

The Federal Reserve and the Elementary Classroom

Mary C. Suiter and Lyndlee Mabry

Economics is the social science that studies how people make decisions when faced with scarce resources. Put another way, economics is the business of ordinary life. Economic education in the elementary grades helps to equip students with tools for making decisions today, economic and otherwise—and it lays the groundwork so that, as adult citizens, they will be ready to face more complex choices in the future.¹

Ed and the Fed

The Federal Reserve, commonly referred to as the “Fed,” is the central bank of the United States. The Fed was established in 1913 in response to the nation’s recurring banking panics. The responsibilities of the Fed have grown over the decades as the size and complexity of the U.S. economy has grown.²

The Fed is made up of the Board of Governors, which is the federal government agency that contributes to the nation’s monetary policy, regulates banks, and oversees the activities of Reserve banks. There are 12 Federal Reserve Banks, each serving a region of the United States. The Reserve banks, most of which have branches, operate independently but under the general oversight of the Board of Governors.

The Reserve Banks primarily serve three audiences—bankers, the U.S. Department of the Treasury, and the public. Reserve banks are often referred to as the “bankers’ banks” because they store commercial banks’ excess reserves (cash and coin), process checks and electronic payments, and make loans to banks. Reserve banks also supervise commercial banks in their region. As the bank for the U.S. government, the Reserve Banks process the Treasury’s payments, sell its securities, and assist with its cash management and investment activities.³

As past president of the Federal Reserve Bank of Philadelphia Anthony Santomero has explained, the Fed’s economic education efforts are “important to, and intertwined with,” the three primary functions of the Fed:

- To conduct monetary policy,
- To help supervise and regulate banks and financial institutions, and
- To maintain an effective payments system.”⁴

President of the Federal Reserve Bank of St. Louis James Bullard points out, “Many people think economics is too com-

plicated. [But everyone lives with] the consequences of supply and demand every day. We live in a market system, and people need to understand how that system works.”⁵

The Federal Reserve is involved in educating young people about money and banking because a democracy needs an informed citizenry. The study of economics serves that goal.⁶

Active Citizens

Today’s young students, when they grow to be adults, will have to make decisions the consequences of which will impact their lives and the lives of others. As consumers, they will need to understand that they can’t have everything they want. They will have to make spending, savings, and investing decisions that benefit their own families over the long term.

Citizens also need to understand that they can’t have everything they want. They need to promote prudent and sustainable public policies. For example, our representatives can cut taxes and increase spending on public goods and government programs ... for a while. Such policies, however, are not sustainable over the long run.

Citizens must grapple with understanding the economic policy decisions of Congress, the President, and the Federal Reserve, and how these policies impact the lives of consumers, producers, and investors—and the health of the economy itself.

Research in economic education tells us that elementary students can and do learn economics when their teachers are knowledgeable and have high-quality economic education materials on hand.⁷ The Fed has expertise through its economists and its economic educators to provide content programs, publications, and curricular materials for teachers to use to help elementary students develop economic literacy.

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SIDEBAR 1. Fourth-Grade Benchmarks from the *Voluntary National Content Standards in Economics*

Standard 1: **Scarcity**

Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.

Standard 2: **Marginal Cost/Benefit**

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.

Standard 3: **Allocation of Goods and Services**

Different methods can be used to allocate goods and services. People acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services.

Standard 4: **Role of Incentives**

People respond predictably to positive and negative incentives.

Standard 5: **Gains from Trade**

Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations.

Standard 6: **Specialization and Trade**

When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase.

Standard 7: **Markets-Price and Quantity Determination**

Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

Standard 8: **Role of Price in a Market System**

Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.

Standard 9: **Role of Competition**

Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.

Standard 10: **Role of Economic Institutions**

Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.

Standard 11: **Role of Money**

Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.

Standard 13: **Role of Resources in Determining Income**

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.

Standard 14: **Profit and the Entrepreneur**

Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure.

