

## 2010-2011 Grant Proposals

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Robert Carver, Business Administration  
8th International Conference on the Teaching of Statistics in Ljubljana, Slovenia  
Pedagogy Travel Grant

1) TITLE: Presentation at 8th International Conference on the Teaching of Statistics (ICOTS-8) in Ljubljana, Slovenia, July 11-16, 2010. The presentation is titled "RECIPE FOR A COBB SALAD IN A TIME OF EASY COMPUTABILITY"

2) PROJECT DESCRIPTION: This travel grant would support the presentation of a paper at ICOTS-8. (web site: <http://icots8.org>). This biennial Conference gathers statistics educators from the Americas, Asia, Europe, the Middle East, Australia and New Zealand for nearly a week. The current literature in statistics education now often refers to the proceedings from earlier conferences, and it has gradually become a popular venue for the leading voices in the discipline.

Few fields are more heavily influenced by the rapid pace of change in technologies related to teaching and to the discipline, and technology has radically changed what is and can be taught in statistics. Concurrently, statistics has emerged as a core field within liberal arts education around the world, and there is much to be gained through direct contact with scholars from other countries.

Papers for this conference go through a process of peer review and the conference organizers have accepted my paper. The paper is based on a book that I am now completing, much of which is based on pedagogy that I have tested and refined at Stonehill and at Brandeis University. The paper itself will be published in Conference Proceedings, and my presentation will both lay out the paper's argument and findings as well as demonstrate some of the techniques and ideas.

Abstract of the paper (full text below) "Technology continues to change not only how we teach, but also what we teach in the introductory course. Recently there has been lively discussion about which topics belong in the course. Prof. George Cobb (Mt. Holyoke College) has challenged us to rethink the curriculum in light of the computational power of our technologies. This paper proposes a framework for structuring a course using JMP software, omitting some traditional topics, leaving space for emphasis on concepts, on data production, on visualization, and on topics that are rarely included in an introductory course. Through such a structure, we can more directly connect statistics education to students' disciplinary contexts in business, engineering, social and natural sciences, etc. Additionally, we can strengthen students' conceptual foundations in the field so that, in their roles as citizens and professionals, they can become more critical consumers of statistical arguments."

3) BENEFITS: This conference gathers statistics educators from around the world to work together on improving statistics education. This is a unique opportunity to present tangible results of my scholarship to a specialized global audience (past conferences have had representation from nearly every continent), to interact with these colleagues, to receive their input and thus to grow professionally. Naturally, it is also a valuable way to carry the good name of Stonehill College and our program in Business Administration to an international arena alongside colleges and universities with long-established reputations for excellence.

Because the project addresses some very basic questions in statistics education and the role of statistics in global citizenship, it reaches well past the technical demands of programs in management, economics, or finance and touches on matters of importance to all curricula that include statistics. At Stonehill the message of this project is relevant to General Education and to all of the natural and social science programs that offer courses in quantitative reasoning.

4) COMMUNITY OUTREACH: Academic Development Day would be a most natural context for dissemination of this work, and I would welcome the opportunity to offer a breakout session for faculty who teach about quantitative reasoning and for others interested in general questions of curricular revisions or creative pedagogy. Additionally I am eager to share these ideas via Class Notes or other on-campus channels.

Budget (detail how you will use the funds requested)

Due to the location and duration of the conference, travel expenses will far exceed the normal College-provided funding, and I anticipate using personal funds to cover much of the expense. Here is a current "best estimate" of total costs (all ICOTS prices are quoted by conference organizers in Euros, and these estimates are based on the exchange rate as of late February 2010):

Early (discounted) Conference Registration: \$450

Air fare (round trip Boston - Ljubljana) : \$ 1275

Ground transport (public: Boston + Ljubljana) : \$45

Hotel accommodations (quoted prices include breakfast + tourist tax (6 nights \* \$136): \$816

Other meals (\$20 per day) : \$140

TOTAL COSTS: \$2726

AMOUNT REQUESTED: \$750 to defray airfare.