
LEARNING, EARNING, AND INVESTING FOR A NEW GENERATION



COUNCIL FOR
**Economic
Education**

Teaching Opportunity®

AUTHORS:

M. Scott Niederjohn

*Charlotte and Walter Kohler Associate Professor of Economics and Business
Director, Center for Economic Education
Lakeland College
Sheboygan, Wisconsin*

Mark C. Schug

*Professor of Curriculum and Instruction Emeritus
University of Wisconsin-Milwaukee
Milwaukee, Wisconsin*

William C. Wood

*Professor of Economics
Director, Center for Economic Education
James Madison University
Harrisonburg, Virginia*

This publication was made possible through funding provided by Discover.

DISCOVER[®]

Copyright © 2012, Council for Economic Education, 122 East 42nd Street, Suite 2600, New York, NY 10168. All rights reserved. The slides and student activities may be duplicated for classroom use, the number not to exceed the number of students in each class. Notice of copyright must appear on all pages. With the exception of the slides and student activities, no part of this book may be reproduced in any form by any means without written permission from the publisher. Printed in the United States of America.

ISBN: 978-156183-572-0

CONTENTS

| | |
|---|-------------|
| Foreword | iv |
| Acknowledgments | v |
| <i>Gen i Revolution</i> Integration Guide | vi |
| Downloading Slides, Activities, and Related Materials | xiii |
| Correlations to National Standards | xiv |
| Voluntary National Content Standards in Economics | xiv |
| National Standards in Personal Finance | xv |
| | |
| Lesson 1 Why Save? | 1 |
| Lesson 2 Invest in Yourself | 11 |
| Lesson 3 What Is a Stock? | 27 |
| Lesson 4 Finding Financial Information Online | 41 |
| Lesson 5 What Is a Bond? | 65 |
| Lesson 6 What Are Mutual Funds? | 89 |
| Lesson 7 What Are Stock Markets? | 107 |
| Lesson 8 Buying on Margin and Selling Short | 119 |
| Lesson 9 Building Wealth over the Long Term | 137 |
| Lesson 10 Financial Institutions in the U.S. Economy | 167 |
| Lesson 11 Researching Companies | 185 |
| Lesson 12 Credit: Your Best Friend or Your Worst Enemy? | 199 |
| Lesson 13 Why Not Save? | 213 |
| Lesson 14 How Are Stock Prices Determined? | 227 |
| Lesson 15 The Role of Government in Financial Markets | 251 |
| Lesson 16 The Stock Market and the Economy: Can You Forecast the Future? | 271 |
| Lesson 17 Lessons from History: Stock Market Crashes | 285 |
| Lesson 18 Managing Risk | 307 |
| Lesson 19 Investing Internationally | 321 |
| Lesson 20 The Language of Financial Markets | 335 |
| Lesson 21 Planning Your Financial Future | 379 |
| | |
| How to Win a Stock Market Game | 395 |
| Glossary | 397 |

FOREWORD

In these uncertain times, it is more important than ever for students to learn the fundamentals of money management, saving, and investing. Schools can play a critical role in helping parents and others to provide our young people with a comprehensive program of economic education and personal finance—including investor education. For maximum benefit to young people, investor education must be taught early, often, and well.

Learning, Earning, and Investing for a New Generation introduces students to the world of investing, with its abundant opportunities and ever-present risks. The focus is on strategies for investing for the long term, as part of an overall approach to financial planning that empowers young people to take control of their own financial futures. Lessons cover basics such as the language of financial markets, gathering information on investments, and the nature of financial institutions in the U.S. economy. There are lessons on stocks, bonds, and mutual funds. The 21 lessons provide active learning experiences to help students master the basics of investing.

Learning, Earning, and Investing for a New Generation builds on the success of its 2004 predecessor, *Learning, Earning and Investing*. The new title reflects our effort to update the content and integrate it with the Council for Economic Education's free online personal finance game, *Gen i Revolution*. Every part of the *Gen i Revolution* game is linked to corresponding content in *Learning, Earning, and Investing for a New Generation*.

New content in this edition includes the following:

- New material on the financial crisis of 2008 and the recession of 2007-2009
- A new lesson on short selling and margin transactions
- A new lesson on financial institutions, fully updated with a case study on Apple Computer
- A revised lesson on the relationship between government and financial markets
- A new, comprehensive lesson on managing risk
- A thoroughly revised lesson on international investing
- A revised capstone lesson on financial planning

In 2004, stock and bond markets had achieved a formidable record of providing high returns with minimal observed risk. Declines in the markets, even steep ones, were seen as temporary. Since that time, financial distress and systemic risk have become much more prominent. This revision incorporates what has been learned in the recent financial turmoil. Even with these significant changes, however, the new edition reflects fundamental principles of wealth building that have held up well over time.

