

#10112

THE ECONOMICS CLASSROOM: LEARNING, EARNING, SAVING

ANNENBERG/CPB, 2002

Grade Level: Adult

60 Minutes

4 Instructional Graphics Included



CAPTIONED MEDIA PROGRAM RELATED RESOURCES

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Annenberg/CPB
Professional Development Workshop Guide

The Economics Classroom

A Workshop for Grade 9-12 Teachers

An eight-part professional development workshop
for high school economics teachers

Produced by Pacific Street Film Projects, Inc.
in association with the National Council on Economic Education

The Economics Classroom

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About the Workshop

Overview

The Economics Classroom illustrates why economics is losing its reputation as “the dismal science.” Instead, economics can become one of the most relevant and stimulating courses taken in high school.

These teacher development workshops are intended for high school teachers of economics, many of whom have little or no background in the subject, to help them learn effective lessons and techniques for bringing this important and often misunderstood subject to their students.

The workshop consists of eight two-hour sessions with hour-long videos, each on a different topic that is covered in most high school economics courses. The workshops are organized along broad subject lines, illustrating how economists think, how markets operate, and how and why the government participates in the economy. Watching real classroom lessons, you’ll see students learning the basics of personal finance as well as a few things about wealth that they never knew before. Demonstrations and exercises designed by economic educators also cover the role of the entrepreneur and innovation in economic life, as well as the dynamics of international trade.

High school graduates will make economic choices all their lives in their roles as consumers, employees, entrepreneurs, savers, investors, and citizen voters. In the words of James Tobin, Nobel Laureate in Economics, “The case for economic literacy is obvious. High school graduates will be making economic choices all their lives, as breadwinners and consumers, and as citizens and voters. A wide range of people will bombard them with economic information and misinformation for their entire lives. They will need some capacity for critical judgment. They will need it whether or not they go to college.” (Quoted in *The Wall Street Journal*, July 9, 1986.)

The eight programs in *The Economics Classroom* cover the content areas of a typical high school economics course, including scarcity, markets, supply and demand, competition and monopoly, personal finance, the role of government, measuring economic performance, monetary and fiscal policy, and economic growth. The programs also cover the content of the 20 *Voluntary National Content Standards in Economics*.

Most important, the lessons in *The Economics Classroom* show how to bring economic concepts alive in the classroom. The philosophy behind this workshop is that students learn by doing. According to a Chinese proverb, “I hear and I forget; I see and I remember; I do and I understand.” When teachers and students approach the study of economics by doing something involving economic reasoning and economic behavior, they truly understand the ideas being taught and why those ideas are useful to them. Several of the lessons seen in the video programs appear in this workshop guide. Feel free to use them in your classroom.

The high school economics course should provide skills which will help high school graduates to compete in the global economy of the twenty-first century. *The Economics Classroom* provides a foundation to help teachers accomplish this important goal.

Workshop Format

Each workshop program is divided into several segments; each addresses a different aspect of a broad subject area and features actual in-classroom footage of teachers who are recognized for their skill in teaching economics. These classroom segments are accompanied by introductory and background information presented by Professor Timothy Taylor of Macalester College in Minneapolis, Minnesota, a leading economic educator and managing editor of the *Journal of Economic Perspectives*.

Each program also includes lesson plans and curriculum suggestions; interviews with teachers discussing their techniques, lesson plans, and pertinent experiences; and students reacting to the lessons in which they have just participated. Teachers and students comprise a diverse group in schools ranging from a private girls’ school in suburban New Jersey to public schools in and outside of cities like Atlanta and Denver to honors classrooms in Hawaii and an urban high school in New York City. Teachers can follow links throughout the workshop Web site at www.learner.org/channel/workshops/economics to learn more about a particular subject, find additional lesson ideas and exercises, and obtain additional information on the teachers and classes featured in this workshop.

About the Workshop, cont'd.

Workshop Descriptions

Workshop 1. How Economists Think

This workshop illustrates why economics is much more than a bundle of concepts. Economics is a unique way of thinking that offers insights into the seemingly chaotic confusion of human behavior in a world of different values, resources, and cultures. In the video, teachers demonstrate the key ideas that constitute an economic way of thinking.

Workshop 2. How Markets Work

This workshop focuses on the laws of supply and demand and their effects on the allocation of resources. In the video, teachers use simulations and classroom demonstrations to illustrate the behavior behind supply and demand curves. They also demonstrate the importance of competition and the incentives created by profits.

Workshop 3. The Government's Hand

This workshop demonstrates the positive role of government in a market economy and also explores why well-meaning government policies can fail. A simulation dramatically demonstrates how protection of property rights conserves and develops resources. An "economic mystery" is used to illustrate public-choice theory while a simulation shows how price ceilings and floors cause unintended consequences.

Workshop 4. Learning, Earning, and Saving

Effective lessons to teach personal finance are demonstrated in this workshop. Teachers use the "Millionaire Game," the "Chessboard of Financial Life," and a stock market simulation to show how concepts such as earning a living, spending, saving, investing, borrowing, and managing money are taught in a high school economics course.

Workshop 5. Trading Globally

The positive effects of voluntary trade and the harmful effects of protectionism are shown dramatically in this program. A "label-search" activity, a discussion on the worldwide ingredients in a candy bar, and a "banana wars" simulation all demonstrate the benefits of trade and the unintended negative consequences of protectionist policies.

Workshop 6. The Building Blocks of Macroeconomics

This workshop illustrates activities that teach about the basic measurement tools of any economy: gross domestic product (GDP), unemployment, and inflation. These measurement tools can seem abstract, but GDP and economic growth, unemployment, and inflation can have a profound effect on students' future welfare, their job opportunities, the level of their prospective earnings, and the prices they will pay for the things they buy.

Workshop 7. Monetary and Fiscal Policy

Teachers use a lecture/discussion technique, demonstrations, and simulations to teach about the effects of monetary and fiscal policy on aggregate supply and aggregate demand. Students learn how government monetary and fiscal policies affect economic growth, unemployment, and inflation.

