



Money skills you need for life.

**Hands on Banking**®



## **How Hands on Banking® / El futuro en tus manos® Aligns with Rhode Island 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:

- *The Rhode Island The Rhode Island K-8 Mathematics Grade-Level Expectations* (2007)
- *Rhode Island and New Hampshire Reading and Writing Grade Level Expectations* (2006)
- *A Standards-Based Guide for Social Studies Programs in Rhode Island Schools* (2001)
- *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 *The Rhode Island K-8 Mathematics Grade-Level Expectations* (2007)**

### **Number and Operations**

#### **Grade 4**

M (N&O)–4–4 Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors and multiples; and addition or subtraction of decimals and positive proper fractions with like denominators. (Multiplication limited to 2 digits by 2 digits, and division limited to 1-digit divisors.)

M (N&O)–4–6 Mentally adds and subtracts whole number facts through 20; multiplies whole number facts to a product of 100, and calculates related division facts; adds two-digit whole numbers, combinations of two-digit and 3-digit whole numbers that are multiples of ten, and 4-digit whole numbers that are multiples of 100 (limited to two addends) and subtracts a one-digit whole number from a two-digit whole number and subtracts combinations of two-digit and three-digit whole numbers that are multiples of ten

M (N&O)–4–7 Makes estimates in a given situation by identifying when estimation is appropriate, selecting the appropriate method of estimation, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands.

#### **Grade 5**

M (N&O)–5–4 Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime, or composite numbers; and addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.)

M (N&O)–5–6 Mentally calculates change back from \$1.00, \$5.00, and \$10.00; calculates multiplication and related division facts to a product of 144; multiplies a two-digit whole number by a one-digit whole number two-digit whole numbers that are multiples of ten a three-digit whole number that is a multiple of 100 by a two- or three-digit number which is a multiple of 10 or 100, respectively and divides 3- and 4-digit multiples of powers of ten by their compatible factors

M (N&O)–5–7 Makes estimates in a given situation by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands.

#### **Grade 6**

M (N&O)–6–4 Accurately solves problems involving single or multiple operations on fractions (proper, improper, and mixed), or decimals; and addition or subtraction of integers; percent of a whole; or problems involving greatest common factor or least common multiple.

M (N&O)–6–6 Uses a variety of mental computation strategies to solve problems (e.g., using compatible numbers, applying properties of operations, using mental imagery, using patterns) and to determine the reasonableness of answers; and mentally calculates change back from \$5.00, \$10.00, \$20.00, \$50.00, and \$100.00; multiplies a two-digit whole number by a one-digit number whole number, two-digit whole numbers that are multiples of ten, a three-digit whole number that is a multiple of 100 by a two- or three-digit number which is a multiple of 10 or 100, respectively, divides 3- and 4-digit multiples of powers of ten by their compatible factors and determines the part of a whole number using benchmark percents (1%, 10%, 25%, 50%, and 75%).

M (N&O)–6–7 Makes estimates in a given situation by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands.

### **Grade 7**

M (N&O)–7–4 Accurately solves problems involving proportional reasoning; percents involving discounts, tax, or tips; and rates.

M(N&O)–7–6 Uses a variety of mental computation strategies to solve problems (e.g., using compatible numbers, applying properties of operations, using mental imagery, using patterns) and to determine the reasonableness of answers; and mentally calculates benchmark perfect squares and related square roots, determines the part of a number using benchmark percents and related fractions

M (N&O)–7–7 Makes estimates in a given situation (including tips, discounts, and tax) by identifying when estimation is appropriate, selecting the appropriate method of estimation, determining the level of accuracy needed given the situation, analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands.

### **Grade 8**

M (N&O)–8–4 Accurately solves problems involving proportional reasoning (percent increase or decrease, interest rates, markups, or rates); multiplication or division of integers; and squares, cubes, and taking square or cube roots.

M (N&O)–8–7 Makes estimates in a given situation (including tips, discounts, tax, and the value of a non-perfect square root as between two whole numbers) by identifying when estimation is appropriate, selecting the appropriate method of estimation; determining the level of accuracy needed given the situation; analyzing the effect of the estimation method on the accuracy of results; and evaluating the reasonableness of solutions appropriate to grade level GLEs across content strands

### **Grades 9-10**

M (N&O)–10–4 Accurately solves problems that involve but are not limited to proportional relationships, percents, ratios, and rates. (The problems might be drawn from contexts outside of and within mathematics including those that cut across content strands or disciplines.)  
(State)

## **Problem Solving, Reasoning and Proof**

**M (PRP)–5–1 Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content and be able to:**

### **Grades 3-5**

Determine the reasonableness of solutions to real-world problems.

Generalize solutions and apply strategies to new problem situations.

Add to the repertoire of problem-solving strategies (e.g., looking for similar problems) and use those strategies in more sophisticated ways.