CEE gratefully acknowledges Discover, whose generous support made *Learning, Earning, and Investing for a New Generation* possible. The students who learn from these materials, and the nation where they earn and save and invest, will benefit for years to come.

Council for Economic Education

ACKNOWLEDGMENTS

The Council for Economic Education expresses its thanks to the many individuals who were involved with this project.

PROJECT DIRECTOR:

William C. Wood

Professor of Economics
Director, Center for Economic Education
James Madison University
Harrisonburg, Virginia

PROJECT EDITOR:

Richard D. Western

Florence, Wisconsin

PROJECT ADMINISTRATOR:

Rosanna Castillo

Council for Economic Education
New York, New York

FIELD-TEST TEACHERS:

Andrea Caceres-Santamaria

Seminole Ridge High School
Palm Beach County School District, Florida

Dawn Framstad

Washington Park High School
Racine Unified School District, Wisconsin

Robert Heinrichs

Spanish River High School
Palm Beach County School District, Florida

Veronica Karas

Santaluces High School
Palm Beach County School District, Florida

Charlie Lemberger

Valders High School
Valders Area School District, Wisconsin

Elizabeth Ramsey

Rockbridge County High School
Rockbridge County School District, Virginia

Donna Wallace

Rockbridge County High School
Rockbridge County School District, Virginia

Special thanks are also due to the authors of lessons in the 2004 predecessor of this project: Jean Caldwell, University of Central Oklahoma; James E. Davis, Colorado Social Science Education Consortium; Suzanne M. Gallagher, Virginia Commonwealth University; Jane S. Lopus, California State University-East Bay; John S. Morton, Arizona Council on Economic Education; Mark C. Schug, University of Wisconsin-Milwaukee; Mary Suiter, Federal Reserve Bank of St. Louis; Phillip J. VanFossen, Purdue University; Donald R. Wentworth, Pacific Lutheran University; and William C. Wood, James Madison University.

GEN *i* REVOLUTION INTEGRATION GUIDE

The lessons presented in this book are designed to take full advantage of the Council for Economic Education’s free online game, *Gen i Revolution*. At the same time, all the lessons are free-standing and may be used without any mention of the game.

In *Gen i Revolution*, each student assumes the role of a secret agent, assigned by the mysterious Monique to help people with financial problems. *Gen i Revolution* is divided into 15 missions. Each mission begins with a briefing from Monique and the selection of computer-based characters to form a team. Then students participate in interactive exercises and tutorials related to the financial problem that has been posed. Each mission concludes with students making financial recommendations, which are then scored according to their effectiveness in solving the financial problem.

Teachers may enroll their classes for participation in *Gen i* missions by applying for a teacher ID at <http://genirevolution.org>. Each teacher ID enables the teacher to enroll classes, manage access to missions, and monitor student progress.

The print lessons in *Learning, Earning, and Investing for a New Generation* have two specific connections to the online game. At the end of each lesson, you will find a recommendation (Gen i Connection) for a *Gen i Revolution* mission to reinforce the lesson’s key points. In cases where the online missions do not correspond directly to a print lesson’s key points, the lesson provides other references to Council for Economic Education online resources. Each Gen i Connection is followed by a Gen i Reflection, an in-depth question that invites students to reflect on what they have learned about personal finance and their own investing goals.

Below is a chart showing the correspondence between *Gen i Revolution* missions and the print lessons in *Learning, Earning, and Investing for a New Generation*:

| Lesson Number and Title | Key Concepts | Related Gen i Missions |
|-------------------------|---|---|
| 1. Why Save? | Compound interest Consumption Income Rule of 72 Saving Simple interest | 1. Help Angela build wealth over the long term. |
| 2. Invest in Yourself | Human capital Income Investment in human capital Opportunity cost | 2. Help Veronica chose a tentative career. 3. Help Matt decide whether to continue formal education after he graduates from high school. |

