



Money skills you need for life.

Hands on Banking®



How Hands on Banking® / El futuro en tus manos® Aligns with New York 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:

- *New York State Learning Standard for Mathematics, Science* (2005)
- *New York State Learning Standards for Social Studies* (1996)
- *English Language Arts Core Curriculum* (2005)
- *New York Learning Standards for Career Development and Occupational Studies at Three Levels*
- *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 (2010)
- *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 New York State Learning Standard for Mathematics, Science (2005)

Grade 4

Students will build new mathematical knowledge through problem solving.

- **4.PS.1** Explore, examine and make observations about a social problem or mathematical situation
 - **4.PS.3** Interpret information correctly identify the problem, and generate possible solutions
- Students will solve problems that arise in mathematics and in other contexts.***
- **4.PS.5** Formulate problems and solutions from everyday situations
 - **4.PS.8** Select an appropriate representation of a problem

Students will apply and adapt a variety of appropriate strategies to solve problems.

- **4.PS.13** Work in collaboration with others to solve problems

Students will monitor and reflect on the process of mathematical problem solving.

- **4.PS.20** Determine what information is needed to solve a problem
- **4.PS.21** Discuss with peers to understand a problem situation

Students will communicate their mathematical thinking coherently and clearly to peers, teachers and others.

- **4.CM.6** Answer clarifying questions from others

Students will recognize and use connections among mathematical ideas.

- **4.CN.1** Recognize, understand, and make connections in their everyday experiences to mathematical ideas
- **4.CN.3** Connect and apply mathematical information to solve problems

Students will recognize and apply mathematics in contexts outside of mathematics.

- **4.CN.6** Recognize the presence of mathematics in their daily lives
- **4.CN.7** Apply mathematics to solve problems that develop outside of mathematics
- **4.CN.8** Recognize and apply mathematics to other disciplines

Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.

- **4.N.10** Develop an understanding of decimals as part of a whole
- **4.N.11** Read and write decimals to hundredths, using money as a context
- **4.N.12** Use concrete materials and visual models to compare and order decimals (less than 1) to the hundredths place in the context of money

Students will understand meanings of operations and procedures, and how they relate to one another.

- **4.N.14** Use a variety of strategies to add and subtract numbers up to 10,000
- **4.N.15** Select appropriate computational and operational methods to solve problems

Students will use units to give meaning to measurements.

- **4.M.8** Make change, using combined coins and dollar amounts

Grade 5

Students will build new mathematical knowledge through problem solving.

- **5.PS.3** Interpret information correctly, identify the problem, and generate possible strategies and solutions

Students will solve problems that arise in mathematics and in other contexts.

- **5.PS.5** Formulate problems and solutions from everyday situations
- **5.PS.8** Select an appropriate representation of a problem

Students will apply and adapt a variety of appropriate strategies to solve problems.

- **5.PS.10** Work in collaboration with others to solve problems

Students will monitor and reflect on the process of mathematical problem solving.

- **5.PS.16** Discuss with peers to understand a problem situation
- **5.PS.17** Determine what information is needed to solve problem

Students will communicate their mathematical thinking coherently and clearly to peers, teachers, and others.

- **5.CM.5** Answer clarifying questions from others

Students will recognize and apply mathematics in contexts outside of mathematics.

- **5.CN.6** Recognize and provide examples of the presence of mathematics in their daily lives
- **5.CN.7** Apply mathematics to problem situations that develop outside of mathematics
- **5.CN.8** Investigate the presence of mathematics in careers and areas of interest
- **5.CN.9** Recognize and apply mathematics to other disciplines and areas of interest

Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.

- **5.N.8** Read, write, and order decimals to thousandths
- **5.N.10** Compare decimals using $<$, $>$, or $=$
- **5.N.11** Understand that percent means part of 100, and write percents as fractions and decimals

Students will understand meanings of operations and procedures, and how they relate to one another.

- **5.N.16** Use a variety of strategies to multiply three-digit by three-digit
- **5.N.17** Use a variety of strategies to divide three-digit numbers by one- and two-digit numbers
- **5.N.23** Use a variety of strategies to add, subtract, multiply, and divide decimals to thousandths

Grade 6

Students will build new mathematical knowledge through problem solving.

6 PS.3 - Interpret information correctly, identify the problem, and generate possible strategies and solutions

Students will solve problems that arise in mathematics and in other contexts.

- **6.PS.5** Formulate problems and solutions from everyday situations
- **6 PS.8** Select an appropriate representation of a problem

Students will apply and adapt a variety of appropriate strategies to solve problems.