Workshop 8. Growth and Entrepreneurship

In the final workshop, students learn why the key to improving a nation's standard of living is economic growth. Teachers illustrate the important factors that contribute to economic growth and how a market economy creates incentives that encourage entrepreneurship, innovation, and investment. The role of patents and copyrights in creating incentives for entrepreneurs is also covered.

About the Workshop, cont'd.

About the Lessons

Each session includes two economics lessons. In many cases, a version of the lesson is demonstrated by a teacher in the workshop video. In all cases, the content of the lesson relates to the content of the video program. Teachers are free to copy and use these lessons in their classrooms.

This is just a sampling of the lessons available to high school economics teachers. These lessons utilize an active-learning approach. Most of the lessons in this guide were previously published by the National Council on Economic Education (NCEE). They are not in the exact format in which they were originally published. For information on the publications of NCEE, call toll-free 800-338-1192 to obtain a catalog or view the online catalog at www.ncee.net.

The following lessons appear in this guide.

Workshop 1. How Economists Think

The Tragedy of the Commons

by Mark C. Schug, from *The Great Economic Mysteries Book: A Guide to Teaching Economic Reasoning, Grades 9-12*, National Council on Economic Education, 2001.

Why Do People Trade?

by Gerald J. Lynch, Michael W. Watts, and Donald R. Wentworth, from *Focus: International Economics*, National Council on Economic Education, 1998.

Workshop 2. How Markets Work

A Classroom Market for Crude Oil

by Michael W. Watts, Sarapage McCorkle, Bonnie T. Meszaros, and Mark C. Schug, from *Focus: High School Economics*, National Council on Economic Education, 2001.

Shifts in Supply and Demand

by John S. Morton, from *Advanced Placement Economics: Microeconomics: Student Activities*, National Council on Economic Education, 1996. A new edition will be published in 2003.

Workshop 3. The Government's Hand

Property Rights Simulation

by John S. Morton.

Price Floors and Ceilings

by John S. Morton, from *Advanced Placement Economics: Microeconomics: Student Activities*, National Council on Economic Education, 1996.

Workshop 4. Learning, Earning, and Saving

How To Really Be a Millionaire

by John S. Morton and Mark C. Schug, from *Financial Fitness for Life: Bringing Home the Gold, Grades 9-12*, National Council on Economic Education, 2001.

The Chessboard of Financial Life

by John S. Morton and Mark C. Schug, from *Financial Fitness for Life: Bringing Home the Gold, Grades 9-12*, National Council on Economic Education, 2001.

About the Workshop, cont'd.

Workshop 5. Trading Globally

Working and Living Together: The Importance of Trade

by Harlan R. Day, from *Trading Around the World: Introducing Economics Into the Middle School Curriculum*, National Council on Economic Education, 1997.

The “Banana Wars” Lesson

by Elaine Schwartz.

Workshop 6. The Building Blocks of Macroeconomics

All About GDP

by John S. Morton, from *Advanced Placement Economics: Macroeconomics: Student Activities*, National Council on Economic Education, 1996.

Who Is Hurt and Who Is Helped by Inflation?

by John S. Morton, from *Advanced Placement Economics: Macroeconomics: Student Activities*, National Council on Economic Education, 1996.

Workshop 7. Monetary and Fiscal Policy

The Tools of Fiscal Policy

by John S. Morton, from *Advanced Placement Economics: Macroeconomics: Student Activities*, National Council on Economic Education, 1996.

Money, Interest, and Monetary Policy

by Michael W. Watts, Sarapage McCorkle, Bonnie T. Meszaros, and Mark C. Schug, from *Focus: High School Economics*, National Council on Economic Education, 2001.

Workshop 8. Growth and Entrepreneurship

Mystery Nations

by Jane Lopus, John S. Morton, Robert Reinke, Mark C. Schug, and Donald R. Wentworth, from *Capstone II*, National Council on Economic Education, to be published in 2003.

Can I Become an Entrepreneur?

by John E. Clow, Carolyn R. Holleran, Calvin A. Kent, Gary Rabbior, Francis W. Rushing, and Alan Stafford, from *Economics and Entrepreneurship*, National Council on Economic Education, 1993.

About the Workshop, cont'd.

About the Content

These workshops cover the 20 standards in the *Voluntary National Content Standards in Economics*. The standards covered by each workshop are listed below under the number of the workshop. Each standard is written in its entirety in the workshop chapter(s) in which it is covered.

A Correlation of the Workshop Programs to the Voluntary National Content Standards in Economics

Standards	Workshops							
	1	2	3	4	5	6	7	8
1. Scarcity	X							
2. Marginal costs/marginal benefits	X			X				
3. Allocation of goods and services		X						
4. Role of incentives	X							
5. Gains from trade	X				X			
6. Specialization and trade					X			
7. Markets—price and quantity determination		X						
8. Role of price in market system		X						
9. Benefits of competition		X						
10. Role of economic institutions			X					
11. Role of money							X	
12. Role of interest rates							X	
13. Role of resources in determining income				X				
14. Profit and the entrepreneur		X						X
15. Growth								X
16. Role of government			X					
17. Costs of government policies			X					
18. Circular flow-interdependence						X	X	
19. Unemployment and inflation						X		
20. Monetary and fiscal policy							X	

From *Voluntary National Content Standards in Economics*, National Council on Economic Education, 1997.

About the Contributors

Project Director, Producers

Since the founding of Pacific Street Films (PSF) in 1969, **Steven Fischler** (project director and producer) and **Joel Sucher** (producer) have produced, directed, and written award-winning documentary films on a wide variety of historical, cultural, and political themes. Sucher and Fischler have been the recipients of numerous awards and grants, including Guggenheim Fellowships in Film, Emmy Awards, Cine Golden Eagles, and the John Grierson Award for Social Documentaries.