| | | |
|---|---|--|
| 3. What Is a Stock? | Dividend Income Saving Stock | 8. Help Uncle Louie learn the basics about stocks. |
| 4. Finding Financial Information Online | Closing price Dividend Net asset value Price/earnings ratio (P/E ratio) Stock symbol Trading volume Yield | Tutorials on reading financial tables in Missions 8, 9, and 10. |
| 5. What Is a Bond? | Bond Bond rating Coupon Coupon bond Coupon rate Face value Maturity date Par value Risk Zero-coupon bond | 9. Teach Tyrone and Felicia how to invest in bonds. |
| 6. What Are Mutual Funds? | Diversification Liquidity Load Mutual fund Net asset value Risk and reward | 10. Teach a group of students how to invest in mutual funds. |
| 7. What Are Stock Markets? | Market Primary market Secondary market Stock market | 12. Show Jasmine what determines stock prices. |
| 8. Buying Stocks on Margin | Buying on margin Opportunity cost Short cover Short sale | No game coverage of margin buying, but good risk coverage in Gen i Mission 6 (Advise Kai on how to invest his grandmother's \$10,000). |

| | | |
|---|--|---|
| 9. Building Wealth for the Long Term | Compound interest Diversification Forms of saving and investing Reward Risk | 1. Help Angela build wealth over the long term. |
| 10. Financial Institutions in the U.S. Economy | Corporation Debt financing Economic investment Equity financing Financial institutions Financial investment Limited liability Partnership Primary markets Proprietorship Secondary markets Venture capitalist | No direct coverage, but several of these topics are mentioned in Missions 11 and 12. |
| 11. Researching Companies | Alternatives Choice Fundamental analysis Opportunity cost Scarcity | 11. Advise a Gen i donor on her \$10 million investment. |
| 12. Credit: Your Best Friend or Your Worst Enemy? | Choice Costs and benefits Credit Debt Interest Revolving credit | 5. Teach Justin about credit. 7. Convince Paul, Fred, and Diana to reconsider their choice of financial institution. |

| | | |
|---|--|---|
| <p>13. Why Not Save?</p> | <p>Benefits Costs Goals Incentives Interest Long-term goal Medium-term goal Opportunity cost Saving Short-term goal</p> | <p>4. Help the O'Neils save \$300 a month.</p> |
| <p>14. How Are Stock Prices Determined?</p> | <p>Demand Equilibrium price Shift in demand or supply Shortage Supply Surplus</p> | <p>12. Show Jasmine what determines stock prices.</p> |
| <p>15. The Role of Government in Financial Markets</p> | <p>Government failure Market failure Ponzi scheme Too Big to Fail</p> | <p>No direct connection, but reinforcement of Lesson 15 is available from Missions 13 (Advise Markos how to weather a crash in the scholarship fund) and 14 (Advise political leaders on their economic forecasts).</p> |
| <p>16. The Stock Market and the Economy: Can You Forecast the Future?</p> | <p>Business cycles Contraction Economic forecasting Expansion Gross Domestic Product Leading economic indicators Peak Recession Trough</p> | <p>14. Advise political leaders on their economic forecasts.</p> |

| | | |
|--|---|---|
| 17. Lessons from History: Stock Market Crashes | <p>Causes and effects of the stock market crash of 1929</p> <p>Causes and effects of the stock market crash of 1987</p> <p>Causes and effects of the stock market crash that began in 2007</p> <p>Federal Reserve</p> <p>Monetary policy</p> <p>Supply and demand</p> | 13. Advise Markos how to weather a crash in the scholarship fund. |
| 18. Managing Risk | <p>Diversification</p> <p>Insurance</p> <p>Market price risk</p> <p>Risk</p> | 6. Advise Kai on how to invest his grandmother's \$10,000. |
| 19. Investing Internationally | <p>Currency markets</p> <p>Diversification</p> <p>Exchange rate</p> <p>Strong and weak dollar</p> | 14. Advise political leaders on their economic forecasts. |
| 20. The Language of Financial Markets | <p>Bond</p> <p>Mutual fund</p> <p>Stock</p> <p>Stock market</p> | Coverage throughout missions. |
| 21. Planning Your Financial Future | <p>Bonds</p> <p>Certificate of deposit</p> <p>Diversification</p> <p>Liquidity</p> <p>Money market account</p> <p>Mutual funds</p> <p>Principal</p> <p>Rate of return</p> <p>Risk</p> <p>Savings account</p> <p>Stocks</p> | 15. Conduct the Red Roosters Club annual financial planning workshop. |

