

SYSTEMATIC IMPROVEMENT OF UNDERGRADUATE EDUCATION IN RESEARCH UNIVERSITIES

A PROJECT BASED AT DUKE UNIVERSITY

CO-SPONSORED BY THE SPENCER FOUNDATION AND THE TEAGLE FOUNDATION

Under the leadership of Robert J. Thompson (principal investigator), and with the support of the Spencer and Teagle Foundations, Duke University has embarked on a collaborative research project aimed at fostering a culture of experimentation and evidence for undergraduate education at research universities. A primary outcome is that iterative approaches to curricular and pedagogical efforts to enhance student learning and engagement become the standard practice for departments and programs responsible for undergraduate education in the humanities and social sciences. A second goal of the project is to incorporate what is known about cognitive development, the process of learning, and effective teaching and learning practices into well-designed initiatives with measurable and replicable results. Promoting a spread of effect for this work within and across institutions will also be key.

Institutions have been drawn from the American members of the Association of American Universities and were selected to participate through a competitive RFP. Each participating institution has undertaken one or two campus-based projects over three years that evaluate and experiment with various pedagogical approaches focused on the development of two core intellectual skills: writing and critical thinking / analytical reasoning. The campus projects will employ a basic A-B-C design for a specific, well-defined experiment. (The A condition is the first step in which the experiment is undertaken and the learning outcome assessed. The B condition is the second step in which modifications of the A condition are made and the learning outcome is again evaluated. The C condition is a modification of the B initiative based on the evaluation of the B condition.)

Leaders of the campus projects will convene once a year to share results and experiences and engage in working groups or clusters of faculty across institutions around each core intellectual skill.

The knowledge generated from this project will be disseminated in two ways. First, leaders of campus projects will be expected to publish their findings in appropriate journals and to present their work at national and regional professional meetings. Second, the principal investigator will write a book that synthesizes the findings of the entire project and addresses the implications for higher education's commitment to liberal education at the undergraduate level. At the heart of the book will be a discussion about the evidence for effective practices in the development of writing and critical thinking / analytical reasoning abilities.

CAMPUS PROJECTS

(The grant awards listed below represent Spencer's commitment; the Teagle Foundation has matched these amounts.)

Carnegie Mellon University

Using argument diagramming in freshman writing courses.
\$25,200 over 36 months.

Duke University

Enhancing writing and critical thinking.
\$40,000 over 36 months.

Georgetown University

Threshold of writing project.
\$25,000 over 36 months.

Indiana University

The history learning project: Decoding critical thinking and writing.
\$40,000 over 36 months.

Pennsylvania State University

Excellence in communication certificate: Integrating ethics into teaching of environmental science, economics, and policy.
\$25,000 over 36 months.

The University of California at Berkeley

An active learning model for enhancing writing in sociology ; Improving critical thinking through methodological training in an interdisciplinary context.
\$45,000 over 36 months.

The University of California at Davis

Improvement of writing as an intellectual skills; Critical thinking and visual imagery.
\$45,000 over 36 months.

The University of Illinois at Urbana-Champaign

Enhancing traditional and innovative approaches to advanced composition in academic disciplines.
\$40,000 over 36 months.

The University of Kansas at Lawrence

Enhancing research and writing skills through instructional design teams.
\$40,000 over 36 months.

The University of Michigan at Ann Arbor

The impact of metacognitive strategies within writing in the disciplines: Experiments to improve writing and critical thinking.

\$45,000 over 36 months.

The University of Nebraska at Lincoln

Piloting a general education writing assessment system.

\$25,000 over 36 months.

The University of North Carolina at Chapel Hill

Investigating synergies between research and writing: CI-GFC courses at UNC-Chapel Hill.

\$40,000 over 36 months.

University of Southern California

Technology at the service of writing and critical thinking.

\$25,000 over 36 months.