Report of the Committee on Economic Education for 2009

On January 6, 2009, with co-sponsorship from the Council for Economic Education, the Journal of Economic Education, and the Senesh Endowment in Economic Education at Purdue University, the Committee hosted a day long symposium comparing precollege and undergraduate economic education initiatives and research in four other nations (Australia, Japan, Korea, and the United Kingdom) where there are relatively "mature" and extensive programs to compare with current US practice. Michael Watts (Purdue) and William Walstad (Nebraska-Lincoln) were the co-directors of the symposium. Papers were presented by David Round and Martin Shanahan (both at South Australia); Michio Yamaoka (Waseda University), Tadayoshi Asano (Yamamura Gakuen College), and Shintara Abe (Josai International University); Peter Davies and Guy Durden (both of Staffordshire University); and Jinsoo Hahn (Gyeongin National University of Education) and Kyungho Jang (Inha University). Several members of the Committee and other prominent economic educators served as discussants or on a panel discussion of the issues raised in the four papers. A closing dinner featured a keynote address by John Taylor (Stanford). The four papers presented at the symposium are forthcoming in the Journal of Economic Education.

The Committee sponsors the "Teaching Innovations Program" (TIP) for faculty members in economics, funded by a \$675,000 grant over five years from the National Science Foundation, co-directed by William Walstad (Nebraska-Lincoln) and Michael Salemi (North Carolina). The project began in 2005 and featured two workshops a year on interactive teaching strategies. A final TIP conference will be held in Atlanta, immediately after the AEA meetings. A total of 338 economists attended one of the 10 workshops offered in the program. In 2009 workshops were held in Santa Fe, NM, and Rosemont, IL. Online modules on assessment and teaching methods are completed by participants after the workshops. TIP also offers participants opportunities to present their own work on interactive teaching strategies at the annual AEA, SEA, and WEA meetings. An edited volume featuring these papers is forthcoming, and the proposal for TIP 2.0 was recently submitted to NSF. The TIP report for 2009 is appended to this report.

The Committee was awarded a grant from the Teagle Foundation in 2007, to address the role of the undergraduate economics major in a liberal education. Dave Colander (Middlebury) and KimMarie McGoldrick (Richmond) served as project co-directors. A short version of the final report was presented at the 2009 AEA meetings in San Francisco, with comments from economists who are or have been high level administrators at prominent liberal arts schools. An edited volume with a longer version of the report and responses from a large number of economists teaching or serving as administrators at different kinds of schools has now been published (Elgar 2009). With funding from the grant copies of the book are being mailed to chairs of US economics departments. In 2009 Teagle awarded two follow-up grants for the project: the first deals with teaching "Big Think" questions in economics and is directed by KimMarie McGoldrick and Rob Garnett (TCU); the second funds the development of a pilot "Creativity Boot Camp" for graduate programs in economics and will be directed by Dave Colander (Middlebury) and John Siegfried (Vanderbilt).

A proposal developed by the Committee to prepare training modules on advanced econometric methods in economic education research was funded as part of annual grants on Excellence in Economics made by the US Department of Education to the Council on Economic Education. William Becker (Indiana) has now developed three of the four modules, which are posted on the Committee web page. The modules cover data management and heteroskedasticity issues; endogenous regressors with natural experiments, instrumental variables, two-stage estimators; and panel data (this module developed with William Greene at NYU and John Siegfried at Vanderbilt). The final module (by Becker and Greene) will deal with sample selection issues. Each of the modules includes a dataset from published papers and sample programs written in LIMDEP, STATA, and SAS. The formal "rollout" of the modules will take place at a regular session and a special luncheon event at the Atlanta meetings.

The Committee supported an NSF proposal on "Teaching With Data" in undergraduate social studies courses, directed by George Alter and Bill Frey (both at Michigan). The proposal was funded in 2009, and the Committee was asked to appoint a representative to the project advisory board. Tisha Emerson (Baylor) is serving in that role.

The Committee annually tracks the number of bachelor's degrees conferred in economics. Preliminary data (54 percent of the final number of schools and number of graduates reported last year) from the AEA Universal Questionnaire, based on a sample of 152 schools that have responded from 1991-2009, show the number of economics degrees awarded increasing 3 percent in 2008-2009. Larger percentage increases are reported at private than public schools, but with increases at all types of schools except public baccalaureate schools. The share of female graduates has been on a plateau of just under 31 percent for several years, and down slightly from a few years before that despite the continuing rise in the share of all degrees going to females. Long term growth in undergraduate economics degrees awarded (since 1990–1991) is much higher (54 percent) at public PhD schools, followed by private selective liberal arts schools (21 percent), and private PhD schools (16 percent), with overall growth of 33 percent. The increasing share of economics majors at "elite" schools has also been noted in England. Final results and more detailed information will be provided in a forthcoming annual report (Siegfried, Journal of Economic Education, 2010).