- **6 PS.10** Work in collaboration with others to solve problems

• ***Students will monitor and reflect on the process of mathematical problem solving.*** **6.PS.16** Discuss with peers to understand a problem situation

- **6.PS.17** Determine what information is needed to solve problem

Students will communicate their mathematical thinking coherently and clearly to peers, teachers, and others.

- **6.CM.5** Answer clarifying questions from others

Students will recognize and apply mathematics in contexts outside of mathematics.

- **6.CN.6** Recognize and provide examples of the presence of mathematics in their daily lives
- **6.CN.7** Apply mathematics to problem situations that develop outside of mathematics
- **6.CN.8** Investigate the presence of mathematics in careers and areas of interest
- **6.CN.9** Recognize and apply mathematics to other disciplines and areas of interest

Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.

- **6.N.11** Read, write, and identify percents of a whole (0% to 100%)
- **6.N.12** Solve percent problems involving percent, rate, and base
- **6.N.21** Find multiple representations of rational numbers (fractions, decimals, and percents 0 to 100)

Students will compute accurately and make reasonable estimates.

- **6.N.26** Estimate a percent of quantity (0% to 100%)

Grade 7

Students will build new mathematical knowledge through problem solving.

- **7.PS.1** Use a variety of strategies to understand new mathematical content and to develop more efficient methods
- **7.PS.2** Construct appropriate extensions to problem situations

Students will apply and adapt a variety of appropriate strategies to solve problems.

- **7.PS.11** Work in collaboration with others to solve problems

Students will monitor and reflect on the process of mathematical problem solving.

- **7.PS.14** Determine information required to solve the problem
- **7.PS.15** Choose methods for obtaining required information

Students will communicate their mathematical thinking coherently and clearly to peers, teachers, and others.

- **7.CM.5** Answer clarifying questions from others

Students will recognize and apply mathematics in contexts outside of mathematics.

- **7.CN.6** Recognize and provide examples of the presence of mathematics in their daily lives
- **7.CN.7** Apply mathematical ideas to problem situations that develop outside of mathematics
- **7.CN.8** Investigate the presence of mathematics in careers and areas of interest
- **7.CN.9** Recognize and apply mathematics to other disciplines, areas of interest, and societal issues

Grade 8

Students will build new mathematical knowledge through problem solving.

- **8.PS.1** Use a variety of strategies to understand new mathematical content and to develop more efficient methods
- **8.PS.2** Construct appropriate extensions to problem situations

Students will solve problems that arise in mathematics and in other contexts.

Students will apply and adapt a variety of appropriate strategies to solve problems.

- **8.PS.11** Work in collaboration with others to solve problems

Students will communicate their mathematical thinking coherently and clearly to peers, teachers, and others.

- **8.CM.5** Answer clarifying questions from others

Students will recognize and apply mathematics in contexts outside of mathematics.

- **8.CN.6** Recognize and provide examples of the presence of mathematics in their daily lives
- **8.CN.7** Apply mathematical ideas to problem situations that develop outside of mathematics
- **8.CN.8** Investigate the presence of mathematics in careers and areas of interest
- **8.CN.9** Recognize and apply mathematics to other disciplines, areas of interest, and societal issues

Students will understand meanings of operations and procedures, and how they relate to one another.

- **8.N.4** Apply percents to:
 - Tax
 - Percent increase/decrease
 - Simple interest
 - Sale price
 - Commission

- Interest rates
- Gratuities

Students will compute accurately and make reasonable estimates.

- **8.N.5** Estimate a percent of quantity, given an application

Integrated Algebra

Problem Solving Strand

Students will build new mathematical knowledge through problem solving.

- **A.PS.1** Use a variety of problem solving strategies to understand new mathematical content
- **A.PS.2** Recognize and understand equivalent representations of a problem situation or a mathematical concept

Students will apply and adapt a variety of appropriate strategies to solve problems.

- **A.PS.5** Choose an effective approach to solve a problem from a variety of strategies (numeric, graphic, algebraic)

Connections Strand

Students will recognize and apply mathematics in contexts outside of mathematics.

- **A.CN.6** Recognize and apply mathematics to situations in the outside world
- **A.CN.7** Recognize and apply mathematical ideas to problem situations that develop outside of mathematics

Algebra 2 and Trigonometry

Problem Solving Strand

Students will build new mathematical knowledge through problem solving.

- **A2.PS.1** Use a variety of problem solving strategies to understand new mathematical content

Connections between Hands on Banking and New York State Learning Standards for Social Studies (1996)

Standard 4—Economics

Students will use a variety of intellectual skills to demonstrate their understanding of how the United States and other societies develop economic systems and associated institutions to allocate scarce resources, how major decision-making units function in the U.S. and other national economies, and how an economy solves the scarcity problem through market and non-market mechanisms.

