster it. Course offerings include statistics across the curriculum in three flavors: for economics, for social science, and for natural science. *Contact:* Joy Jordan <joy.jordan@lawrence.edu>.

Macalester College (St. Paul, MN). Quantitative Methods for Public Policy. An interdisciplinary approach supported by a FIPSE grant involving courses in statistics, economics, political science, geography, and journalism that use quantitative methods to analyze the same policy issue. *Contact:* David Bressoud <bressoud@macalester.edu>. URL: www.macalester.edu/qm4pp/.

Skidmore College (Skidmore, NY). A two-level requirement. Before the end of the sophomore year students must demonstrate basic quantitative competence either via sufficient SAT score, or by passing an in-house exam, or by passing a specific remedial quantitative reasoning course. Before the end of the junior year, each student must pass a "QR2" course that devotes a significant portion of the syllabus to quantitative methods and issues. These courses are available in many departments. *Contact:* Gove Effinger <effinger@skidmore.edu>.

Trinity College (Hartford, CT). Two levels of quantitative literacy courses are offered through the Math Center, as well as Center-sponsored quantitative enrichment throughout the curriculum, including the First Year Program, the Tutorial College, and courses in human rights, political science, history, classics, sociology and international studies. URL: www.trincoll.edu/depts/mcenter/. *Contact:* Judy Moran <judith.moran@mail.cc.trincoll.edu>.

University of Arkansas (Fayetteville, AR). Quantitative literacy for journalists. An experimental course in which students control the syllabus by bringing to class their own articles from each day's news for analysis and quantitative critique. *Contact:* Bernard Madison <bmadison@uark.edu>.

University of Massachusetts (Boston, MA). A university-wide Math/Quantitative Reasoning requirement seeks to help all students improve their ability to reason logically and quantitatively. Requirements differ by college:

College of Liberal Arts: Students have the option of taking a technology-rich quantitative reasoning course. URL: <http://www.umb.edu/academics/undergraduate/office/QR.htm>. *Contact:* Maura Mast <maura.mast@umb.edu>

College of Public and Community Service: Students must demonstrate competence at two levels, with an emphasis on using quantitative skills to reason about public and community issues. URL: www.cpcs.umb.edu/undergrad/curr_degree_req/core_highlights/qr_highlight.htm.

Contact: Marilyn Frankenstein <marilyn.frankenstein@umb.edu>

University of Nevada (Reno, NV). Brief modules on real QL issues (e.g., drug testing).

Contact: Jerry Johnson <jerryj@unr.edu>. URL: unr.edu/homepage/jerryj/NNN/QL.html.

University of Washington, Bothell (Bothell, WA). A QR across the curriculum program coordinated through a Quantitative Skills Center that tutors students in any course requiring quantitative skills. In addition, the QSC director's primary responsibility is to aide faculty in integrating QR in their junior and senior level curriculum. *Contact:* Cinnamon Hillyard <chillyard@uwb.edu>. URL: www.uwb.edu/qsc.

University System of Georgia (Atlanta, GA). A Regents proposal, currently on hold, would require all college sophomores in Georgia to pass a quantitative skills test. *Contact:* Kathleen Burk <kathleen.burk@usg.edu>.

Virginia Commonwealth University (Richmond, VA). A general education requirement on "quantity and form" includes courses in mathematics, statistics, and critical thinking.

Contact: Aimee Ellington <ajellington@vcu.edu>. URL: www.has.vcu.edu/students/ug_edu/gen_edu/quantity_form.html.

The Washington Center (Olympia, WA). Quantitative literacy across the curriculum.

Contact: Emily Decker <deckere@evergreen.edu>, Gillies Malnarich <malnarig@evergreen.edu>. URL: www.evergreen.edu/washcenter/nnnannouncement.htm.

Washington State University (Pullman, WA). A pilot program in quantitative literacy across the curriculum has been funded for four departments: Mathematics, English, Sociology, and Mechanical Engineering. Courses in the major will incorporate projects tying QL to the major. *Contact:* Kimberly Vincent <vincent@math.wsu.edu>.

Wellesley College (Wellesley, MA). A two-tiered program in quantitative reasoning across the curriculum. *Contact:* Corrine Taylor <ctaylor1@wellesley.edu>. URL: <http://www.wellesley.edu/QR>.