Report of the Committee on Economic Education for 2010

A major initiative of the Committee in 2010 was to organize a conference on teaching economics at the undergraduate and graduate levels, and research on economic education at all levels (including precollege). This will likely become an annual conference, with the first to be held June 1–3, 2011, at the Stanford Institute for Economic Policy Research. Plenary sessions feature Vernon Smith (Chapman), John Taylor (Stanford), and Douglas Bernheim (Stanford), with a reception and fourth plenary session by John Williams (FRB San Francisco) to be held at the San Francisco Federal Reserve Bank. Some 50 concurrent sessions have been scheduled, featuring speakers from across the United States and half a dozen other countries. Preliminary plans are to hold the second conference in Boston in early June 2012. The Committee requested support from the AEA for the 2012 and future conferences, most of which would be used to reduce registration fees for conference participants. That proposal is attached to this report, and was unanimously approved by the AEA Executive Committee in Denver on January 6, 2011. The conference is offered in cooperation with the Journal of Economic Education (JEE), and some papers from the conference will be published in JEE.

The Committee sponsored the five-year "Teaching Innovations Program" (TIP) for faculty members in economics, funded by a \$675,000 grant over five years from the National Science Foundation (NSF), codirected by William Walstad (Nebraska-Lincoln) and Michael Salemi (North Carolina). The project began in 2005 and featured two workshops each year on interactive teaching strategies. A total of 335 economists completed one of the 10 workshops. A final TIP conference was held in Atlanta, immediately after the AEA meetings in January 2010. Edward Elgar has now published a volume on TIP featuring the Atlanta conference papers and overviews of the program. Blackboard training modules posted on the Committee website, covering Assessment, Case Studies, Context Rich Problems, Cooperative Discussion, Learning, Experiments, Interactive Strategies for Large Enrollment Classes, were developed to extend the TIP workshop training sessions, with feedback to those working through the modules provided by the TIP staff. At least one of these modules was completed by 130 of the 335 TIP participants, and 91 participants completed at least two modules. Those who completed two or more modules received certificates of achievement from the TIP program and the Committee. The final TIP report, for 2010, is appended to this report.

Two projects were conducted in 2010, as extensions of the Teagle Foundation grant awarded to the Committee in 2007, on the role of the undergraduate economics major in a liberal education. In the first extension project, with additional support from the Tobin Project and the American Institute of Economic Research, David Colander (Middlebury), John Siegfried (Vanderbilt), and Avinash Dixit (Princeton) organized a pilot "creativity workshop" attended by 12 students from top graduate schools in the summer of 2010, featuring presentations by Edward Leamer (UCLA), Herbert Gintis (Massachusetts), and Brigitte Madrian (Harvard). A session on increasing creativity in graduate education in economics was organized for the AEA meetings in Denver, featuring John List (Chicago), James Heckman (Chicago), and Michael Woodford (Columbia). In the second Teagle extension project, KimMarie McGoldrick (Richmond) and Robert Garnett (TCU) are leading an effort to engage undergraduate economics students using enduring "big think" questions. The project will identify lesson units that can be added at relatively low cost to introductory, intermediate, or upper-division courses. Two complete lesson plans, one in microeconomics and one in macroeconomics, are being developed to demonstrate how big think ideas can be taught. A panel discussion on the project was presented at the Denver meetings.

The last two of four training modules on advanced econometric methods in economic education research have been posted on the Committee website, funded as part of annual grants on Excellence in Economics made by the US Department of Education to the Council on Economic Education. The modules were developed by William Becker (Indiana), with William Greene (NYU) and John Siegfried (Vanderbilt) contributing on two modules. The

four modules deal with Data Management and Heteroskedasticity; Endogenous Regressors with Natural Experiments, Instrumental Variables, and Two-stage Estimators; Panel Data; and Sample Selection Issues. Each module includes a dataset from earlier research papers, and provides sample programs reading and using these datasets in Stata, Limdep, and SAS.