Fischler and Sucher have chronicled both overlooked historical movements (*Free Voice of Labor: The Jewish Anarchists and Anarchism in America*), and misunderstood ones (*Blue Helmets: The Story of United Nations Peacekeeping and In Search of Peace*). PSF produced a documentary on the forgotten story of how Jewish professors who had fled Nazi Germany ended up teaching at historically black colleges in the South, *From Swastika to Jim Crow*, which had its broadcast premiere on PBS in 2001. PSF also has produced long-form biographical sketches on Frankie Lymon (*I Promise to Remember*, 1983), directors Martin Scorsese (*Martin Scorsese Directs*) and Oliver Stone (*Oliver Stone: Inside/Out*). Fischler and Sucher have produced a 12-part telecourse/series, *Exploring the World of Music*, for Annenberg/CPB; a five-part series, *The Warrior Tradition*, and many other broadcast documentaries for both public and commercial television.

Coordinating Producer, Web Site Designer

Clark Bortree has worked with Pacific Street Films since 1996, both as coordinating producer, director and Web designer. He designed and programmed *The Economic Classroom* Web site.

Director of Content

John S. Morton is vice president for program development at the National Council on Economic Education. He was president of the Arizona Council on Economic Education from 1997 to 2001. Mr. Morton has over 35 years' experience as a high school economics teacher, college professor, college administrator, and economic education writer and presenter. He is the author or co-author of more than 30 economics publications.

Educational Consultant, Writer, and Series Host

Timothy Taylor is managing editor of the *Journal of Economic Perspectives*, an academic journal published quarterly by the American Economic Association based at Macalester College in St. Paul, Minnesota. Taylor received his Bachelor of Arts degree from Haverford College in 1982 and a master's degree in economics from Stanford University in 1984. He then worked as an editorial writer for the San Jose Mercury News for two years, before starting the *Journal of Economic Perspectives* in 1986. He has won awards for teaching economics at Stanford University and the University of Minnesota. He has recorded several economics courses for the general public through the Teaching Company.

Board of Advisors

Brett Hardin is a social studies teacher who began teaching economics in 1996. Hardin has a B.A. in history from Wesleyan University and an M.S. in secondary education from the University of Pennsylvania. He is Georgia Teacher of the Year for 2002.

Donna McCreddie is an economics and honors economics teacher at Temple City High School in California. She received her bachelor's degree at California State University, Los Angeles and her master's at the University of Delaware in economic education. Donna is the past president of the California Association of School Economics Teachers and a member of the Writing Committee for National Standards in Economics. Teaching awards include the Foundation for Teaching Economics' 1994 Excellence in Economic Education and the 1994 California Economics Teacher of the Year presented by EconomicsAmerica of California.

Stephen Rabin is president of the Educational Film Center (EFC) and since 1983 has been responsible for management of production, development, and financing of its programs. Under his direction, EFC has created and produced a number of telecourses, teacher training and workshop series, and several hundred television specials, series, and videos, including several for Annenberg/CPB. These include *The World of Chemistry*, *Economics USA*, *Exploring the World of Music*, *In Search of the Novel*, and *Inside the Global Economy*.

About the Contributors, cont'd.

Dimitri Saliani is the social studies chairman at Eleanor Roosevelt High School in New York City opening in September 2002. He has taught previously in the Minisink Valley and Mahopac school districts in New York for five years. He has incorporated economic principles into courses such as world history and United States history. He received his master's degree from New York University and bachelor's from the State University of New York at New Paltz with a major in history.

Dr. Mark C. Schug is the director of the UW-Milwaukee Center for Economic Education. The UWM Center is affiliated with the Wisconsin Council on Economic Education and the National Council on Economic Education. Dr. Schug has taught for over 30 years at the middle school, high school, and university levels. Professor Schug has written and edited over 170 publications.

Elaine L. Schwartz is an AP economics teacher at the Kent Place School. Located in Summit, New Jersey, Kent Place is an independent all-girls' day school pre-K through grade 12. During her 31 years at Kent Place, Elaine has chaired the history department and taught U.S. history. Currently, she occupies an endowed chair in economics and is a member of the Cum Laude Society. Schwartz is a mentor teacher and a workshop leader for the Foundation for Teaching Economics and the author of several textbooks.

Teachers Featured in *The Economics Classroom*

Heather Anderson has a degree in social science education and began her career in education teaching eighth-grade American history. Currently, she teaches four economics honors classes and one AP microeconomics class at Eau Gallie High School in Melbourne, Florida. She has been teaching economics since 1999.

"I decided to teach high school. The only way I could move here was to teach world history and economics. And I thought, 'I can do it. I'll get through a couple of years and then I'll get rid of the economics and I'll be left with the world history.' And once I started teaching economics that's what I ended up loving. And so now I'm trying to get rid of the world history so that I can have all economics."

Classes presented in *The Economics Classroom*: Price Floors (Workshop 3); Price Ceilings (Workshop 3); Compound Interest (Workshop 4)

Kendra Cheese teaches economics at Lakewood Senior High, located in western Jefferson County, a suburb of Denver, where she is the department chair for social studies. A Denver native, she has been teaching for 32 years. She received the Enterprising Teacher of the Year award from the Colorado Council of Economic Education in 2001. For the last four years, she has been teaching pre-international baccalaureate economics to ninth graders.

"Teaching ninth graders economics is a difficult challenge because they haven't had a lot of real-world experiences. They don't drive, most of them have never worked, they're still in that transition period from their parents giving them allowance to knowing more about how to work with money. But ninth graders are enthusiastic and they're spontaneous and they like activities...they really enjoy them and don't look at them as being beneath them."

Class presented in *The Economics Classroom*: Property Rights (Workshop 3)

Dr. Eric M. Gernant received an M.A. and a Ph.D. in economics from Fordham University and has been teaching in the New York City school system since 1972. He transferred to New York City's High School of Economics and Finance in 1995. One of New York's specialized high schools, the High School of Economics and Finance offers a specialized curriculum focusing on finance and business-related courses.

"Historically, social studies teachers hate to teach economics. You have very few teachers on the faculty in any high school who have a master's degree, let alone a bachelor's degree in economics. It's always a course that's farmed out to somebody who has the least seniority. And here I had an opportunity, I thought, with a passion for the subject, to really go into depth and give these kids a top-notch education."

Class presented in *The Economics Classroom*: Comparative Advantage and Specialization (Workshop 5)

About the Contributors, cont'd.