William Becker (Indiana) stepped down as Editor of the *Journal of Economic Education* in August 2009, after serving in that role for 20 years. The editor of *JEE* is appointed by the Council for Economic Education, which supports the operation of the journal. William Walstad (Nebraska–Lincoln) has been appointed as the new editor, and in that capacity serves as an *ex officio* member of the AEA CEE. The *JEE* also has a new publisher, Taylor Francis.

The Committee presented six sessions and three special events for the 2010 AEA meetings in Atlanta.

• The first session was a panel discussion organized by Benjamin Friedman (Harvard)

and Dave Colander (Middlebury), on "How Should the Financial Crises Change How We Teach Economics?" Colander chaired the session, and the panelists were Alan Blinder (Princeton), Friedman (Harvard), Raghuram Rajan (Chicago), and Robert Shiller (Yale). The session was posted as a conference Webcast by the AEA, and the panelists' comments will be published in the *Journal of Economic Education*.

- · The second CEE session was a set of four research papers chosen by William Greene (NYU) from an open Call for Papers, to be published in the 2010 AER Papers and Proceedings. The first paper, "Achievement Goals, Locus of Control, and Academic Success and Effort in Introductory and Intermediate Microeconomics," was presented by Lester Hadsell (SUNY Oneonta). Vincent Munley (Lehigh), Eoghan Garvey (National University of Ireland), and Michael McConnell (Economic Research Service) presented "The Effectiveness of Peer Tutoring on Student Achievement at the University Level." The third paper, "Do Online Homework Tools Improve Student Results in Microeconomics Principles Courses?", was written by William Lee, Richard Courtney, and Steven Balassi, (all at St. Mary's College of California). The fourth paper, "Can Student Performance Justify Resources Allocated to Collaborative Learning Recitation Sessions?" was written by Kim Huynh, David Jacho-Chavez, and James Self (all at Indiana). Discussants in this session were Wendy Stock (Montana State), Sam Allgood (Nebraska-Lincoln), Tisha Emerson (Baylor), and Georg Schaur (Tennessee).
- A session of papers reviewing results from the five-year TIP program were presented. The session was organized by KimMarie McGoldrick (Richmond), and chaired by Ben Friedman (Harvard). The first paper, "Findings from a Teaching Innovations Program for Economics Faculty," was by William Walstad (Nebraska–Lincoln). Michael Salemi (North Carolina) presented "Developing Teacher Expertise for Economists through a Workshop Experience." The third paper, "Online Faculty Instruction to Improve Interactive Teaching of Economics," was written by

Mark Maier (Glendale Community College). KimMarie McGoldrick presented "Advancing the Scholarship of Teaching and Learning in Economics." Discussants for these papers were Robert Rebelein (Vassar), Kirsten Madden (Millersville University), Tisha Emerson (Baylor), and Sue Stockly (Eastern New Mexico).

- A session of research papers on K-12 economic education was organized by Richard MacDonald (St. Cloud State and Council for Economic Education) and William Walstad (Nebraska-Lincoln). Roger Butters and Tammie Fischer (both at Nebraska–Lincoln) presented "Human Capital in the Classroom: Teacher Comprehension and Student Achievement." Rebecca Campbell Smith, Erin Sharp, and Joshua Pitts (all of Mississippi State) gave the paper "Evaluation of Financial Fitness for Life Program and Future Outlook in the Mississippi Delta." John Swinton (Georgia College & State University) presented "Quantifying the Impact of the Virtual Economics Materials on Georgia Student Achievement." The fourth paper, on "EnterpriseMath: Impact of Economics and Financial Literacy on Math Achievement and Attitudes," was by Diane Breiner and George Vredeveld (both at Cincinnati). The discussants for these papers were Paul Grimes (Mississippi State), James O'Neil (Delaware), William Bosshardt (Florida Atlantic), and Matthew Nicklay (St. Cloud State).
- A session introducing the online econometrics training modules for economic education research, developed by William Becker (Indiana), was organized by Michael Watts (Purdue). Discussants in this session were Gail Hoyt (Kentucky) and William Bosshardt (Florida Atlantic).
- The annual poster session on teaching economics was organized by Wendy Stock (Montana State). This year 27 posters were presented by: Sheryl Ball (Virginia Tech) and Catherine Eckel (Texas–Dallas), "Classroom Experiments Improve Learning in Calculus Based Micro Theory Courses"; Daniel Barkley (California State Fullerton), "Economics on the Move"; Barbara Beliveau and Thomas Botzman (both at St. Mary's College of