The Committee supports an NSF-funded project on "Teaching with Data" in undergraduate social studies courses, directed by George Alter and Bill Frey (both at Michigan). A Quantitative Social Science Digital Library will become part of the National Science Digital Library to help faculty integrate quantitative literacy into undergraduate social science courses. The library will include data and other resources from the fields of economics, geography, political science, and sociology. Tisha Emerson (Baylor) serves as the Committee representative for this project's advisory board.

The Committee supported an NSF-funded project on "Adapting Effective Outreach and Workshop Practices to Improve Community College Economics Instruction," directed by Mark Maier and Cathryn Manduca at Glendale Community College. Participants in this program will attend a workshop in Palo Alto for two days in May 2011, just before the Committee's June 1–3 conference on teaching economics. Most or all of these participants will also attend the Committee conference.

The Committee tracks the number of undergraduate degrees awarded at US colleges and universities. After three flat years, in 2008 and 2009 the number of degrees awarded resumed the sharp increases seen from 1997–2004 (when they rose 56 percent). The percentage of undergraduate degrees in economics awarded to women declined slowly but steadily over the past six years, however, from a peak of 34 percent in 2003 to 30 percent in 2009. This occurred while the share of all bachelor's degrees earned by women grew slightly (from 57.5 to 57.9 percent). Annual reports/updates on these surveys are published by John Siegfried (Vanderbilt) in *JEE*.

The editor of the *JEE* serves as the only ex officio member of the Committee, and as noted at several points in this report, the Committee and *JEE* jointly support or conduct many projects. The annual report to the Committee from the *JEE* editor is attached at the end of this report.

The Committee presented six sessions and three special events for the 2011 AEA meetings in Denver:

- The first session, "Economics as a Moral Science," was organized by Benjamin Friedman (Harvard) and will be published in the May 2011 American Economic Review Papers and Proceedings. The papers presented in Denver were: Anthony Atkinson (Oxford), "Economics as a Moral Science"; Benjamin Friedman (Harvard), "Economics: Religious Origins, Moral Implications"; and Robert Shiller (Yale), "Living Up to Our Persona as Worldly Philosophers."
- The second session was organized by Ken Elzinga (Virginia), who also served as the discussant for the four papers on "Teaching Undergraduate Economics": Wayne Grove (Lemoyne College) and Stephen Wu (Hamilton College), "Factors Influencing Performance in **Economics:** Class and Instructor Characteristics"; Tim Haab (Ohio State), Aaron Schiff (Covec, Zealand), and New John Whitehead (Appalachian "Web State), 2.0 Economic Education"; Jane Lopus and Lynn Paringer (both at California State-East Bay), "Textbooks—Content Coverage and Usage"; and KimMarie McGoldrick (Richmond) and Brian Peterson (Central College, Iowa), "Assessing Student Learning with Rubrics."
- A session of three papers reviewing or drawn from the five-year TIP program (described above), organized by KimMarie McGoldrick (Richmond): Tisha Emerson and Linda Carter (both at Baylor), "In-Class versus Online Experiments: Is There a Difference?"; Monica Hartmann and Robert Werner (both at St. Thomas), "Teaching With Case Studies ... 'Hyperinflation: What Can Zimbabwe Teach Us?"; and Lee Erickson and Patricia Erickson (both at Taylor), "Using Clicker Questions to Predict Performance in Small Enrollment Principles of Microeconomics Classes." Discussants in this session were Steven Balassi (St. Marys College, California), Jennifer Imazeki (San Diego State), Mariah Ehmke (Wyoming), and Cynthia Bansak (St. Lawrence).