Elementary

1. The study of economics requires an understanding of major economic concepts and systems, the principles of economic decision making, and the interdependence of economies and economic systems throughout the world.

Students:

- know some ways individuals and groups attempt to satisfy their basic needs and wants by utilizing scarce resources
- explain how people's wants exceed their limited resources and that this condition defines scarcity
- know that scarcity requires individuals to make choices and that these choices involve costs

Intermediate

1. The study of economics requires an understanding of major economic concepts and systems, the principles of economic decision making, and the interdependence of economies and economic systems throughout the world.

Commencement

1. The study of economics requires an understanding of major economic concepts and systems, the principles of economic decision making, and the interdependence of economies and economic systems throughout the world.
- 2.

Connections between *Hands on Banking* and New York State Learning Standards: Economics (2002)

2. Economics requires the development and application of the skills needed to make informed and well-reasoned economic decisions in daily and national life.

and

Connections among *Hands on Banking*, National Voluntary Standards for Teaching Economics, Jump\$tart Coalition Personal Finance Management Guidelines, and NY Standards of Learning:

1. Productive resources are limited.
2. Effective decision-making requires comparing the additional costs of alternatives with the additional benefits.
 - I. Income
 - II. Money Management
 - III. Spending and Credit
 - IV. Saving and Investing

Connections between *Hands on Banking* and *English Language Arts Core Curriculum (2005)*

Standard 1: Students will read, write, listen, and speak for information and understanding.

Grade 4

Fluency

- Read with confidence from a variety of grade-level texts with appropriate speed, accuracy, and expression

Background Knowledge and Vocabulary Development

- Learn grade-level vocabulary through a variety of means
- Use prior knowledge and experience in order to understand ideas and vocabulary found in books
- Acquire new vocabulary by reading books and other print sources

Comprehension Strategies

- Read a variety of grade-level texts with understanding
- Use self-monitoring strategies, such as rereading, attending to vocabulary, and cross-checking, to determine meaning of text
- Work cooperatively with others to determine meaning
- Ask questions to clarify understanding of grade-level texts
- Read grade-level texts and answer literal, inferential, and evaluative questions
- Participate in discussions about grade-level texts
- Demonstrate comprehension of grade-level texts through a variety of responses, such as writing, drama, and oral presentations

Motivation to Read

- Show interest in a wide range of grade-level texts, both literary and informational
- Read voluntarily for differing purposes
- Engage in independent silent reading

Listening

- Listen attentively for different purposes and for an extended period of time
- Respond appropriately to what is heard

Grade 5

Word Recognition

- Integrate sources of information to decode unfamiliar words and to cross-check, self-correcting when appropriate
- Recognize at sight a large body of high-frequency words and irregularly spelled content vocabulary

Background Knowledge and Vocabulary Development

- Learn grade-level vocabulary through both direct and indirect means
- Use prior knowledge and experience in order to understand ideas and vocabulary found in books
- Acquire new vocabulary by reading a variety of texts
- Determine the meaning of unfamiliar words by using context clues, dictionaries, glossaries, and other resources

Comprehension Strategies

- Read a variety of grade-level texts, for a variety of purposes, with understanding
- Use self-monitoring strategies, such as cross-checking, summarizing, and self-questioning, to construct meaning of text
- Ask questions to clarify understanding and to focus reading
- Make connections between text being read and own lives, the lives of others, and other texts read in the past
- Use prior knowledge in concert with text information to support comprehension, from forming predictions to making inferences and drawing conclusions
- Read grade-level texts and answer literal, inferential, and evaluative questions
- Demonstrate comprehension of grade-level texts through a range of responses, such as writing, drama, and oral presentations

Motivation to Read

- Show interest in a wide range of texts, topics, and genres for reading
- Read voluntarily for a variety of purposes

Listening

- Listen attentively for different purposes and for an extended period of time
- Identify own purpose(s) for listening
- Respond appropriately to what is heard

Grade 6

Word Recognition

- Integrate sources of information to decode unfamiliar words, self-monitor, and self-correct for word-reading accuracy
- Recognize at sight a large body of high-frequency words and specialized content vocabulary

Background Knowledge and Vocabulary Development

- Extend knowledge of word meaning through direct and indirect means
- Use prior knowledge and experience in order to understand ideas and vocabulary found in a variety of texts
- Acquire new vocabulary by engaging with a variety of texts written by a range of different authors
- Determine the meaning of unfamiliar words by using context, dictionaries, glossaries, and other print resources, including electronic resources