Jay Grenawalt has been teaching for over 25 years. Currently, he works with juniors and seniors in the international baccalaureate program at George Washington High School in Denver, Colorado, teaching economics and history. He has been the recipient of many awards, including the White House Fellowship Distinguished Teacher of the Year Award, Commission on Presidential Scholars, 1994; the Boettcher Foundation Teacher Recognition Award, 1996; and the University of Chicago Outstanding Teacher Award, 1997 and 1998.

Grenawalt's students are generally very committed and academically oriented. He notes that even those students who are "sort of in the middle of the pack" get swept up by the interest and the enthusiasm that many of the students have.

"Too many American texts present economics from the American perspective only and we really do live in a global economy today. I try to find as many curricular materials that perhaps take us out of our own boundaries and look at it more in terms of how the Europeans might view it or the people in Asia or what have you...."

Classes presented in *The Economics Classroom*: Voluntary Trade (Workshop 1); Global Trade (Workshop 5); Gains From Trade (Workshop 5); What Makes Countries Rich? (Workshop 8)

Brett Hardin is a social studies teacher who began teaching economics in 1996. Hardin has a B.A. in history from Wesleyan University and an M.S. in secondary education from the University of Pennsylvania. He was a STAR teacher from 1998 through 2002, received the 2000-2001 BellSouth-Atlanta Braves Excellence in Education Award and was Georgia Teacher of the Year for 2002. He teaches at Campbell High School in Smyrna, Georgia.

"One of the things about teaching economics has been that I'm a better American history teacher than I was before, because there are lots of moments in American history where major economic events have obviously had major social or political impacts. And the social studies teachers—we like to focus on the social and political. We shy away from the economics 'cause we don't always understand it."

Classes presented in *The Economics Classroom*: Macroeconomics (Workshop 6); Unemployment (Workshop 6); Effects of Inflation (Workshop 6)

Ted Hartsoe teaches economics at Choate Rosemary Hall, a small, private secondary school in Wallingford, Connecticut. The school has about 800 students and the economics program is an important feature in the curriculum. Mr. Hartsoe's economics classes are very popular elective choices. He teaches microeconomics, macroeconomics, international economics and an advanced topics course in economics. In 2001 he was named a NASDAQ Teacher of the Year and the student team he coached won the NCEE's first nationwide Economics Challenge.

"It's important for all the students, not just AP-level students, to know about basic economic indicators.... They have to be able to put those into context and understand what that tells them about the performance of the national economy. So they can understand what the politicians are saying to them and political candidates, and what that means in terms of policy—fiscal policy and monetary policy. I think every citizen needs to have an understanding of those indicators and what they mean and what those numbers are telling them."

Classes presented in *The Economics Classroom*: Measuring Inflation (Workshop 6); Fiscal Policy (Workshop 7); How Money Works (Workshop 7); Business and Finance (Workshop 8)

About the Contributors, cont'd.

Marc A. Johnson is the social studies department coordinator and a teacher at Smoky Hill High School in Aurora, Colorado. He has taught middle school, high school, and community college for over 18 years. He received the Teacher of the Year Award from Horizon Community Middle School in 1995, the Enterprising Teacher of the Year Award from the Colorado Council on Economic Education in December 2000, and was one of four Colorado teachers selected by the NCEE to do a study tour of St. Petersburg, Russia, and establish an international classroom partnership in March 2002.

"A very good young social studies teacher said, 'You know, you could throw me into any social studies class—anthropology, psychology, sociology, history, geography—and I could handle them all except for economics. I wouldn't feel comfortable there.' So the challenge is how do you get these guys, who have avoided economics in the past, how can you get them up to speed with economics? And I'm convinced the answer is through strong state councils offering courses that are non-threatening and friendly. I think we need to attack it in two ways: a content base, so they really have some economic understanding, then give them some lessons and activities and things that they can do. I don't think one is good without the other."

Classes presented in *The Economics Classroom*: Salaries and Wages (Workshop 4); Millionaires (Workshop 4); Education Pays Off (Workshop 4)

Richie Kibota teaches at Iolani High School in Honolulu, Hawaii. Affiliated with the Episcopal Church, the school is a culturally diverse, coeducational, college preparatory school. A member of the Hawaii Council on Economic Education, Richie has coached students at Moanalua High School and at Iolani to win the Hawaii State Economics Challenge contest. An economics teacher since 1983, Kibota has taught both advanced placement and microeconomics courses and currently teaches an elective 12th-grade economics class.

"This course is strictly an economics course. It's not a financial management course and it's not a consumer education course. It's teaching microeconomic concepts. These students will become smarter consumers and make better decisions when it comes to finances down the road."

Class presented in *The Economics Classroom*: Cartels and Competition (Workshop 2)

Dee Mecham teaches at Kamehameha School in Honolulu, Hawaii, a school that is unique because all the students are of Hawaiian ancestry. The school was founded by Princess Bernice Pauahi Bishop to support the Christian and Hawaiian values of the island's children.

Mr. Mecham was a Ph.D. student in economics at the University of Hawaii who found his part-time work as a college teaching assistant so exciting that he now teaches full-time at Kamehameha School. He teaches a one-semester principles course (the regular level), a one-semester honors course, and the year-long advanced placement course. One semester of economics is required at any of the three levels. Mecham has received the 2002 Economics Teacher of the Year award for Hawaii from Hawaii Pacific University and the Hawaii Council on Economic Education.

"I definitely try to use a lot of local examples. In fact, when I started teaching classes at the University—I had come from Utah, so a lot of the examples that I had had to deal with parkas and skiing and snow. I've definitely switched and become more accustomed to using examples that have to do with surfboards and Spam musubis, some of the local foods here. It helps the kids to understand."

Class presented in *The Economics Classroom*: Price Controls (Workshop 3)

Mark Melkonian supports his high school's overall mission to provide a rigorous curriculum with a special focus on finance and business, and to help students prepare for the business world and for college. Mr. Melkonian teaches history, as well as entrepreneurship classes, at the High School of Economics and Finance in New York, New York.

