



Money skills you need for life.

Hands on Banking[®]



How Hands on Banking[®] / El futuro en tus manos[®] Aligns with Massachusetts Education Standards

The *Hands on Banking* program is helping students across the United States grasp important mathematics concepts while gaining valuable skills for life. The curriculum aligns with national and state principles and standards for mathematics, reading, and economics. All units and lessons are grade-level appropriate and are available in both English and Spanish.

The **No Child Left Behind Act** is a federal law designed to improve the academic achievement of all students, particularly those who are minorities, disabled, economically disadvantaged, or have limited English proficiency. The Act requires teachers of mathematics to provide all students with equal opportunities to excel and the mathematical skills and knowledge they need to actively participate in American society. Consistent with the objectives of the No Child Left Behind Act, the *Hands on Banking / El futuro en tus manos* curriculum includes supplemental materials for grade levels 4-12 that is also aligned with both state and national educational standards for mathematics, reading, and economics.

Specifically, *Hands on Banking* Teaching Guides coordinate with:

- *Massachusetts Mathematics Curriculum Framework* (2000)
- *Massachusetts History and Social Science Curriculum Framework* (2003)
- *Massachusetts English Language Arts Curriculum Framework* (2001)
- Massachusetts Technology Literacy Standards and Expectations (2008)
- *Principles and Standards for School Mathematics* compiled by the National Council for Teachers of Mathematics (2000)
- *National Standards in K-12 Education*, Jumpstart Coalition for Personal Financial Literacy (2007)
- *Voluntary National Content Standards in Economics*, National Council on Economic Education and National Association of Economics Educators and the Foundation for Teaching Economics (2007)
- *Standards for the English Language Arts*, sponsored by the National Council of Teachers of English and the International Reading Association (1996)
- *Economic and Personal Finance and Marketing Standards*, Business Education Standards from National Business Education Association from Securities Industry Foundation for Economic Education (2002)
- ISTE National Educational Technology Standards for Students (NETS*S) (2005)
- Department of Defense Education Activity (DODEA) *Curriculum Standards for Mathematics, Reading, and Social Studies*. “*Teaching the children of America's military families worldwide.*” (2009)

We encourage teachers to use the connections below as starting points. Please refer to your own school, district, or local, standards to determine the appropriateness of individual units and lessons for your students.

Connections between *Hands on Banking* and *Massachusetts Mathematics Curriculum Framework (2000)*

Grades 3-4

Number Sense and Operations

4N.5 Identify and generate equivalent forms of common decimals and fractions less than one whole (halves, quarters, fifths, and tenths).

4N.6 Exhibit an understanding of the base ten number system by reading, naming, and writing decimals between 0 and 1 up to the hundredths.

4N.10 Select and use appropriate operations (addition, subtraction, multiplication, and division) to solve problems, including those involving money.

4.N.12 Add and subtract (up to five-digit numbers) and multiply (up to three digits by two digits) accurately and efficiently.

4N.13 Divide up to a three-digit whole number with a single-digit divisor (with or without remainders) accurately and efficiently. Interpret any remainders.

Patterns, Relations, and Algebra

4P.5 Solve problems involving proportional relationships, including unit pricing (e.g., four apples cost 80¢, so one apple costs 20¢)

Measurement

4M.2 Carry out simple unit conversions within a system of measurement, e.g., hours to minutes, cents to dollars, yards to feet or inches, etc.

Grades 5-6

Number Sense and Operations

6N.5 Identify and determine common equivalent fractions, mixed numbers, decimals, and percents.

6N.9 Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers, and with positive fractions, mixed numbers, decimals, and percents.

6N.13 Accurately and efficiently add, subtract, multiply, and divide (with double-digit divisors) whole numbers and positive decimals.

6N.16 Estimate results of computations with whole numbers, and with positive fractions, mixed numbers, decimals, and percents. Describe reasonableness of estimates.

Grades 7-8

Number Sense and Operations

8.N.1 Compare, order, estimate, and translate among integers, fractions and mixed numbers (i.e., rational numbers), decimals, and percents.

8H.8 Demonstrate an understanding of the properties of arithmetic operations on rational numbers. Use the associative, commutative, and distributive properties; properties of the identity and inverse elements

8N.9 Use the inverse relationships of addition and subtraction, multiplication and division, and squaring and finding square roots to simplify computations and solve problems, e.g. multiplying by $\frac{1}{2}$ or 0.5 is the same as dividing by 2.

8N.10 Estimate and compute with fractions (including simplification of fractions), integers, decimals, and percents (including those greater than 100 and less than 1).

8N.11 Determine when an estimate rather than an exact answer is appropriate and apply in problem situations.

8N.12 Select and use appropriate operations—addition, subtraction, multiplication, division, and positive integer exponents—to solve problems with rational numbers (including negatives).

Grades 9-10

Number Sense and Operations

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

10.N.1 Identify and use the properties of operations on real numbers, including the associative, commutative, and distributive properties; the existence of the identity and inverse elements for addition and multiplication.