Comprehension Strategies

- Read grade-level texts from a variety of genres, in varying text formats and by different authors, for a variety of purposes
- Use a variety of strategies (e.g., summarizing, forming questions, visualizing, and making connections) to support understanding of texts read
- Ask questions to self-monitor comprehension, to clarify understanding, and to focus reading
- Make connections between texts being read to own lives, the lives of others, other texts read in the past, and the world at large
- Read grade-level texts and answer literal, inferential, analytic, and evaluative questions
- Use prior knowledge, along with multiple sources of information, to support comprehension, from forming predictions to making inferences and drawing conclusions
- Demonstrate comprehension of grade-level texts through a range of responses, such as writing, drama, and presentations
- Demonstrate personal response to grade-level texts through a range of responses, such as writing, drama, and oral presentations

Motivation to Read

- Show interest in reading a wide range of texts, topics, genres, and authors
- Engage in independent silent reading for extended periods of time

Listening

- Listen attentively for different purposes, both student determined and teacher determined
- Respond appropriately to what is heard

Grade 7

Word Recognition

- Recognize at sight a large body of words and specialized-content vocabulary
- Use multiple sources of information, including context, to self-monitor and self-correct for word-reading accuracy

Background Knowledge and Vocabulary

- Develop vocabulary through extensive reading of a variety of texts across subjects and genres
- Determine the meaning of unfamiliar vocabulary and idioms by using prior knowledge and context clues
- Use a variety of resources, such as dictionaries, glossaries, and other print and electronic references, to determine the meaning of unfamiliar vocabulary

Comprehension/Response

- Comprehend and respond to a variety of texts from a range of genres and in a variety of formats for a variety of purposes
- Extend understanding of texts by relating content to personal experiences, other texts, and/or world events

Motivation to Read

- Engage in independent silent reading for extended periods of time

Listening

- Respond appropriately to what was heard

Grade 8

Word Recognition

- Recognize at sight a large body of high-frequency words and specialized content vocabulary
- Use varied sources of information, including context, to monitor and self-correct for word-reading accuracy

Background Knowledge and Vocabulary Development

- Acquire grade-appropriate vocabulary by reading a variety of texts across subject areas
- Determine the meaning of unfamiliar words, terms, and idioms by using context, dictionaries, glossaries, and other print and electronic resources
- Determine the meaning of unfamiliar words, terms, and idioms by using prior knowledge and context clues

Comprehension/Response

- Respond to and comprehend various genres for student-selected and teacher-selected purposes
- Combine multiple strategies (e.g., predict/confirm, question, visualize, summarize, monitor, self-correct) to enhance comprehension and response
- Use text structure and literary devices to aid comprehension and response
- Work collaboratively with peers to comprehend and respond to texts
- Find, evaluate, and combine information from print and electronic sources for student-selected and teacher-selected inquiries

Motivation to Read

- Read voluntarily for a variety of personal and academic purposes
- Engage in independent silent reading for extended periods of time

Grades 9-12

Reading

Standard 1: Students will read, write, listen, and speak for information and understanding.

- Read and follow written, complex directions and procedures to solve problems and accomplish tasks

Listening

Standard 1: Students will read, write, listen, and speak for **information and understanding**.

- Listen to and follow complex directions or instructions

Connections between *Hands on Banking* and New York Learning Standards for Career Development and Occupational Studies at Three Levels

Standard 3b—Career Majors

Students who choose a career major will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in postsecondary programs.

Core Business/Information Systems

1. Basic Business Understanding

Students:

- demonstrate an understanding of business, marketing, and multinational economic concepts, perform business-related mathematical computations, and analyze/interpret business-related numerical information.

5. Resource Management

Students:

- identify, organize, plan, and allocate resources (e.g., financial, materials/facilities, human, time) in demonstrating the ability to manage their lives as learners, contributing family members, globally competitive workers, and self-sufficient individuals.

Specialized Business/Information Systems

1. Basic Business Understanding

Students:

- demonstrate an understanding of business, marketing, and multinational economic concepts, perform business-related mathematical computations, and analyze/interpret business-related numerical information.

5. Resource Management

Students:

- identify, organize, plan, and allocate resources (e.g., financial, materials/facilities, human, time) in demonstrating the ability to manage their lives as learners, contributing family members, globally competitive workers, and self-sufficient individuals.

Experiential Business/Information Systems

1. Basic Business Understanding

Students:

- demonstrate an understanding of business, marketing, and multinational economic concepts, perform business-related mathematical computations, and analyze/interpret business-related numerical information.

5. Resource Management

Students:

- identify, organize, plan, and allocate resources (e.g., financial, materials/facilities, human, time) in demonstrating the ability to manage their lives as learners, contributing family members, globally competitive workers, and self-sufficient individuals.

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