- A session of research papers focusing primarily on K-12 economic education was organized by Richard MacDonald (St. Cloud State and Council for Economic Education) and William Walstad (Nebraska-Lincoln), featuring: Jody Hoff (Federal Reserve Bank of San Francisco), Jane Lopus (California State-East Bay), and Rob Velletta (Federal Reserve Bank of San Francisco), "Teacher and Student Characteristics as Determinants of Success in High School Economics Classes"; Wei Chen and Julie Heath (both at Memphis), "It Takes a Village: Determinants of the Efficacy of Findncial Literacy Education for Elementary and Middle School Students"; Dolore Bushati and Barbara Phipps (both at Kansas), "Economic Understanding of Albanian High School Students: Student and Teacher Effects and Specific Content Knowledge"; and Girijasankar Mallik (Western Sydney), "Lecture and Tutorial Attendance and Student Performance in the First Year Economics Course: A Quantile Regression Approach." Discussants in this session were George (Cincinnati), John Vredeveld Swinton (Georgia College), James O'Neil (Delaware), and King Banaian (St. Cloud State).
- The annual poster session on teaching economics was organized by Wendy Stock (Montana State). This year 37 posters were presented by: Barbara Beliveau (St. Mary's College of Maryland), three posters on "Do Voting Schemes Matter?", "The Psychology of Price Bubbles," and "Statistical Inference"; Christopher Bell (North Carolina at Asheville), "Demonstrating a Central Tenet of the New Institutional Economics Using a Classroom Experiement"; Mary Borg (North Florida), Stephen DeLoach (Elon), Shelia Kennison (Oklahoma State), and Elizabeth Perry-Sizemore (Randolph College), "Developing Quality Undergraduate Research Experiences in Economics: Tools, Tips and Ideas from the Starting Point Economics Pedagogic Portal Project"; Charles Britton (Arkansas), "Connecting to Your Heritage: Making Economics Personal"; Keith Brouhle (Grinnell College), "Understanding Strategic Behavior in an Oligopoly Model Using Classroom Clickers"; Bruce Brown, (California State Polytechnic), "Engaging a Diverse Set of Students in Healthcare Economics"; Howard

Cochran and Marieta Velikova (both at Belmont), "Twitternomics: Using Tweets to Teach"; Marilyn Cottrell (Brock), "Perfect in an Imperfect World"; Damian Damianov (Texas-Pan American) and Shane Saunders (Nicholls State), "Teaching Externalities with the Performance-Enhancing Drug Fame: An Experimental Approach"; Maureen Dunne, Martha Meaney, and Fahlino Sjuib (all at Framingham State College), "Improving Undergraduate Teaching and Community Outreach through a State College Economic Research Center"; Sarah Ghosh and Satyajit (both at Scranton), "Teaching Effectiveness of Macroeconomics Policy Using Interactive Spreadsheets"; Highfill and Raymond Wojcikewych (both at Bradley), "Teaching Exchange Rates Using Currency Offer Curves: The U.S.-China Example"; Scott Houser (Colorado School of Mines), "Landmine Clearance as a Case for Principles of Economics"; Areerat Kichkha (Southern Illinois), "Bite Size Pieces Taste Better"; Gregory Krohn (Bucknell), "Mocknell Basketball League Player Auction"; Carsten Lange (California State Polytechnic), "How to Assess Student Success for Students Working with Internet Applications"; Mark Learning Maier (Glendale Community College), KimMarie McGoldrick (Richmond), and Scott Simkins (North Carolina A&T), "Starting Point: Pedagogical Resources for Teaching and Learning Economics"; G. Dirk Mateer (Penn State), "Using Live Question for Assist Learning in Economics"; Simon Medcalfe (Augusta), "There Is No Such Thing as a Free Textbook"; Angela Mitchell (Wilmington College), "Self-Guided Learning: The Value of Self-Directed Projects in Statistics for Business and Economics"; Michael Murray and Brian Peterson (both at Central College, Iowa), "Large Classes in a Small College Setting: Achieving Economies of Scale and Pedagogical Success in Teaching Principles of Microeconomics"; Bridget O'Shaughnessy (McMaster), "A Web-Based Final Exam in Economics: Can We Help Students Learn to Identify and Explain Economics in Everyday Life?"; B.A. Pitafi and Thomas Mitchell (both at Southern Illinois), "Teaching Externalities with Dynamic Graphs in Microsoft Excel"; Pomorina (Bristol), "The Inna (UK)