Maryland), "Strategies for Corporate Finance"; Bruce Brown (California State Polytechnic-Ponoma), "Using Appropriate Visual Aids in Teaching Economics"; Mary Burfisher and Karen Thierfelder (both at the US Naval Academy), "Undergraduate Teaching Tools for Computable General Equilibrium Models"; David Carpenter, Karen Gebhardt, and Robert Kling (all at Colorado State), "Assessing the Effectiveness of 'Writing to Learn' in Introductory Economics"; Howard Cochran and Marieta Veilkova (both at Belmont University), "Fusion Teaching-Utilizing Course Management Technology to Deliver a Multimodal Pedagogy"; Lee Coppock (Virginia), "Polling the Audience: Using Opinion Surveys to Improve Teaching"; Marilyn Cottrell (Brock University), "The Taxman Can be Indirect"; Thomas Creahan (Morehead State), "Computer Animations and Demonstrations for Teaching Economics"; Damian Damianov (Texas-Pan American), "A Classroom Experiment on Status Goods and Consumer Choice"; Linda Ghent (Eastern Illinois), Dirk Mateer (Penn State), and Misty Stone (Penn State), "Television for Economists"; Satyajit Ghosh and Sarah Ghosh (both at Scranton), "Active Learning: Using Excel Based Interactive Graphs to Teach Incidence of Excise Tax and Deadweight Loss in a Principles Class"; Scott Gilbert (Southern Illinois), "Active Learning in Economics via Real World Investigations"; William Goffe (SUNY Oswego), "Team Based Learning in the Economics Classroom"; G. Nicholas (Luther College), "Teaching Gomersall Macroeconomics by Induction"; Inhyuck Ha and Jessica Hollars (both at Western Carolina), "A Classroom Economic Experiment: How to Estimate the Unemployment Rate"; Carsten Lange (California State Polytchnic-Pomona), "Forecasting Student Success in a Principles Online Class"; Simon Economics of Nedcalf (Augusta State), "The Relationship Between Music and Student Enjoyment of Economics Classes"; Martha Olney (California-Berkeley), "Demonstrations in Large-Enrollment Principles Courses"; Brian Peterson (Central College), "Context-Rich Problems in Public Finance: Reverse Engineering an Upper Level Policy Course"; Geetha Rajaram (Whittier College), "Teaching Econometrics as Active Learning";

Jennifer Rhoads (Illinois–Chicago), "Being Aware of Health Care: Using Cooperative Learning to Synthesize and Communicate US Health Care Reform Issues"; Rochelle Ruffer (Nazareth College), "Context-rich Problems in Principles of Microeconomics and Intermediate Microeconomics"; Nicholas Rupp (East Carolina), "Mandatory Homework Problem Set Completion and Test Performance in Economics"; Brian Sloboda (University of Phoenix), "Teaching Real and Nominal Gross Domestic Product"; and Melissa Wiseman (Houston Baptist), "A Game Approach to Learning and Retaining Microeconomics."

The Committee's three special events at the Atlanta meetings are:

- A reception for "Friends of Economic Education," on January 3.
- The luncheon on the online econometrics training modules, on January 5.
- For the sixth consecutive year the Committee offered a continental breakfast for departmental directors of undergraduate studies in economics, on January 4, to discuss issues of concern and share information. This year the event was organized by Sam Allgood (Nebraska–Lincoln) and KimMarie McGoldrick (Richmond).

The Committee Chair makes an annual presentation at the AEA Breakfast for Chairs of economics departments, to review key activities of the Committee and call special attention to programs such as TIP or the econometrics training modules that are available or open to applications from economists at colleges and universities all across the United States.

Members of the Committee are called on to provide time and service each year, and they regularly and generously answer that call. New members joining the Committee in 2009–2010 are B. Douglas Bernheim (Stanford), Tisha Emerson (Baylor), and Randall S. Kroszner (Chicago). In August 2009 William Walstad (Nebraska–Lincoln) replaced William Becker (Indiana) as editor of the *Journal of Economic Education*, and thereby also became an *ex officio* member of the Committee. Benjamin Friedman (Harvard) and KimMarie McGoldrick (Richmond) were reappointed to second terms on the Committee. The other continuing members of the Committee are Sam Allgood (Nebraska–Lincoln), Kenneth Elzinga (Virginia), William Greene (NYU), Wendy Stock (Montana State), and Michael Watts (Purdue). Staff members at the Council for Economic Education, including Acting President and CEO Joe Peri and Senior Program Advisor Richard MacDonald, are frequently participants in the Committee meetings and various projects, and the Council regularly cosponsors special projects with the Committee, as noted above in this report.