"It's not just starting and owning your own business, it's empowering young people and giving them the ability to see an opportunity and act on it and to improve their lives. And I think if young people get that message, that's the key. That's what I'm hopefully trying to do."

Class presented in *The Economics Classroom*: Entrepreneurs (Workshop 8)

About the Contributors, cont'd.

Ghandi Moussa teaches economics, including the school-required “Welcome to Wall Street” course, at the High School of Economics and Finance in New York. Originally a social studies teacher, Mr. Moussa enjoys incorporating his passion for history and government studies into his economics classes.

“It’s hard to make a case for the kids about the importance and the value of learning history and learning politics and government. It just doesn’t seem to catch on. But with economics and finance, they can see the relevance and the immediate effect on their own lives.”

Class presented in *The Economics Classroom: Patents and Copyrights* (Workshop 8)

Carol Penland has been teaching economics for over 25 years. She received the first Teacher of the Year in Economics award in Georgia in 1986 and was the founding president of the Georgia Association of Economic Educators in 1994. She has served on local, state, and national committees to write curriculum and is currently working with the Georgia Department of Education to revise the end-of-course test for economics. She teaches at South Cobb High School in Austell, Georgia.

“Economics has been called ‘the dismal science’ and there’s a reason for that. Most of us go to college and we just have someone stand up and talk to us about it. But I think students, especially in high school—and even in elementary and middle school—if they can have some hands-on experience it just makes a world of difference. I don’t want students to be afraid of economics. I want them to embrace it because it will make them better citizens, better consumers, better producers, and that’s going to make our economy better for all of us.”

Classes presented in *The Economics Classroom: Supply and Demand* (Workshop 2); *Market Simulation* (Workshop 2)

Colonel Dick Rankin was a career military officer. A graduate of the Virginia Military Institute, he taught economics and was the course director for sophomore economics at West Point. After he retired from the service, he began teaching at Iolani High School in Honolulu, Hawaii. He has coached a number of award-winning student economics teams, including an Economics Challenge National final-four team, and three Western Region Championship teams. Rankin has been the recipient of many awards, including U.S. Military Academy Department of Social Science Teacher of the Year, 1983; Hawaii State Economics Teacher of the Year, 2000; Western Region Economics Teacher of the Year, 2001; and the National Economics Teacher of the Year, 2001.

“I think economics is an extremely important subject. It’s a life-long skill that should be learned sooner rather than later. It is critical to get a handle on what makes our economy tick early on in your life and to understand the importance of decision-making. After all, economics really is about decision-making. Every decision you make doesn’t just have benefits, it has costs as well. And to weigh the costs and benefits, to think critically about those decisions, is going to make a person make the right decisions. I think it’s important to know economics on a personal level. I think to be an informed voter, economics is extremely important.”

Class presented in *The Economics Classroom: Shifts in Supply and Demand* (Workshop 2)

Steve Reich is an experienced teacher with over 17 years presenting economics and personal finance. While he had some minimal college course work in economics, he, like many teachers, had to learn on the job. He teaches at Valhalla High School in Valhalla, New York.

“When I first started teaching economics, I had only taken one class in economics and I was basically reading the textbook and trying to figure out what it was I was going to teach the next day. I was just out of college and I think they were looking for a large male who was also schooled in football. I was a social studies teacher. I had a history and an English degree. Economics was the job and they said, ‘Can you teach it?’ And I said, ‘Absolutely,’ and went right to it and did it.”

Classes presented in *The Economics Classroom: Incentives* (Workshop 1); *Incentives and Public Policy* (Workshop 3)

About the Contributors, cont'd.

Eliot Scher has been teaching economics for over 20 years, and like many of the other exceptional teachers we see in this series, his economics career began almost by accident. He teaches at White Plains High School in White Plains, New York.

"It was 1980 and we wanted to implement an economics program. Our department chairperson came to us and said, 'Who wants to teach economics?' and nobody knew anything about economics. They offered us some money for writing the curriculum and here I was, I was a young father [who] needed a couple of bucks and so I said to him, 'Hey, I'll write the curriculum.' And we sat down (it was one other person and myself) to write the curriculum and we had no idea where to begin. We looked at the State of Oregon's economics curriculum. So we said, 'We found this great curriculum out in Oregon and we think it looks pretty good,' and we implemented the Oregon economics program and it stuck."

Classes presented in *The Economics Classroom*: Stock Market (Workshop 4); Inflation (Workshop 6); Open Market Operations (Workshop 7); Fed Challenge Team (Workshop 7)

Elaine Schwartz teaches at Kent Place School, a private girls' school in Summit, New Jersey that was founded over 100 years ago. Currently, her economics class, which is an elective, is composed of 18 seniors. She is also the author of two economics textbooks.

"I perceive economics to provide a fundamental outlook for all of us in our personal lives, at work and as voters. And with that in mind—with the idea that decisions always involve tradeoffs, that people respond to incentives, that people go and they trade—they buy when they think they're going to get individual gain. All of these basic ideas are at the heart of what thinking economically is about. I perceive economics as a critical, critical area for students to learn about when they're at the high school level."

Classes presented in *The Economics Classroom*: Opportunity Cost (Workshop 1); Trade-Offs (Workshop 1); Protectionism (Workshop 5)

Greg Smith is a social studies teacher with a master's degree in American history. At Hastings-on-Hudson High School in Hastings-on-Hudson, New York, he teaches economics, a curriculum requirement, to mainstream students, as well as at-risk students, such as the class shown in this workshop.

"When we start the class, I'm getting some of the basic economic principles down, so they have that as a core foundation—a key vocabulary for them. The responses in the beginning are mixed. Some of them take an interest [in] it. Others think it's boring. But I noticed as the class progresses they seem to take more stock in what they do and they become more interested in what we're doing in class. As the year progresses they start to see the relevance. It's not something that I can teach in one 40-minute class or one 80-minute class to show them the relevance. It's something that I have to build upon, with the hope that by the end of the semester they come to see that."