Standard 15: **Growth**

Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.

Standard 16: **Role of Government**

There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive.

Standard 19: **Unemployment and Inflation**

Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power. Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.

From National Council on Economic Education, *Voluntary National Content Standards in Economics* (New York: NCEE, 1997). NCEE has become the Council on Economic Education (CEE).

Economics and Children’s Literature Lessons

Sixteen online lessons from the St. Louis and Philadelphia Federal Reserve Banks correlated with the *Voluntary Standards in Economics* for which there are fourth-grade benchmarks. www.stlouisfed.org/education_resources/lesson_plans_k-5.cfm. See also www.philadelphiafed.org/education/teachers/lesson-plans.

Lesson	Standards	Lesson	Standards
A Basket of Bangles: How a Business Begins	10	On the Court with Michael Jordan	1, 2, 15
Earth Day Hooray!	4	Pickle Patch Bathtub	1, 10
A Goat in the Rug	1	Potato: A Tale from the Great Depression	1, 4, 11, 13
Less Than Zero	2, 5, 11, 13	Saturday Sancocho	5, 11
Meet Kit	1, 14, 19	Saving Strawberry Farm	1
Money, Money Honey Bunny	1	Something from Nothing	1
Monster Musical Chairs	1	So Few of Me	1
My Side of the Mountain	1	Ten Mile Day	1, 6

SIDEBAR 2. Teaching Resources From the Federal Reserve Banks

Here is an annotated list of Federal Reserve Bank publications and curricular materials useful for the elementary grades correlated with the Voluntary National Content Standards in Economics for which there are fourth-grade benchmarks. Some are online games, Some are available to download, and others may be ordered, often in classroom sets, by visiting the sponsoring Bank's website. — Mary C. Suiter and Lyndlee Mabry

American Currency Exhibit

At this online exhibit, students explore the history of money in the U.S. and learn how our country's rich history is closely tied to its currency. www.frbsf.org/currency/index.html. Standards 10, 11

Econ Explorers Journal

This booklet of worksheets helps students learn about the economics in their homes, neighborhoods, and schools through five long-term projects. There is a teacher's guide to accompany this booklet, www.newyorkfed.org/education/elemiddleschool.html. Standards 1, 8–10

Economics and Children's Literature Lessons

These 16 lesson plans were written to teach economics using a children's trade book with the same title as the lesson. More lessons are added each quarter. SMARTBoard applications can be downloaded for many of these lessons. www.stlouisfed.org/education_resources/lesson_plans_k-5.cfm. See also www.philadelphiafed.org/education/teachers/lesson-plans. Standards vary for each of 16 lessons. (See bottom of page 18).

Escape to Barter Islands

This online game answers the question, "Why do we have money?" Students see that obtaining goods and services in a world without money can be difficult. The use of money makes trading easier. www.clevelandfed.org/Learning_Center/Online_Activities/index.cfm. Standard 6

Explore Money from Around the World

In this online activity, students examine a country's currency and learn about its culture, heroes, and landscapes. www.clevelandfed.org/Learning_Center/Online_Activities/index.cfm. Standard 11

Fedville

This online game allows kids to earn money, open a savings account, and watch their money grow. Kids collect trivia cards as they move around Fedville. www.frbsf.org/education/fedville. Standards 10–13

Great Minds Think: Kid's Guide to Money

This activity book introduces kids to concepts, such as earning, spending and saving in a fun way. Order from www.clevelandfed.org/Learning_Center/Online_Activities/great_minds_think/index.cfm. Standards 10, 16

Historical Bookmarks

These bookmarks have pictures of historical figures, brief biographies, a list of achievements, and quotes and fun facts. Teaching tips are there too. Order at www.richmondfed.org/publications/education/historical_figure_bookmarks/index.cfm. Standards 10, 19

Lincoln and the \$5 Note

A lesson plan helps students identify the leadership characteristics that Abraham Lincoln possessed. Students consider how Lincoln's leadership characteristics contribute to the fact that he is featured on the note. They learn about the new features of the \$5 note introduced in March 2008, [www.stlouisfed.org/education_resources/assets/lesson_plans/Lincoln\\$5Note.pdf](http://www.stlouisfed.org/education_resources/assets/lesson_plans/Lincoln$5Note.pdf). Standard 11

Money in Motion: What is Money?

