

Working DRAFT
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Proposal to

Diamond Center for Economic Education at Lehigh University

Achieving State Standards for Economics

Problem

Yesterday, life was simple. Your company took care of your retirement, your broker took care of your investments, and your banker took care of your savings account. Today, people are managing in their own retirement plans, making stock trades and purchases over the Internet, and moving their own savings among money market or high growth equity funds. How individuals and societies make decisions between needs and wants—the basics of economic literacy—has become profoundly important in the 21st Century.

Recent studies of the basic economic knowledge of Americans, however, indicate that a disturbing number of Americans—nearly two-thirds of young people and half of adults—don't know enough about economics to understand how money moves. In a test of basic economic principles given to about 1,000 adults and 1,100 high school students, sponsored by the National Council on Economic Education, almost half the adults and 66% of the students received a failing grade. Even more disconcerting is the fact that only 6% of the adults and 3% of the students received an A.

The consequences of economic illiteracy are felt, unfortunately, by Americans, both personally and as a whole. There has been a disturbing rise in personal bankruptcy due to money, credit, or career problems—problems that might have been avoided with a basic knowledge of economics. Historians tell us that even our own Congressmen didn't realize the impact of economics when, despite the petitioning of thousands of economics to reject the Smoot-Hawley Tariff Act, Congress passed it, erecting barriers to world trade which deepened a world recession and led to the Great Depression.¹

Although people recognize the importance of a solid understanding of economics—a full 96% of the adults surveyed believe that basic economics should be included in high school education—only 14 states mandate that the subject be taught as a requirement for a high school diploma. Unfortunately, Pennsylvania is not among those.

To raise awareness and promote economic literacy, the Pennsylvania Partnership for Economic Education has begun a 5-year *Campaign for Economic Literacy*. The goals of campaign are to:

- ensure that economic literacy is a school priority in K-12 curricula;
- strengthen the teaching of economics through both pre-service and in-service professional development of teachers;
- optimize the network of Pennsylvania Centers for Economics Education, to make effective use of teaching strategies and instructional materials;
- enhance and expand use and distribution of high quality electronic and print materials; and,
- build a coalition of partners to broaden and sustain the impact of the campaign.

As one of the 14 Pennsylvania Centers for Economics Education, the Diamond Center at Lehigh University proposes to make major inroads toward that successful campaign.

The Diamond Center for Economic Education at Lehigh University

The Diamond Center was established in 1976 to foster literacy in economics, principally among students in grades K-12, operating under the guidance of the National Council on Economic Education. The Center is part of a nationwide network of centers that provide training programs and a variety of instructional materials for teachers and others interested in economic education.

Among the recent programs offered by Lehigh's Diamond Center are:

- a seminar series on current economic issues;
- a Virtual Economics Workshop—a training program for teachers to use the CD-Rom “Virtual Economics: An Interactive Center for Economic Education”;
- a workshop providing teachers with instruction and classroom material about problems facing the former Soviet Union countries; and,
- a Teacher Internship Program, a three-day orientation program given as part of the Lehigh Valley Business Education Partnership Internship Program and sponsored by Lehigh Valley businesses.

Recognizing more than 20 years ago that knowledge of basic economic principles is vital to everyday living, Lehigh University established the Diamond Center for Economic Education as part of its commitment to serve the community, thereby ensuring that pre-college students are more than ready to take their place in the rigorous academic world of higher education. The Diamond Center works toward economic literacy, defined by the National Council on Economic Education as “a set of tools that provides an analytical base for decision-making throughout life. These tools help people to choose among the trade-offs that shape their lives each day.” The Diamond Center at Lehigh serves the counties of Lehigh, Northampton, Monroe, and Carbon.

National Level

The move toward economic literacy started at the national level. The National Council on Economic Education (NCEE), founded in 1949, is a national source of teacher training, educational materials, curriculum reform, and evaluation in the field of economic education. The NCEE established the Voluntary National Content Standards in Economics – a set of curriculum standards based on essential principles of economics. To present those standards, NCEE holds teacher training programs called EconomicsAmerica.