**Solve problems with multiple solutions, recognize when a problem has no solution, and recognize problems where more information is needed.**

Translate results of a computation into solutions that fit the real-world problem

### **Grades 6-8**

#### **Use problem-solving strategies appropriately and effectively for a given situation.**

Determine, collect and organize the relevant information needed to solve real-world problems. Apply integrated problem-solving strategies to solve problems in the physical, natural, and social sciences and in pure mathematics.

Use technology when appropriate to solve problems.

Reflect on solutions and the problem-solving process for a given situation and refine strategies as needed.

#### **M (PRP)–5–2 Students will use mathematical reasoning and proof and be able to:**

### **Grades 3-5**

Draw conclusions and solve problems using elementary deductive reasoning and reasoning by analogy.

Make and defend conjectures and generalizations.

Use models, known facts, properties, and relationships to explain thinking and to justify answers and solution processes.

Recognize the pervasive use and power of reasoning as a part of mathematics.

### **Grades 6-8**

Draw logical conclusions and make generalizations using deductive and inductive reasoning.

Apply mathematical reasoning skills in other disciplines.

### **Communication, Connections, and Representations**

#### **M (CCR)–5–3 Students will recognize, explore, and develop mathematical connections and be able to:**

### **Grades 3-5**

Recognize and use mathematics in other curriculum areas and in their daily lives.

Use mathematical skills, concepts, and applications in other disciplines (e.g., graphs in social studies, patterns in art, or music and geometry in technology education)

### **Grades 6-8**

Understand that many real-world applications require an understanding of mathematical concepts (e.g., personal finance, running a business, building a house, following a recipe, or sending a rocket to the moon).

### ***Connections between Hands on Banking and Rhode Island and New Hampshire Reading and Writing Grade Level Expectations (2006)***

#### **Reading Fluency and Accuracy (R-11)**

### **Grade 4**

R-4-11 - Reads grade-level appropriate material with:

R-4-11.1 Accuracy: reading material appropriate for grade 4 with at least 90-94% accuracy

### **Grade 5**

R-5-11 - Reads grade-level appropriate material with:

R-5-11.1 Accuracy: reading material appropriate for grade 5 with at least 90-94% accuracy

### **Grade 6**

R-6-11 - Reads grade-level appropriate material with:

R-6-11.1 Accuracy: reading material appropriate for grade 6 with at least 90-94% accuracy

### **Grade 7**

R-7-11 - Reads grade-level appropriate material with:

R-7-11.1 Accuracy: reading material appropriate for grade 7 with at least 90-94% accuracy

### **Grade 8**

R-8-11 - Reads grade-level appropriate material with:

R-8 11.1 Accuracy: reading material appropriate for grade 8 with at least 90-94% accuracy

## **Grades 9-12**

R-10-11 - Reads grade-level appropriate material with:

R-10-11.1 Accuracy: reading material appropriate for high school with at least 90-94% accuracy

R-12-11 Reads grade-level appropriate material with:

R-12-11.1 Accuracy: reading material appropriate for high school with at least 90-94% accuracy

## **Word Identification Skills and Strategies (R-1)**

### **Grade 4**

R-4-1 Applies word identification/decoding strategies by

R-4-1.4 Reading grade-appropriate words

### **Grade 5**

R-5-1 Applies word identification/decoding strategies by

R-5-1.4 Reading grade-appropriate words

### **Grade 6**

R-6-1 Applies word identification/decoding strategies by

R-6-1.4 Reading grade-appropriate words

### **Grade 7**

R7-1 Applies word identification/decoding strategies by

R-7-1.4 Reading grade-appropriate words

### **Grade 8**

R8-1 Applies word identification/decoding strategies by

R-8-1.4 Reading grade-appropriate words

## **Grades 9-12**

R-10-1 Applies word identification/ decoding strategies by

R-10-1.1 Identifying multi-syllabic words by using knowledge of sounds, syllable division, and word patterns

R-12-1 Applies word identification/ decoding strategies by ...

R-12-1.1 Identifying multi-syllabic words by using knowledge of sounds, syllable division, and word patterns

## **Vocabulary Strategies (R-2)**

### **Grade 4**

R-4-2 Students identify the meaning of unfamiliar vocabulary by

R-4-2.1 Using strategies to unlock meaning (e.g., knowledge of word structure, including prefixes/suffixes and base words; or context clues; or other resources, such as dictionaries, glossaries; or prior knowledge)

### **Grade 5**

R-5-2 Students identify the meaning of unfamiliar vocabulary by

R-5-2.1 Using strategies to unlock meaning (e.g., knowledge of word structure, including prefixes/suffixes and base words; or context clues; or other resources, such as dictionaries, glossaries; or prior knowledge)

### **Grade 6**

R-6-2 Students identify the meaning of unfamiliar vocabulary by

R-6-2.1 Using strategies to unlock meaning (e.g., knowledge of word structure, including prefixes/suffixes and base words; or context clues; or other resources, such as dictionaries, glossaries, thesauruses ; or prior knowledge)

### **Grade 7**

R-7-2 Students identify the meaning of unfamiliar vocabulary by

R-7-2.1 Using strategies to unlock meaning (e.g., knowledge of word structure, including prefixes/suffixes and base words; or context clues; or other resources, such as dictionaries, glossaries, thesauruses; or prior knowledge)

### **Grade 8**

R-8-2 Students identify the meaning of unfamiliar vocabulary by

R-8-2.1 Using strategies to unlock meaning (e.g., knowledge of word structure, including prefixes/suffixes and base words; or context clues; or other resources, such as dictionaries, glossaries, thesauruses; or prior knowledge)

### **Grades 9-12**

R-10-2 Students identify the meaning of unfamiliar vocabulary by...