This lesson plan has students barter to obtain ingredients to make cookies. They repeat the simulation using money to learn about the advantages of using money, www.philadelphiafed.org/education/teachers/lesson-plans. Standard 11

My Money

This activity book introduces K-2 students to economic concepts, such as money, saving, goods and services. The activities include coin identification and money equivalent. A teacher's guide to accompany the activity book is also available. Order at www.richmondfed.org/publications/education/my_money/index.cfm. Standard 11

The Piggy Bank Primer: Saving and Budgeting

A story and activity book introduce students to economic concepts such as saving, spending, budgeting, wants, goods, services, and opportunity cost. A teacher's guide is also available. Order from www.stlouisfed.org/education_resources/publications.cfm. See also *Twenty-five Cents of History*, an activity book that invites students to take a close look at nickels and quarters commemorating historic events in the seven states that make up the Fed's Eighth District. Standards 10, 16

Pursuit: A New England Economic Adventure Game

This online search game makes use of the Economic Adventure web site's timeline of New England economic history. Players embark on "trails" that explore three different time periods in "pursuit" of answers to questions that show how growth occurs. www.economicadventure.org/pursuit. Standards 1–4, 6–9, 10–16

There's No Business Like Bank Business

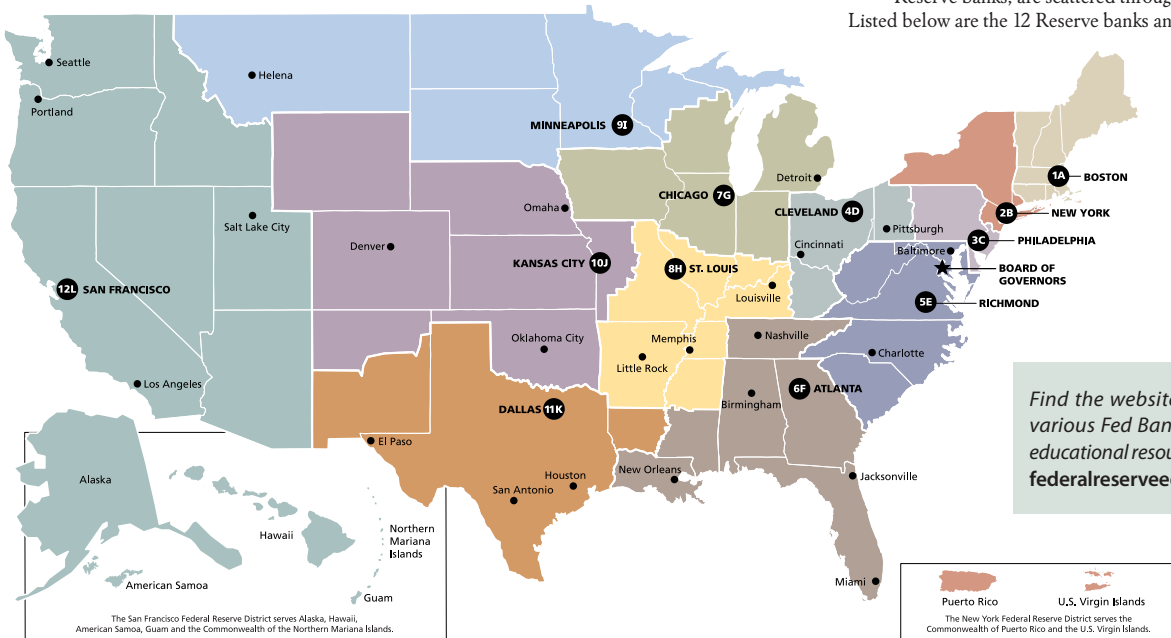
This role-play lesson helps kids learn about financial decision making and introduces concepts, such as earning, spending and saving, www.kansas-cityfed.org/Education/TeachingResources/No_Business_lesson.pdf. Standard 10