Economics Network: Ten Major Successes from the Past Ten Years"; Rod Raehsler (Clarion), "Use of a Student-Authored Study Guide to Teach Principles of Microeconomics": Geetha Rajaram (Whittier College), "Closing the Gap between 9 and 10am Introductory Microeconomics Classes by Using Active Learning Examples"; Christopher Ruebeck (Lafayette College) and Joseph Harrington (Johns Hopkins), "Simulating Oligopoly to Enhance Student Learning"; Rochelle Ruffer (Nazareth College) and Mark Maier (Glendale Community College), "Interactive Lecture Demonstrations: Assessing Effectiveness of Predict, Experience, and Reflect in Economics Instruction"; Nicholas (East Carolina), "A Classroom Experiment Illustrating the Law of Demand"; Michael Salemi (North Carolina) and Jose Vazquez-Cognet (Illinois), "Peer Instruction the Economics Way: A Modification of Peer Instruction Designed for a Large Enrollment Principles of Economics Classroom"; Shane Saunders (Nicholls State) and Dennis Weisman (Kansas State), "An Instructional Exercise in Price Controls: Product Quality and Public Policy"; Katherine Sauer (Metropolitan State College), "Generative Learning Strategies for a Principles of Microeconomics Course"; Brian Sloboda (US Postal Service), "Understanding Inflation: The Consumer Price Index"; Scott Steele (Berea College), "The Economic Naturalist Walk"; Kristine West and Katie Genadek (both at Minnesota), "Thinking Like an Economist."

The sixth session was organized by Sam Allgood and William Walstad (both at Nebraska-Lincoln), chaired by Kroszner (Chicago), and featured three papers on "Research on Teaching Practices of Economics Faculty": William Walstad (Nebraska-Lincoln) and Michael Salemi (North Carolina at Chapel Hill), "Results from a Faculty Development Program in Teaching Economics"; Michael Watts (Purdue) and Georg Schaur (Tennessee-Knoxville), "Teaching and Assessment Methods in Undergraduate Economics: A Fourth National Quinquennial Survey"; and Kevin Mumford and Matthew Ohland (both at Purdue), "Student Performance in Undergraduate Economics Courses." Discussants in this

session were Kristina Lybecker (Colorado College), Tisha Emerson (Baylor), and Sam Allgood (Nebraska-Lincoln).

The Committee's two special events at the Denver meetings were:

- A reception for "Friends of Economic Education" on January 7.
- For the seventh consecutive year the Committee hosted a continental breakfast for department directors of undergraduate studies in economics to discuss issues of concern and share information. Organized by Sam Allgood and Tisha Emerson.

The Committee Chair makes an annual presentation at the breakfast for Chairs of economics departments, to review key activities of the Committee and call special attention to programs that provide resources and opportunities open to all faculty members, such as the new conference on teaching tertiary economics and the econometrics training modules.

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 2011 are William Bosshardt (Florida Atlantic), Gail Hoyt (Kentucky), and Nancy Rose (MIT). The continuing members of the Committee are Douglas Bernheim (Stanford), Tisha Emerson (Baylor), Benjamin Friedman (Harvard), William Greene (NYU), Randall Kroszner (Chicago), KimMarie McGoldrick (Richmond), William Walstad (Nebraska-Lincoln, ex officio as editor of the Journal of Economic Education), and Michael Watts (Purdue). Staff members at the Council for Economic Education, especially President Nan Morrison and Senior Program Advisor Richard MacDonald, are frequent participants in the Committee's meetings and various projects, and the Council regularly cosponsors special projects with the Committee, as noted above in

Special thanks are due to departing Committee members who completed their second terms at the Denver meetings. Dave Colander has played a leading role with the Teagle project on undergraduate education and the Teagle extension projects and grants described earlier in this report. Ken Elzinga organized numerous

workshops and sessions on teaching undergraduate economics for the January meetings, and drew large audiences in all of those sessions. Wendy Stock presented and discussed numerous research papers on graduate and undergraduate teaching or degree programs over her two terms, and she played the leading role in organizing and roughly doubling participation in the Committee's annual poster session.