Class presented in *The Economics Classroom*: Monetary Policy (Workshop 7)

Anna Vanlandingham has taught in Mississippi and now teaches at Lake Mary High School in Lake Mary, Florida. Like many other experienced teachers, she was recruited to teach economics. Her school needed an assistant basketball coach and economics teacher and she accepted. More than 20 years later, she is one of Florida's most experienced high school economics teachers. Her awards include the 2001 Regional NASDAQ Economics Educator of the Year; Florida Council on Economic Education Economics Educator of the Year, 2002; and the 2001 Florida Junior Achievement Economics Educator of the Year.

"When a new teacher is starting out with hands-on activities it can be difficult. One of the first things that you have to accept with hands-on is you don't have complete control of your classroom. Most beginning teachers are not equipped for that. When you're a new teacher you're not real confident, so it makes you want to be more in control of everything. Another thing is you have to have confidence in yourself and listen to the students if you really want to make it interesting and make it good. Because I found that when I first started doing some of these things that my students had a lot of good suggestions, which improved my program. That confidence takes a couple of years of teaching to develop."

Class presented in *The Economics Classroom*: Gross Domestic Product (Workshop 6)

Helpful Hints

Conducting Successful Workshop Sessions

Utilize All the Workshop Components

The Economics Classroom consists of eight hour-long videos, *The Economics Classroom* Web site, and the materials in this guide. Each workshop is two hours long and consists of a one-hour video and a one-hour site discussion.

Designate a Facilitator

Each week one participant should be responsible for facilitating the workshop session. Another option is to appoint a facilitator and another participant to demonstrate a lesson. The facilitator does not need to be the same person each week. In fact, we recommend that participants rotate the role of facilitator on a weekly basis. The facilitator should bring the necessary materials to that workshop or make sure the materials are there.

Keep an Eye on the Time but Be Flexible

Each workshop consists of a one-hour video and a one-hour site discussion. The recommended format is to stop the video at designated times and conduct a discussion or lesson pertaining to the content just viewed. There is also time for Getting Ready and Closure. These times differ for each workshop. The times are approximate. Feel free to alter the discussions depending on your needs.

Note: If you are watching the video programs directly from the Annenberg/CPB Channel broadcast or via the Annenberg/CPB Channel Web stream, you will be unable to stop the program for discussions and activities. Therefore, you will need to alter the workshop session to discuss and hold group activities before and/or after watching the program.

Read the Lessons Before the Workshop

Each workshop involves discussing or demonstrating two sample lessons. To facilitate the use of the lessons, read them before the workshop. If the lesson is to be demonstrated, do not read the answers. It would also be helpful to designate a lesson facilitator the week before each workshop.

Try the Lessons in Your Classroom

Conduct the lessons in your classroom if you are currently covering that content. Share your experiences with your colleagues; be sure to discuss any changes you made in the lesson to meet the needs of your students.

Utilize the Web Site

You can find *The Economics Classroom* Web site at

www.learner.org/channel/workshops/economics.

The Web site offers lesson plans and links to other sources of information that are not found in this guide. On the Web site, you will find:

- About the Workshops
- Workshop Descriptions
- About the Teachers
- Support Materials (this guide in PDF file format)
- Channel-Talk (the email discussion list for this workshop)
- Resources
- Credits

There are also links to workshop registration, information on receiving graduate credit, the broadcast schedule of the video programs on the Annenberg/CPB Channel, and information on purchasing the video programs.

Helpful Hints, cont'd.

Make Choices

You may find that viewing the video, conducting the discussions, and demonstrating the lessons take more than two hours. We recommend that the facilitator make choices among the activities and decide which discussion items are most important for the participants. All activities and lessons spring from the videos, so all choices will be appropriate to the content.

Workshop 4

Learning, Earning, and Saving

Description

Most high school economics courses include a unit on personal finance. The key to an effective personal finance curriculum is to apply economic concepts and an economic way of thinking to personal decision-making. A personal finance unit should include earning an income, as well as spending, saving and investing, borrowing, and managing money. Economics covers more than money, but particularly at the high school level, it covers money and personal finance.

Perhaps the most important lesson students can learn in the personal finance unit is that to become financially secure, people must save early and often. Marc Johnson's class at Smoky Hill High School in Aurora, Colorado, plays the "How To Really Be a Millionaire" game. They find that preconceptions about millionaires are not necessarily so and learn rules for improving their financial lives. Heather Anderson, from Eau Gallie High School in Melbourne, Florida, dramatically illustrates the power of compound interest to her class using "The Chessboard of Financial Life" simulation. Finally, Eliot Scher, from White Plains High School in White Plains, New York, has his students participate in a stock market simulation to get them interested in investing.

Key Concepts

- Higher education greatly increases lifetime earnings. On average, high school graduates earn more than high school dropouts, and college graduates earn more than high school graduates.
- Compound interest can work for or against you. If you save early and often, it works for you. If you borrow early and often, compound interest works against you.
- Good money-management skills improve your financial well-being.
- Wise personal decision-making involves identifying criteria and using those criteria to make decisions. Consumers must make decisions because resources are limited and wants are unlimited. Consumer decisions always involve costs, benefits, and trade-offs.

Voluntary National Content Standards in Economics

The activities shown in this workshop illustrate the following standards:

- Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something; few choices are “all or nothing” decisions. (Content Standard 2)
- Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are. (Content Standard 13)

Workshop Session

Getting Ready (20 minutes)

- Participants should tell the group which two personal-finance topics they feel are the most important to teach in their economics class.
- Have one participant write the topics on the board.
- Determine which three topics are the most important and why.