Each of the 20 content standards, developed by a panel of economists and economic educators, includes a rationale for inclusion, benchmarks for attaining levels for students in grades 4, 8, and 12; samples of what students can do to enhance or demonstrate understanding of economics; and correlation of existing publications to standards. Says the NCEE: “A better understanding of economics enables people to understand the forces that affect them every day, and helps them identify and evaluate the consequences of private decision and public policies.”² These particular economic education standards are receiving new emphasis through the five-year Pennsylvania state *Campaign for Economic Literacy* and through the passage of the U. S. Department of Education’s “Goals 2000: Educate America Act.”

Using the NCEE standards as a framework, the Pennsylvania State Department of Education recently drafted proposed economic standards of its own, submitting them to the State Board of Education on January 19, 2000.³

Program Objectives

Good teachers have standards in mind when they set up their lessons. Standards represent a *specific idea of what teacher expects the student to recall, replicate, manipulate, understand, or demonstrate at some point in their educational careers*. Yet only 13 out of 49 state documents are specific enough to be used by teachers. State standard documents often “describe standards at levels of generality that do not provide sufficient clarity for classroom instruction,” according to the American Federation of Teachers. Nor are they precise enough to serve as an instrument of accountability. **Therefore, schools and teachers need assistance in developing curricula based on standards.**

The Diamond Center for Economic Education at Lehigh University plans to implement a program to help schools and teachers throughout the state to ensure that students in Pennsylvania are successfully achieving the state’s standards for economics. The Diamond Center proposes to develop, test, and deliver economics curriculum modules to pilot sites around the state based on the newly developed standards. Working in collaboration with the Centers for Economic Education located in Villanova University, University of Pittsburgh, and Pennsylvania State University in Harrisburg, along with the Pennsylvania Partnership for Economic Education, each region will gather a team of

faculty, teachers, and directors. The goal of the collaborative program is to develop a specific program for teachers to be used state-wide, focusing on curriculum delivery, technology, assessment, and outcomes. An extensive review of grade-appropriate standards in economics will result in the development of curriculum modules to achieve the outcomes of each standard.

This is a unique opportunity for Lehigh University. The State Standards in Economics are multidisciplinary and must be integrated into the current school curriculum, unlike the other standards that have been approved and sent out to the district. Lehigh University has a strong background in multidisciplinary and interdisciplinary education. This program enables the Diamond Center and its partner Centers to use a variety of experts throughout each University, strengthening its outcomes.

Economics has been aligned as a social science related to civics and government, geography and history, and is intended to be taught in social studies classes. The development of the curriculum, to be presented as web-based modules, would take place in three phases. Each phase is estimated to take 12 months – one academic year and one summer:

- Phase 1 – curriculum development;
- Phase 2 – curriculum delivery to pilot sites; and
- Phase 3 – assessment and evaluation.

Method

For the purposes of this program, the Diamond Center has divided Pennsylvania into four regions. Each region will be served by a partnering Center for Economic Education. Each Center will assemble a collaborative curriculum and development team consisting of the Center Director, a graduate student from that University or College, an Intermediate Unit represented by its director, and three teachers representing an elementary, middle school, and high school within that Intermediate Unit. The tentative teams are:

- **Lehigh University**
 - Laurie Gostley-Hackett, Diamond Center for Economic Education
 - Steve Bronack, College of Education
 - Intermediate Unit #20, Northampton-Monroe County, Joe Mickley, Executive Director
 - Intermediate Unit #21 Lehigh-Carbon County, Jerry Stout, Executive Director
- **Villanova University**
 - John Coughlin, Director, Center for Economic Education
 - Intermediate Unit #25, Delaware County
- **University of Pittsburgh**
 - Dung Nguwen, Director, Center for Economic Education

Intermediate Unit #3, Allegany County

- **Penn State University - Harrisburg**
Mulkund Kulkarni, Director, Center for Economic Education
Intermediate Unit #15 Capital Area

The Pennsylvania Partnership for Economic Education will also participate in the program, represented by Hilary Park, vice president for Program Development.