R-10-2.1a Using strategies to unlock meaning (e.g., knowledge of word structure including prefixes/suffixes, common roots, or word origins; or context clues; or resources including dictionaries, glossaries, or thesauruses to determine definition, pronunciation, etymology, or usage of words; or prior knowledge) (

R-12-2 Students identify the meaning of unfamiliar vocabulary by...

R-12-2.1a Using strategies to unlock meaning (e.g., knowledge of word structure, including prefixes/suffixes, common roots, or word origins; or context clues; or resources including dictionaries, glossaries, or thesauruses to determine definition, pronunciation, etymology, or usage of words; or prior knowledge)

## **Informational Texts: Initial Understanding of Informational Text**

### **Grade 4**

R4-7 Demonstrate initial understanding of informational texts (expository and practical texts by

R4-7.1 Obtaining information from text features [e.g., table of contents, glossary, index, transition words/phrases, transitional devices (including use of white space), bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations

R4-7.2 Using information from the text to answer questions related to explicitly stated main/central ideas or key details

### **Grade 5**

R5-7 Demonstrate initial understanding of informational texts (expository and practical texts by

R5-7.1 Obtaining information from text features [e.g., table of contents, glossary, index, transition words/phrases, transitional devices (including use of white space), bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations

R5-7.2 Using information from the text to answer questions related to explicitly stated main/central ideas or key details

### **Grade 6**

R5-7 Demonstrate initial understanding of informational texts (expository and practical texts by

R5-7.1 Obtaining information from text features [e.g., table of contents, glossary, index, transition words/phrases, transitional devices (including use of white space), bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations

### **Grade 7**

R-7-7 Demonstrate initial understanding of informational texts (expository and practical texts by

R7-7.1 Obtaining information from text features [e.g., table of contents, glossary, index, transition words/phrases, transitional devices (including use of white space), bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations

## **Grade 8**

R8-7 Demonstrate initial understanding of informational texts (expository and practical texts by  
R8-7.1 Obtaining information from text features [e.g., table of contents, glossary, index, transition words/phrases, transitional devices (including use of white space), bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations

## **Grades 9-12**

R-10-7 Demonstrate initial understanding of informational texts (expository and practical texts)

R-10-7.1 Obtaining information from text features [e.g., table of contents, glossary, index, transition words/phrases, transitional devices (including use of white space), bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations

R-12-7 Demonstrate initial understanding of informational texts (expository and practical texts)

R-12-7.1 Obtaining information from text features [e.g., table of contents, glossary, index, transition words/phrases, transitional devices (including use of white space), bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations

### **Informational Texts: Initial Understanding of Informational Text**

R-10-7 Demonstrate initial understanding of informational texts (expository and practical texts)

R-10-7.4 Generating questions before, during, and after reading to enhance understanding and recall; expand understanding and/or gain new information

R-12-7 Demonstrate initial understanding of informational texts (expository and practical texts)

R-12-7.4 Generating questions before, during, and after reading to enhance understanding and recall; expand understanding and/or gain new information

## **Reading Comprehension Strategies**

### **Grade 4**

R-4-13 Uses Comprehension strategies (flexibly and as needed) before, during, and after reading literary and informational text.

### **Grade 5**

R-5-13 Uses Comprehension strategies (flexibly and as needed) before, during, and after reading literary and informational text.

### **Grade 6**

R-6-13 Uses Comprehension strategies (flexibly and as needed) before, during, and after reading literary and informational text.

### **Grade 7**

R-7-13 Uses Comprehension strategies (flexibly and as needed) before, during, and after reading literary and informational text.

### **Grade 8**

R-8-13 Uses Comprehension strategies (flexibly and as needed) before, during, and after reading literary and informational text.

### **Grades 9-12**

R-10-13 Uses Comprehension strategies (flexibly and as needed) before, during, and after reading literary and informational text.

R-12-13 Uses Comprehension strategies (flexibly and as needed) before, during, and after reading literary and informational text

## **Connections between *Hands on Banking* and *A Standards-Based Guide for Social Studies Programs in Rhode Island Schools***

### **Economics**

**Standard 1** Productive resources are limited. Therefore, people can not have all the goods and services they want; as a result, they must choose some things and give up others.

**Standard 2** 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 11** Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.

**Standard 12** Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.

### **Grades 9-12**

**Standard 1** Productive resources are limited. Therefore, people can not have all the goods and services they want; as a result, they must choose some things and give up others.

**Standard 2** 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.

**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](mailto:hobinfo@wellsfargo.com)**