Watching and Discussing the Video (90 minutes)

1. View Section One (salaries and wages), Section Two (The Millionaire Game), and Section Three (education pay-off). (26 minutes)
2. Form small groups to discuss Visual 2 in The Millionaire Game (Lesson 4.1). (10 minutes)
 - What are some examples that support these rules for improving your financial life?
 - The game is clearly fun for Mark's students. What are the educational reasons for playing the game?
 - Are there any misrepresentations or overgeneralizations in the Millionaire Game?
3. View Section Four (compound interest). (14 minutes)
4. Now play "The Chessboard of Financial Life" in a different way. (12 minutes)
 - Appoint a participant to play the role of the teacher.
 - Now ask, "Would you take \$10,000 or one cent doubled until the end of the third row of boxes?" Use Lesson 4.2.
 - At the end of each row, ask the question again to see if anyone has changed his or her mind. How many people changed their minds?
 - How much money would you have by the end of the third row?
 - What other activities can you suggest to illustrate the power of compound interest?
5. View Section Five (stock market). (15 minutes)
6. Discuss the advantages and disadvantages of stock market simulations. (13 minutes)
 - What are the advantages of using an online stock market simulation in your classroom?
 - What are the disadvantages of using an online stock market simulation in your classroom?
 - How does an online stock market simulation misrepresent basic principles of investing?
 - What additional curriculum materials does a teacher need to supplement a stock market simulation?
 - What activities can a teacher use to teach the benefits of long-term investing as opposed to short-term investing?
 - Should a personal-finance curriculum place more emphasis on the benefits of regular saving or on strategies for investing in the stock market?

Workshop Session, cont'd.

Closure (10 minutes)

- Write your own list of rules for improving your financial life. Share them with the other participants.
- Make a list of the instructional activities packages you use to teach personal finance. Which two do you think are the most effective?

Lesson 4.1: How To Really Be a Millionaire

"How To Really Be a Millionaire" is from *Financial Fitness for Life: Bringing Home the Gold, Grades 9-12*, by John S. Morton and Mark C. Schug, National Council on Economic Education, 2001.

Fitness Focus:

Lesson Description

This lesson is designed to get students interested in personal finance. Financial planning may seem dull and laborious, but finding out how to become a millionaire is an activity that tends to stir up considerable interest. This lesson shows the students that they are unlikely to achieve wealth without self-discipline. Achieving personal wealth involves planning and making sound choices, such as getting a good education, spending wisely, saving early and often, and taking prudent risks. The lesson here is not that the only goal in life is to become rich. Wealth, in itself, is no guarantee of happiness. Nevertheless, wealth provides the freedom to have more choices in life.

This lesson is correlated with national standards for economics as well as the national guidelines for personal financial management as shown in Tables 1 and 2 in the front of the book *Financial Fitness for Life*.

Student Objectives

At the end of this lesson, the student will be able to:

- Describe the characteristics of millionaires.
- Illustrate how sound financial decisions can increase wealth and a person's standard of living.

Materials

- Visual 1: The Millionaire Game
- Visual 2: Rules for Improving Your Financial Life
- Activity 1: Millionaire Game Score Sheet

Workout:

Warm-Up

Tell the students that the purpose of this lesson is to show how they can make choices that can improve their lives. The lesson has several tips about the accumulation of personal wealth. It introduces ideas that will be explored throughout the study of economics and personal finance.

Exercise

A. Divide the class into groups of three. To each group, distribute one sheet of paper with "T" on one side and "F" on the other, and one sheet with "Millionaire" written on it.

B. Explain the rules of The Millionaire Game.

1. Choose a spokesperson for each group.
2. All students in the group must tell the spokesperson what they think the right answers are for the questions on Visual 1.
3. The majority prevails whenever the group disagrees on the answer.
4. The spokesperson must hold up the sheet of paper with "T" and "F" to indicate the group's decision on the question. The teams must answer each question. The spokesperson may also hold up the "Millionaire" sign if the group wants to use this option.
5. Each group gets five points for each correct answer. Each group loses five points for each incorrect answer.
6. Each group may choose to "Millionaire" on any question up to a total of five questions. If the group answers correctly, it receives 10 points; if the group answers incorrectly, it loses 10 points from its current score. Groups should use this tactic on questions they are most confident about answering correctly.

Lesson 4.1, cont'd.

7. A total of 100 points is a perfect score. To earn this score, the students must answer all questions correctly and "Millionaire" correctly on five questions.
 8. The team with the most points wins and is declared The Millionaires of Tomorrow.
- C. Display Visual 1, "The Millionaire Game," on the overhead projector. At first, keep all the questions covered. Show the students one question at a time so they do not see them all at once.
- D. For each question, ask the students to decide in their group if they think the statement is true or false. Then the spokesperson holds up the "True/False" sign to show the group's decision to the class. The spokesperson should also hold up the "Millionaire" sign if this tactic was chosen for this question. Make sure these sheets are raised simultaneously to discourage some groups from waiting to see what other groups decided. Or the groups can write their answers to all the questions first and then calculate their score.
- E. While the students keep track of their scores on Activity 1, "Millionaire Game Score Sheet," keep a point total on the board so that each group can see how it is performing relative to other groups. They will use this information to decide when to go "Millionaire."
- F. Discuss the answers, shown below, as the students answer each question or at the end of the game. Explain to the students some basic principles for getting rich and living a more satisfying life.
1. **True.** *Four of five millionaires are college graduates. Eighteen percent have master's degrees, 8% law degrees, 6% medical degrees, and 6% Ph.D.s.*
 2. **False.** *About 2/3 of millionaires work 45 to 55 hours a week.*
 3. **True.** *Only 19% of millionaires received any income or wealth of any kind from a trust fund or an estate. Fewer than 10% of millionaires inherited 10% or more of their wealth.*
 4. **False.** *Only 28.6% of millionaires have American Express Gold Cards while 43% have Sears credit cards. Only 6.2% of millionaires have American Express Platinum Cards.*
 5. **True.** *Ford is preferred by 9.4% and Cadillac by 8.8%. Lincoln comes in third at 7.8%. Only 23% of millionaires drive a current-year (new) car.*
 6. **False.** *A majority of millionaires are in ordinary industries and jobs. They are proficient in targeting marketing opportunities.*
 7. **False.** *About three out of four millionaires are self-employed and consider themselves to be entrepreneurs. Most of the others are professionals, such as doctors, accountants, and lawyers.*
 8. **False.** *Few people get rich the easy way. If you play the lottery, the chances of winning are about one in 12 million. The average person who plays the lottery every day would have to live about 33,000 years to win once. In contrast, you have a one in 1.9 million chance of being struck by lightning. A pregnant woman has one chance in 705,000 live births to have quadruplets. How many sets of quadruplets do you know?*
 9. **True.** *In recent years, the average college graduate earned 66% more than the average high school graduate did. People with professional degrees earned 150% more than high school graduates did.*
 10. **True.** *Of course, a normal person would spend some of the difference, but it is a dramatic illustration of how valuable a high school diploma is. The difference in earnings between a high school graduate and a high school dropout is \$8000 at age 18. The illustration assumes the difference increases by 1.5% each year and that the difference is invested at 8% interest each year.*
 11. **False.** *Recent studies show that 80% of day traders lose money.*

Lesson 4.1, cont'd.