Wishes to Rainbow

This children's story illustrates the economic problem of scarcity and a society's reaction to the problem. There's a teachers' guide to accompany this called Road to Roota. Order at www.bos.frb.org/education/pubs/wishes.htm. Standards 1, 3, 5, 7–9, 16

Federal Reserve Banks and Branches

The Federal Reserve System's centralized component, the Board of Governors, is located in Washington, D.C. (see star on map). It is decentralized components Reserve banks, are scattered throughout the country. Listed below are the 12 Reserve banks and their branches.



Find the website URLs of the various Fed Banks, as well as educational resources, at www.federalreserveeducation.org

A Cornucopia of Resources

Each of the 12 Federal Reserve Bank offers its own economic education programs for teachers. Some of the Banks offer programs for students, and many of the Banks have exhibits or museums and provide opportunities for school groups to visit.

To find out if the Federal Reserve Bank nearest you has an exhibit or museum appropriate for elementary students, visit its website (SEE MAP).

Federal Reserve Banks have also developed curricular materials to help educators address the social studies curriculum standards published by NCSS,⁸ as well as benchmarks and standards published by the Council on Economic Education.⁹

Curriculum Standards

Strand VII in *Expectations for Excellence: Curriculum Standards for the Social Studies*, states, “Social studies programs should include experiences that provide for the study of how people organize for the production, distribution, and consumption of goods and services.”

Voluntary National Content Standards in Economics provides 20 standards along with a set of benchmarks for grades 4, 8 and 12. In **SIDEBAR 1**, p. 18, we have listed the standards for which there are fourth-grade benchmarks. Federal Reserve publications are matched with these benchmarks in **SIDEBAR 2**, p. 19.

Conclusion

The Fed provides materials that help teachers help students better understand their economic world. Each of the 12 Federal Reserve Banks offers different curriculum materials, publications, and professional development opportunities.¹⁰ The Banks add to their education resources occasionally, so check the websites often. Best of all, Federal Reserve education programs, online resources, and most print materials are free! 📄

Notes

1. Mark C. Schug, “How Children Learn Economics,” *International Journal of Social Education* 8 (Winter 1993): 25-34.
2. Federal Reserve Bank of St. Louis, *In Plain English: Making Sense of the Federal Reserve* (December 2008), 1.

3. Federal Reserve Bank of St. Louis, 5.
4. Anthony M. Santomero, “Knowledge is Power: The importance of Economic Education,” Speech to the Pennsylvania Economic Association (May 30 2003), www.philadelphiafed.org/publications/speeches/santomero/2003/05-30-03_penn-economic-assn.cfm.
5. James Bullard, “New President Bullard Bullish on Economics,” *Central Banker Summer* (2008), www.stlouisfed.org/publications/cb/2008/b/pages/lead_story.cfm
6. Bonnie T. Meszaros and Mary C. Suiter, “You Can’t Always Get What You Want,” *The Region* (December 1998): 39-43.
7. Michael Watts, “What Works: A Review of Research on Outcomes and Effective Program Delivery in Pre-college Economic Education,” August 29, 2005, www.councilforeconed.org.
8. National Council for the Social Studies, *Expectations for Excellence: Curriculum Standards for the Social Studies* (Washington, DC: NCSS, 1994).
9. National Council on Economic Education, *Voluntary National Content Standards in Economics* (New York: NCEE, 1997). NCEE has become the Council on Economic Education (CEE).
10. The views expressed in this article are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of St. Louis or the Federal Reserve System.

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