10N.4 Use estimation to judge the reasonableness of results of computations and of solutions to problems involving real numbers.

Connections between *Hands on Banking* and Massachusetts History and Social Science Curriculum Framework (2002)

Grade 4

Economics

8. Give examples of limited and unlimited resources and explain how scarcity compels people and communities to make choices about goods and services, giving up some things to get other things. (E)

9. Give examples of how the interaction of buyers and sellers influences the prices of goods and services in markets. (E)

Grade 5

Economics

12. Give examples of the ways people save their money and explain the advantages and disadvantages of each. (E)

14. Define profit and describe how profit is an incentive for entrepreneurs. (E)

Grade 6

Economics

13. Define supply and demand and describe how changes in supply and demand affect prices of specific products. (E)

Supply is what producers or sellers want to sell or exchange. Demand is what consumers or buyers want to get in exchange or buy.

14. Identify the key elements of a market economy. (E)

In a market economy, the major decisions about production and distribution are made in a decentralized manner by individual households and business firms following their own self interest.

Grade 7

Economics

8. Define and apply economic concepts learned in pre kindergarten through grade 6: *producers, consumers, goods, services, buyers, sellers, natural resources, taxes, specialization, savings, entrepreneur, prices, markets, scarcity, trade, barter, money, medium of exchange, supply, and demand.* (E)

Grades 8-12

General Economics Skills

14. Explain how people or communities examine and weigh the benefits of each alternative when making a choice and that “opportunity costs” are those benefits that are given up once one alternative is chosen. (E)
15. Explain how financial markets, such as the stock market, channel funds from savers to investors. (E)
18. Explain how competition among sellers lowers costs and prices, and encourages producers to produce more. (E)
19. Describe the role of buyers and sellers in determining the equilibrium price, and use supply and demand to explain and predict changes in quantity and price. (E)
20. Describe how the earnings of workers are affected by the market value of the product produced and worker skills. (E)

Grade 12 Elective:

Economics

Scarcity and Economic Reasoning

Students will understand that 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.

E.1.2 Explain how consumers and producers confront the condition of scarcity, by making choices that involve opportunity costs, and tradeoffs.

E.1.5 Predict how interest rates will act as an incentive for savers and borrowers.

E.1.6 Recognize that voluntary exchange occurs when all participating parties expect to gain.

E.1.10 Formulate a savings or financial investment plan for a future goal (e.g., college or retirement).

Supply and Demand

Students will understand the role that supply and demand, prices, and profits play in determining production and distribution in a market economy.

E.2.5 Explain the function of profit in a market economy as an incentive for entrepreneurs to accept the risks of business failure.

E.2.11 Explain how financial markets, such as the stock market, channel funds from savers to investors.

Market Structures

Students will understand the organization and role of business firms and analyze the various types of market structures in the United States economy.

E.3.10 Identify skills individuals need to be successful in the workplace.

Money and the Role of Financial Institutions

Students will understand the role of money and financial institutions in a market economy.

E.6.1 Explain the basic functions of money (e.g., medium of exchange, store of value, unit of account).

E.6.3 Explain the role of banks and other financial institutions in the economy of the United States.

E.6.5 Compare and contrast credit, savings, and investment services available to the consumer from financial institutions.

E.6.6 Research and monitor financial investments, such as stocks, bonds, and mutual funds.

E.6.7 Formulate a credit plan for purchasing a major item such as a car or home comparing different interest rates.

Connections between *Hands on Banking* and Massachusetts English Language Arts Curriculum Framework (2001)

Grades 3-4

General Standard 7: Beginning Reading

7.9 Read grade-appropriate imaginative/literary and informational/expository text with comprehension (see General Standard 8).

General Standard 8: Understanding a Text

8.15 Locate facts that answer the reader's questions.

Language Strand:

Grades 9-10 and 11-12:

Standard 1: Discussion

Continue to address earlier standards as needed

Standard 2: Questioning, Listening, and Contributing

Continue to address earlier standards as needed

Standard 4: Vocabulary and Concept Development

Continue to address earlier standards as needed

4.26: Identify and use correctly new words acquired through study of their different relationships to other words.

4.27: Use general dictionaries, specialized dictionaries, thesauruses, histories of language, books of quotations, and other related references as needed.

Reading and Literature Strand:

Grades 9-10 and 11-12:

Standard 8: Understanding a Text

Continue to address earlier standards as needed and as they apply to more difficult texts

Connections between *Hands on Banking* and Massachusetts Technology Literacy Standards and Expectations

The **Recommended PreK – 12 Instructional Technology Standards** fall under three broad categories:

Standard 1. Demonstrate proficiency in the use of computers and applications as well as an understanding of concepts underlying hardware, software, and connectivity.

Grades Per-K – 4

1.1 Develop basic skills for using hardware and applications (e.g., open/close a file, navigate using scroll bars, arrow keys, special keys, and mouse).

We congratulate you on your support of financial education in your schools, and thank you for your interest in our program. We welcome your questions and comments, or if you would like additional information, please contact us at hobinfo@wellsfargo.com