And here is a chart showing how Gen i Revolution missions can be mapped back to the content of *Learning, Earning, and Investing for a New Generation (LEIG)*:

| Mission Number and Title | Key Concepts | Related Lessons |
|---|--|---------------------------------|
| 1. Help Angela build wealth over the long term. | Compound interest Saving | LEIG Lesson 9 |
| 2. Help Veronica choose a tentative career. | Investing in human capital Opportunity cost Career choice | LEIG Lesson 2 |
| 3. Help Matt decide whether to continue formal education after he graduates from high school. | Investing in human capital Opportunity cost Income | LEIG Lesson 2 |
| 4. Help the O'Neils save \$300 a month for a down payment on a home. | Budgeting Financial goal setting | LEIG Lesson 1 |
| 5. Teach Justin about credit. | Credit Debt Interest | LEIG Lesson 12 |
| 6. Advise Kai on how to invest his grandmother's \$10,000. | Forms of saving and investing Costs and benefits of saving Risk vs. return | LEIG Lesson 9 LEIG Lesson 13 |
| 7. Convince Paul, Fred, and Diana to reconsider their choice of financial institution. | Advantages and disadvantages of non-mainstream financial services | LEIG Lesson 12 |
| 8. Help Uncle Louie learn the basics about stocks. | Understanding stocks Dividend Saving Reading a stock table | LEIG Lesson 3 LEIG Lesson 4 |
| 9. Teach Tyrone and Felicia how to invest in bonds. | Understanding bonds Bond ratings Reading a bond table | LEIG Lesson 4 LEIG Lesson 5 |
| 10. Teach a group of students how to invest in mutual funds. | Understanding mutual funds Diversification Reading a mutual fund table | LEIG Lesson 4 LEIG Lesson 6 |
| 11. Advise a Gen i donor on her \$10 million investment. | Alternatives Scarcity and choice Fundamental analysis | LEIG Lesson 1 |

| | | |
|--|--|----------------|
| 12. Show Jasmine what determines stock prices. | Equilibrium price Shift in demand or supply | LEIG Lesson 14 |
| 13. Advise Markos on how to weather a crash in the scholarship fund. | Causes and effects of stock market crashes The Federal Reserve Monetary policy | LEIG Lesson 17 |
| 14. Advise political leaders on their economic forecasts. | Business cycles Leading economic indicators Expansion Contraction Economic forecasting | LEIG Lesson 16 |
| 15. Conduct the Red Rooster Club annual financial planning workshop. | Forms of saving and investing Diversification Risk vs. return Financial goal setting | LEIG Lesson 21 |

On the Web

To download the slides and activities for each lesson, find online lessons to extend the student activities, and find related material for each lesson, visit:

<http://lei.councilforeconed.org>



LEARNING, EARNING, AND INVESTING FOR A NEW GENERATION

Lessons correlated with Voluntary National Content Standards in Economics*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|
| Standard 1: Scarcity | | | | | | | | x | | | | | x | | | | | | | | x |
| Standard 2: Decision making | | x | x | | x | | | x | | | x | x | | | | | | x | | x | |
| Standard 3: Allocation | | | | | | | | | | | | | x | | | | | | | | |
| Standard 4: Incentives | x | | | | | | | | | | | | x | | | x | | | | | |
| Standard 5: Trade | | | | | | | x | | | | | | | x | | | | | | | |
| Standard 6: Specialization | | | | | | | | | | | | | | | | | | | | | |
| Standard 7: Markets and prices | | | | | | | x | | | | | | | x | | | x | | | | |
| Standard 8: Role of prices | | | | x | | | | | | | | | | x | | | x | | | | |
| Standard 9: Competition and market structure | | | | | | | | | | | | | | | | | | | | | |
| Standard 10: Institutions | | | | | | | x | | | x | x | x | | | | | x | | | x | |
| Standard 11: Money and inflation | | | | | | | | | | | | | | | | | | | | | |
| Standard 12: Interest rates | x | | | | x | | | | x | | | | | | | | | | | | |
| Standard 13: Income | | x | | | | | | | | | | | | | | | | | | | |
| Standard 14: Entrepreneurship | | | | | | | | | | | | | | | | | | | | | |
| Standard 15: Economic growth | | | | | | | | | | | | | | | | | | | | | |
| Standard 16: Role of government and market failure | | | | | | | | | | | | | | | x | | | | | | |
| Standard 17: Government failure | | | | | | | | | | | | | | | x | | | | | | |
| Standard 18: Economic fluctuations | | | | | | | | | | | | | | | | x | | | | | |
| Standard 19: Unemployment and inflation | | | | | | | | | | | | | | | | | | | | | |
| Standard 20: Monetary and fiscal policy | | | | | | | | | | | | | | | | | | | | | |

*Standards taken from Voluntary National Content Standards in Economics, 2nd ed., Council for Economic Education (CEE), 2010.