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

January 6, 2011

A Proposal for AEA Support for an Annual Conference on Teaching Economics and Research on Economic Education

An annual budget/subsidy of \$25,000 from the AEA is requested to support a new conference.

The Committee on Economic Education, in cooperation with the *Journal of Economic Education*, is launching what we hope will become an annual national conference on teaching economics at the undergraduate and graduate levels and research on economic education. The first conference—a pilot effort offered without the AEA subsidy—will be held June 1–3, 2011, at the Stanford Institute for Economic Policy Research. There will also be a reception and dinner on June 1 at the San Francisco Federal Reserve Bank. The following plenary sessions are scheduled:

- B. Douglas Bernheim, "What Have We Learned about the Effects of Economic and Financial Education on Household Financial Decisions?"
- Vernon Smith, "Bringing Experiments and the Scottish Enlightenment into the Classroom"
- John Taylor, "Lessons from the Financial Crisis for Teaching Economics"

The response to the Call for Papers to be presented in concurrent sessions was stronger than expected, and there will be about 90 separate presentations in those sessions. These proposals came in from across the United States and from about half a dozen other countries. Registration for the conference and our reserved block of hotel rooms opens February 15. It appears likely that we will have to cap registrations at 200, due to space constraints in the room used for plenary sessions.

In future years we plan to rotate the conference among sites such as Boston, Chicago, and San Francisco. There are several premiere universities at each of these locations, making it easier to recruit prominent speakers for plenary sessions, and additional support is available from other organizations, such as Federal Reserve Banks. We usually have members on the AEA Committee from those areas—currently including Ben Friedman, Nancy Rose, Randy Kroszner, and Doug Bernheim—who can help with local and university arrangements and with finding plenary speakers.

Financial support for the conference from the AEA would allow us to reduce the registration fee for participants. With a subsidy from the Association we would continue to tie registration fees to AEA membership, with a lower fee for members—despite the likely end to this policy at the ASSA meetings. We might use a small part of the support (no more than \$3,000) to help cover expenses for a special issue of the Journal of Economic Education that would publish selected papers presented at the conference (subject to editorial review), and to cover some costs for staff support at the host institution of the Chair of the conference planning committee (again, no more than \$3,000). Paying for the Chair's staff support to work on the conference recognizes that it is difficult to justify the use of university salary funds to support an initiative of the AEA CEE. That support would not begin until the next CEE Chair takes over the planning role for the conference, in 2012. Apart from the two items noted above, all other funds would be used to pay direct conference costs, allowing us to reduce registration fees.

Lower registration fees and expanded publication opportunities would increase attendance and encourage more economists to present papers at the conference. With the direct financial commitment, the AEA would support the teaching role that makes up a major part of

almost all academic economists' work. Some of those who attend the conference may well be faculty who do not attend the January AEA meetings on a regular basis, and who work at institutions that have limited funds available for travel support. Lower registration fees would likely be particularly important for that group.

This year the conference registration fee is \$150 for AEA members until April 15, 2011, and \$200 thereafter. The registration fee for non-AEA members is \$200 until April 15, 2011, and \$250 thereafter. The fee covers the cost of continental breakfasts on June 2 and 3, lunch on June 2, charter bus service from Stanford to the June 1 dinner at the Federal Reserve Bank, and daily coffee breaks.