Special thanks are due to departing Committee members Alan Krueger (Princeton) and William Becker (Indiana). Alan Krueger almost completed his second term on the Committee before leaving for an appointment at the Treasury Department. He played a key role on many Committee projects, including organizing and presenting in sessions on graduate education in economics, and with many key projects at the Council for Economic Education, including the revision of the voluntary standards in precollege economic education. As noted earlier, Bill Becker served an unprecedented term of 20 years as the editor of the Journal of Economic Education, which entailed a similar term as an ex officio member on the Committee. He had also served an earlier regular term on the Committee, and was an associate editor of the Journal of Economic Education for a decade before serving as Editor. Beyond these key roles at the Journal and on the Committee, as a scholar and iconic instigator and evangelist he promoted and strengthened the scholarship on teaching and learning economics at all educational levels and recruited many other prominent economists to work in the field, often as coauthors on papers or books. Bill was presented a Certificate of Appreciation by the Committee, the Council for Economic Education, and the Journal of Economic Education at the Atlanta meetings.

Current information and past reports about the Committee and its activities are available at http://www.vanderbilt.edu/AEA/AEACEE/ index.htm.

> Respectfully submitted, MICHAEL WATTS, Chair

December 18, 2009

Report to the AEA Committee on Economic Education on the Teaching Innovations Program

In 2000, the Committee agreed to sponsor a new teaching education initiative. The National Science Foundation funded the Teaching Innovations Program (TIP) in February 2004 with a grant of \$675,000. This report focuses on TIP activities during 2008.

- 1. Two workshops were held in 2009: Hotel Santa Fe in Santa Fe New Mexico on June 5–7 and Chicago Marriott Suites O'Hare on June 12–14. We received 81 applications and had 34 participants at Santa Fe and 33 at Chicago. Workshop staff included Tisha Emerson, Gal Hoyt, Kirsten Madden, Robert Rebelein, KimMarie McGoldrick and Michael Salemi. Participants continue to rate the workshops highly. To date out of 329 participants who completed evaluations, 78 percent judged the workshop to be a better use of their time than their next best alternative and 19 percent judged it to be as good a use of time.
- 2. Phase II of TIP will continue through May 2010. Phase II provides participants with just-in-time instruction designed to help them introduce interactive teaching strategies in their own courses. We currently have Blackboard modules covering Assessment, Case Studies, Context Rich Problems, Cooperative Learning, Discussion, Experiments, and Interactive Strategies for Large Enrollment classes. Of the 338 participants who have completed workshops, 108 (31 percent) have completed at least one module and 53 participants (15 percent) had completed two modules and qualified for a certificate of achievement awarded by CEE. At this year's meeting, CEE will vote to award 15 new certificates to TIP participants.
- 3. In 2006, we began Phase III of TIP. Phase III provide participants with opportunities to present papers on research and teaching innovations related to TIP. In 2009, four TIP participants presented papers at the ASSA meetings and 16 made presentations on their teaching innovations at the SEA meetings. In

2010, six participants will make presentations about their teaching innovations at the poster session sponsored by CEE. And 21 TIP participants will present their work at the TIP Final Conference being held at the Marriott Marquis from 3:15 on Tuesday, January 5 to 12:30 on Wednesday, January 6. CEE members are warmly invited to attend the conference proceedings, which will be held in room A708.

4. Bill Walstad, KimMarie McGoldrick and Michael Salemi have resubmitted a proposal to NSF for TIP 2.0, a project that will create a distance learning teacher education program for college level instructors of economics. We thank CEE for its continued sponsorship of TIP and hope to be able to report at next year's meeting that NSF has funded TIP 2.0.

Resolution on the Award of Certificates of Achievement

Whereas, the Committee on Economic Education has authorized the awarding of a Certificate of Achievement to participants in the Teaching Innovations Program who successfully completed Phase II of the project, and, whereas, the participants named below have qualified for the Certificate,

Be It Therefore Resolved:

That the Committee on Economic Education of the American Economic Association awards the TIP Certificate of Achievement to:

Steven Balassi, Napa Valley College Lori Bell Niels-Hugo Blunch, Washington and Lee University Mariah Tanner Ehmke, University of Wyoming Lee Erickson, Taylor University Amanda Felkey, Lake Forest University Indradeep Ghosh, Haverford College Hisaya Kitaoka, Franklin College Hari Luitel, University of Richmond Kristina Lybecker, Colorado College Alyson Ma, University of San Diego David Mitch, University of Maryland, Baltimore County Tamah Morant, North Carolina State University Derek Stimel, Menlo College Kirsten Wandschneider, Occidental College