12. **False.** Long term (starting in 1926 and including the Great Depression), the Standard & Poor's 500 Stock Index has increased at about an 11% compound annual rate of return, exceeding the return on any other investment. Of course, there is risk. The stock market has down years, and there is no guarantee of an 11% return in the future, especially in the short run. In contrast, the long-term return on risk-free U.S. government securities during the same period ranged from 5% to 6%. The actual return depended on the term of the bond. Another way of looking at this is that \$1.00 invested in the S&P 500 on January 1, 1926, was worth \$1,828 on December 31, 1997. One dollar invested in long-term government bonds during the same period was worth \$39 on December 31, 1997. It probably paid to take the additional risk of buying stocks.
13. **True.** Because of the power of compound interest, small savings can make a difference. It pays to resist temptation and live below your means.
14. **True.** Because of the power of compound interest, the earlier you begin saving the better. Regular saving will make you a millionaire, even if your salary is modest.
15. **False.** Most millionaires are married and stay married. By contrast, divorce is a gateway to poverty. Financially speaking, divorce is something you want to avoid, particularly after you have children. It is important to choose a marriage partner carefully.
- G. At the end of the game, display Visual 2, "Rules for Improving Your Financial Life," and go over the principles. Show that these rules are derived from the answers to the questions in The Millionaire Game.

Cool Down

- A. Have the students write a brief essay on "How To Really Become a Millionaire."
- B. The answers to this test come primarily from two excellent sources:
- Lee, Dwight R., and Richard B. McKenzie. *Getting Rich in America*. Harper Business, 1999.
 - Stanley, Thomas J., and William D. Danko, *The Millionaire Next Door*. Pocket Books, 1996.

The Millionaire Game

Answer each question "True" or "False." For each correct answer, you will receive five points. For each incorrect answer, you will lose five points. For any five questions, you may hold up the "Millionaire" sheet with your answer. If you answer correctly, you will receive 10 points. If you answer incorrectly, you will lose 10 points.

1. Most millionaires are college graduates.
2. Most millionaires work fewer than 40 hours a week.
3. More than half of all millionaires never received money from a trust fund or estate.
4. More millionaires have American Express Gold Cards than Sears cards.
5. More millionaires drive Fords than Cadillacs.
6. Most millionaires work in glamorous jobs, such as sports, entertainment, or high tech.
7. Most millionaires work for big Fortune 500 companies.
8. Many poor people become millionaires by winning the lottery.
9. College graduates earn about 65% more than high school graduates earn.
10. If an average 18-year-old high school graduate spends as much as an average high school dropout until both are 67 years old, but the high school graduate invests the difference in his or her earnings at 8% annual interest, the high school graduate would have \$5,500,000.
11. Day traders usually beat the stock market and many of them become millionaires.
12. If you want to be a millionaire, avoid the risky stock market.
13. At age 18, you decide not to smoke and save \$1.50 a day. You invest this \$1.50 a day at 8% annual interest until you are 67. At age 67, your savings from not smoking are almost \$300,000.
14. If you save \$2000 a year from age 22 to age 65 at 8% annual interest, your savings will be over \$700,000 at age 65.
15. Single people are more often millionaires than married people.

Rules for Improving Your Financial Life

- 1. Get a good education.**
- 2. Work long, hard, and smart.**
- 3. Learn money-management skills.**
- 4. Spend less than you could spend.**
- 5. Save early and often.**
- 6. Invest in common stocks for the long term.**
- 7. Gather information before making decisions.**

The Millionaire Game Score Sheet

1. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
2. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
3. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
4. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
5. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
6. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
7. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
8. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
9. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
10. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
11. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
12. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
13. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
14. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____
15. **True or False** Score (-5 or +5)
(circle one) (Millionaire card -10 or +10) _____

Lesson 4.2: The Chessboard of Financial Life

"The Chessboard of Financial Life" is from *Financial Fitness for Life: Bringing Home the Gold, Grades 9-12*, by John S. Morton and Mark C. Schug, National Council on Economic Education, 2001.

1¢	2¢	4¢					

Which would you choose? \$10,000 in cold cash or a penny doubled on each square in "The Chessboard of Financial Life" until you reach the final square?

Suggested Solutions—

Lesson 4.2: The Chessboard of Financial Life

1. Have students use a calculator to fill in the squares on “The Chessboard of Financial Life.” On basic calculators, they would enter $2 \times .01 = .02$. Instruct them to continue hitting the = key; that will double the amount each time. Simply count as you hit the key each time. (The key sequence is sometimes reversed for scientific calculators, $.01 \times 2 =$, or the K key must be used. Check the instructions for the calculators your students are using.) Record the amount on the transparency or board. By the 21st square, students will have \$10,485.76. Most basic calculators will display an error E in the upper millions in square 34. A scientific calculator will take you all the way to the end (the 64th square) and display the result in scientific notation— $9.2E16$ or 9.2 times 10 to the 16th power.
2. Tell students that the continual process of multiplying that turned this penny into hundreds, then thousands, then millions, billions, trillions, and beyond, is called compounding. Explain that compounding is important to savers. For each dollar saved in a savings account the bank pays interest. This interest is added to the principal, the amount originally saved; then additional interest is paid on both. This compound interest makes money grow much faster. Eventually, money will double, as pennies did on this chessboard. The time it takes to double depends on the interest rate.

To order this or other materials,
or to receive a free Annenberg/CPB
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or visit **www.learner.org**.