Because this is the first year the conference has been offered, estimates of costs and attendance are somewhat speculative. But assuming attendance of 200 for the first meeting that gradually rises in future years—quite possibly moving us into different kinds of venues, such as larger hotels with meeting facilities or conference centers—the subsidy of \$25,000 from the AEA should allow us to lower the preregistration fees by about \$100 a person.

The organizational and logistics work for the conference is handled by subcommittees of the AEA CEE, by the Committee Chair and his local support staff, and by members of the AEA staff in Nashville. Committee members do this work on a voluntary/service basis, and the AEA staff as part of their regular employment.

The annual conference will not reduce the quality or quantity of sessions the CEE organizes for the January AEA meetings, but it will provide an opportunity for more instructors and researchers to present than we are able to accommodate in the limited number of sessions we can offer at the January meetings. The composition of participants will also be different in some respects, drawing those who are interested in a meeting in which all sessions are related to teaching and research on economic education, and where they do not have to deal with the constraints of recruiting or other meetings and obligations that are often part and parcel of attending the January meetings.

Respectfully submitted, MICHAEL WATTS, Chair

December 9, 2010

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 2010.

- TIP officially ended in 2010. No new workshops were offered in 2010.
- 2. Phase II of TIP continued through May 2010. Phase II provided participants with just-in-time instruction designed to help them introduce interactive teaching strategies in their own courses. We offered Blackboard modules covering Assessment, Case Studies, Context Rich Problems, Cooperative Learning, Discussion, Experiments, and Interactive Strategies for Large Enrollment classes. Between November 23, 2009, and the end of the project, participants completed 57 modules, about 25 percent of all modules completed during the project.
- 3. Of the 335 participants who have completed workshops, 130 (39 percent) completed at least one module and 91 participants (27 percent) completed two modules and qualified for a certificate of achievement awarded by CEE. At this year's meeting, CEE will vote to award 29 new certificates to TIP participants.
- 4. In 2006, we began Phase III of TIP. Phase III provided participants with opportunities to present papers on research and teaching innovations related to TIP. On January 5–6, 2010, in conjunction with the Atlanta ASSA Meetings, 21 TIP participants presented their work at the TIP Final Conference. The Conference included seven sessions in which TIP participants presented papers that focused on the interactive teaching strategies emphasized in the program.
- 5. Edward Elgar published a book edited by Michael Salemi and William Walstad and entitled *Teaching Innovations in Economics*.

The book includes conference papers and overviews of the program and was scheduled to be in print by the time of the 2011 ASSA meetings.

6. Bill Walstad, KimMarie McGoldrick, and Michael Salemi resubmitted a proposal to the NSF for TIP 2.0. Although it earned high ratings from evaluators, the submission was not successful. We decided not to resubmit in 2011.

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:

Mike Aguilar, UNC-Chapel Hill Rita Balaban, UNC-Chapel Hill Suchandra Basu, Rhode Island College Michael Davis, University of Missouri-Rolla Jonathan Deming, Seattle Pacific University Justin Dubas, St. Norbert College Julie Gallaway, University of Missouri-Rolla Soma Ghosh, Bridgewater State College Melanie Guidi, Mount Holyoke College John Harter, Eastern Kentucky University John Ifcher, Santa Clara University Mary Kassis, University of West Georgia Sam Liu, West Valley College Stephanie Martin, Allegheny College William Mertens, University of Colorado Peter Mikek, Wabash College Manu Raghav, DePauw University Mona Ray, Morehouse College Jennifer Rhoads, University of Illinois at Chicago

Supriya Sarnikar, Westfield State College Caroliniana Sandifer, University of Georgia Stephen Schmidt, Union College Julie Smith, Lafayette College Christy Spivey, Southern Illinois University Edwardsville

Sue Stockly, Eastern New Mexico University Geetha Vaidyanathan, UNC-Chapel Hill Robert Van Horn, University of Rhode Island Mary White, Albright College Beth Wilson, Humboldt State University