LEARNING, EARNING, AND INVESTING FOR A NEW GENERATION

Lessons correlated with National Standards in Personal Finance*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|
| Financial Responsibility and Decision Making | | | | | | | | | | | | | | | | | | | | | |
| Standard 1: Take responsibility for personal financial decisions. | x | x | | | | | | | x | | x | x | | | x | | | | | | |
| Standard 2: Find and evaluate financial information from a variety of sources. | | | | x | | | x | | | x | | | | | x | | | | | | x |
| Standard 3: Summarize major consumer protection laws. | | | | | | | | | | | | | | | | | | | | | |
| Standard 4: Make financial decisions by systematically considering alternatives and consequences. | | | | | x | x | | | x | | x | | | | | | x | x | | | x |
| Standard 5: Develop communication strategies for discussing financial issues. | | | | x | | | | | | | | | | | | | x | | | | |
| Standard 6: Control personal information. | | | | | | | | | | | | | | | | | | | | | |
| Income and Careers | | | | | | | | | | | | | | | | | | | | | |
| Standard 1: Explore career options. | | x | | | | | | | | | | | | | | | | | | | |
| Standard 2: Identify sources of personal income. | | x | | | | | | | | | | | | | | | | | | | |
| Standard 3: Describe factors affecting take-home pay. | | | | | | | | | | | | | | | | | | | | | |
| Planning and Money Management | | | | | | | | | | | | | | | | | | | | | |
| Standard 1: Develop a plan for spending and saving. | | | | | | | | | | | | | | | | | | | | | |
| Standard 2: Develop a system for keeping and using financial records. | | | | | | | | | | | | | | | | | | | | | |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|---|
| Standard 3: Describe how to use different payment methods. | | | | | | | | | | | | | | | | | | | | | | |
| Standard 4: Apply consumer skills to purchase decisions. | | | | | | | | | | | | | | | | | | | | | | |
| Standard 5: Consider charitable giving. | | | | | | | | | | | | | | | | | | | | | | |
| Standard 6: Develop a personal financial plan. | | | | | | | | x | | | | | | | | | | | | | x | |
| Standard 7: Examine the purpose and importance of a will. | | | | | | | | | | | | | | | | | | | | | | |
| Credit and Debt | | | | | | | | | | | | | | | | | | | | | | |
| Standard 1: Identify the costs and benefits of various types of credit. | | x | | | | | | | | | | x | | | | | | | | | | |
| Standard 2: Explain the purpose of a credit record and identify borrowers' credit report rights. | | | | | | | | | | | | | | | | | | | | | | |
| Standard 3: Describe ways to avoid or correct debt problems. | | | | | | | | | | | | x | | | | | | | | | | |
| Standard 4: Summarize major consumer credit laws. | | | | | | | | | | | | | | | | | | | | | | |
| Risk Management and Insurance | | | | | | | | | | | | | | | | | | | | | | |
| Standard 1: Identify common types of risks and basic risk-management methods. | | | | | | | | | | | | | x | | | | | x | | | | x |
| Standard 2: Explain the purpose and importance of property and liability insurance protection. | | | | | | | | | | | | | | | | | | x | | | | |
| Standard 3: Explain the purpose and importance of health, disability, and life insurance protection. | | | | | | | | | | | | | | | | | | | | | x | |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|
| Saving and Investing | | | | | | | | | | | | | | | | | | | | | |
| Standard 1: Discuss how saving contributes to financial well-being. | x | | x | | | x | | | x | x | | | x | | | | | | | | x |
| Standard 2: Explain how investing builds wealth and helps meet financial goals. | | | | | | x | | | x | x | | | x | | | | | | | | x |
| Standard 3: Evaluate investment alternatives. | | | x | x | x | x | | | x | | x | | x | | | | | | x | | x |
| Standard 4: Describe how to buy and sell investments. | | | x | | x | x | | x | | | | | | x | | | | | | | x |
| Standard 5: Explain how taxes affect the rate of return on investments. | | | | | | | | | | | | | | | | | | | | | |
| Standard 6: Investigate how agencies that regulate financial markets protect investors. | | | | | x | | | | | | | | | | | | | | | | x |

*Standards taken from National Standards in K-12 Personal Finance Education, JumpStart Coalition for Personal Financial Literacy, 2007.