Project Phases

Phase 1: Curriculum Development

During this phase, the collaborative teams would be assembled as outlined earlier. The charge to these teams is to review the grade-appropriate standards in economics and develop curriculum modules to achieve the outcomes of each standard. The grades that will be emphasized are Grades 3, 5, 8, and 11—one level before the grade levels for mastery of Grades 3, 6, 9, and 12 that are mandated by the state.

Since skills play an important role in economic reasoning, the teams will be working to incorporate some key skills that students must develop in economics. This includes an ability to:

1. Identify economic problems, alternatives, benefits and costs;
2. Analyze the incentives at work in an economic situation;
3. Examine the consequences of change in economic conditions and public policies;
4. Collect and organize economic evidence; and
5. Compare benefits with costs.

The state standards for economics mandate that “Pennsylvania’s public schools shall teach, challenge, and support every student to realize his or her maximum potential and acquire the knowledge and skills needed” to attain specific levels of understanding and skills outlined in the standards. Five areas are described:

- Economic Systems
- Markets and the Influences of Governments
- Scarcity and Choice
- Economic Interdependence
- Work and Earnings

The following table presents a sample of the economic standards developed for Economic Systems, the first area to be mastered.

Sample of Proposed Academic Standards for Economics – 10.1 Economic Systems (draft)

Grade 3	Grade 6	Grade 9	Grade 12
Describe how individuals, families, and communities with limited resources satisfy their wants.	Identify and describe the traditional, command and market economic systems.	Analyze the similarities and differences in economic systems.	Evaluate the strengths and weaknesses of traditional, command and market economics.
Identify goods and services produced in the local community.	Explain the three basic questions that all economic systems attempt to answer: <ul style="list-style-type: none"> • What goods and services should be produced? • How will goods and services be produced? • Who will consume goods and services? 	Analyze how characteristics of a traditional, command and market economy function in the (mixed market) U. S. economy.	Contrast the theories of the economists. <ul style="list-style-type: none"> • Classical (e.g. Karl Marx, John Stuart Mill, Adam Smith) • Contemporary (e.g. Milton Friedman, John Maynard Keynes)
Identify local geographic patterns of economic activities: <ul style="list-style-type: none"> • Land use • Food, shelter and clothing • transportation 	Describe geographic patterns of economic activities in Pennsylvania: <ul style="list-style-type: none"> • Agriculture • Travel and tourism • Mining and mineral extraction • Manufacturing • Wholesale and retail • Health services 	<ul style="list-style-type: none"> • Describe geographic patterns of economic activities in the U. S. • Primary – extractive industries • Secondary – materials processing industries • Tertiary – service industries 	Evaluate characteristics and distribution of international economic activities. <ul style="list-style-type: none"> • Traditional economic system in developing countries • Command economic system of communist and former communist countries • Market economic system of developed countries • Transitions between economic systems

Phase 2: Curriculum Delivery to Pilot Sites

During the second phase of this project, the Center would deliver the curriculum modules to pilot sites around Pennsylvania. This phase would involve continued faculty release time, as well as consultant hours from elementary and secondary school teachers and business leaders. The curriculum modules would be web-based, and thus would be living, flexible documents that could be expanded or altered as needed.

Phase 3: Assessment and Evaluation

Phase three will allow us to assess the teachers and the students on the success of the curriculum modules.

By 12th grade, students should:

- Understand the basic economic concepts
- Reason logically about key economic issues
- Know and understand facts about American economy, including its size and current rates of unemployment, inflation and interest
- Understand that economists hold differing views on some economic issues.

Conclusion

To succeed in life, every student must know how to manage resources, prepare for the workforce, make wise investments, and be informed about public policy...a working knowledge of economics in every day life.

Given the breadth of economic diversity in Lehigh's five-county region, the Diamond Center's program in achieving state standards for economics can serve as a pilot program with national application.

References/footnotes

¹ National Council on Economic Education, "Economic Literacy – The Fourth "R" in Education," *Business Week*, October 4, 1999

²National Council on Economic Education website "EconomicsAmerica" – <http://www.economicsamerica.org/standards/index.html>.

³ Prior to any formal adoption, the State is soliciting input from across the Commonwealth on these standards.