



Money skills you need for life.

**Hands on Banking**<sup>®</sup>



## **How Hands on Banking<sup>®</sup> / El futuro en tus manos<sup>®</sup> Aligns with New Mexico 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 Mexico Mathematics Content Standards and Benchmarks (2008)*
- *New Mexico Social Studies Content Standards and Benchmarks (2009)*
- *New Mexico Language Arts Content Standards and Benchmarks (2009)*
- *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 New Mexico Mathematics Content Standards and Benchmarks (2008)**

### **Strand: NUMBER AND OPERATIONS**

**Standard: Students will understand numerical concepts and mathematical operations.**

#### **Grade 4**

- 4.N.1.1** Exhibit an understanding of the place-value structure of the base-ten number system by reading, modeling, writing, and interpreting whole numbers up to 100,000; compare and order the numbers:
- identify the numbers less than 0 by extending the number line and using negative numbers through familiar applications (e.g., temperature, money)
- 4.N.2.1** Demonstrate an understanding of and the ability to use:
- a. standard algorithms for the addition and subtraction of multi-digit numbers
  - b. standard algorithms for multiplying a multi-digit number by a two-digit number and for dividing a multi-digit number by a one-digit number
- 4.N.2.2** Select and use appropriate operations (addition, subtraction, multiplication, and division) to solve problems.
- 4.N.2.3** Extend the uses of whole numbers to the addition and subtraction of simple decimals (positive numbers to two places).
- 4.N.3.1** Demonstrate multiplication combinations through 12 x 12 and related division facts, and use them to solve problems mentally and compute related problems (e.g., 4 x 5 is related to 40 x 50, 400 x 5, and 40 x 500).
- 4.N.3.2** Add, subtract, and multiply up to two double-digits accurately and efficiently.
- 4.N.3.3** Use a variety of strategies (e.g., rounding and regrouping) to estimate the results of whole number computations and judge the reasonableness of the answers.
- 4.N.3.4** Use strategies to estimate computations involving fractions and decimals.

### **Strand: ALGEBRA**

**Standard: Students will understand algebraic concepts and applications.**

- 4.A.3.1** Solve problems involving proportional relationships (including unit pricing and map interpretations; e.g., one inch = five miles; therefore, five inches = □ miles).
- 4.A.4.1** Identify and describe situations with constant or varying rates of change and compare them.

#### **Grade 5**

### **Strand: NUMBER AND OPERATIONS**

**Standard: Students will understand numerical concepts and mathematical operations.**

- 5.N.1.1** Compare and order using concrete or illustrated models:
- a. whole numbers (to millions)
  - b. common fractions (halves, thirds, fourths, eighths)
  - c. decimals (thousandths)
- 5.N.1.2** Demonstrate understanding of the magnitude of the value of numbers from thousandths to millions, including common fractions.
- 5.N.1.3** Represent place value using concrete or illustrated models up to one billion (1,000,000,000).

- 5.N.1.4 Interpret percents as part of a hundred (i.e., find decimal and percent equivalents for common fractions, explain how they represent the same value, and compute a given percent of a whole number).
- 5.N.1.5 Identify and represent on a number line decimals, fractions, and mixed numbers.
- 5.N.2.1 Explain and perform whole number division and express remainders as a whole number or a fractional part as appropriate to the context of real-life problems.
- 5.N.2.2 Add and subtract decimals.
- 5.N.2.5 Use arithmetic operations and inverse relationships to represent and solve real-world problems.
- 5.N.2.6 Identify and represent on a number line decimals, fractions, and mixed numbers.
- 5.N.2.7 Demonstrate proficiency with division, including one- and two-digit divisors.
- 5.N.2.9 Represent and use fractions and decimals in equivalent forms.
- 5.N.3.1 Add, subtract, multiply, and divide whole numbers.
- 5.N.3.2 Add and subtract decimals.
- 5.N.3.3 Use estimation strategies to verify the reasonableness of calculated results.

## **Grade 6**

### **Strand: NUMBER AND OPERATIONS**

#### **Standard: Students will understand numerical concepts and mathematical operations.**

- 6.N.1.2 Use equivalent representations for rational numbers (e.g., integers, decimals, fractions, percents, ratios, numbers with whole-number exponents).
- 6.N.1.3 Use appropriate representations of positive rational numbers in the context of real-life applications.
- 6.N.1.5 Identify and represent on a number line decimals, fractions, mixed numbers, and positive and negative integers
- 6.N.2.1 Calculate multiplication and division problems using contextual situations.
- 6.N.2.3 Demonstrate the relationship and equivalency among ratios and percents.
- 6.N.2.4 Use proportions to solve problems.
- 6.N.2.5 Explain and perform:
  - a. whole number division and express remainders as decimals or appropriately in the context of the problem
  - b. addition, subtraction, multiplication, and division with decimals
  - c. addition and subtraction with integers
  - d. addition, subtraction, and multiplication with fractions and mixed numerals
- 6.N.3.4 Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.
- 6.N.3.5 Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.
- 6.N.3.6 Interpret and use ratios in different contexts.
- 6.N.3.7 Compute and perform multiplication and division of fractions and decimals and apply these procedures to solving problems.

### **Strand: ALGEBRA**

#### **Standard: Students will understand algebraic concepts and applications.**

- 6.A.1.1 Solve problems involving proportional relationships.
- 6.A.3.1 Develop and use mathematical models to represent and justify mathematical relationships found in a variety of situations.

## **Grade 7**

### **Strand: NUMBER AND OPERATIONS**

Standard: Students will understand numerical concepts and mathematical operations.

7.N.1.3 Use properties of the real-number system to explain reasoning and to formulate and solve real-world problems.

7.N.2.3 Calculate given percentages of quantities and use them to solve problems (e.g., discounts of sales, interest earned, tips, markups, commission, profit, simple interest).

7.N.3.2 Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.

7.N.3.4 Calculate the percentage of increases and decreases of a quantity.

### **Strand: ALGEBRA**

Standard: Students will understand algebraic concepts and applications.

7.A.1.6 Solve problems involving rate, average speed, distance, and time.

## **Grade 8**

### **Strand: NUMBER AND OPERATIONS**

Standard: Students will understand numerical concepts and mathematical operations.

8.N.2.2 Perform arithmetic operations and their inverses (e.g., addition/subtraction, multiplication/division, square roots of perfect squares, cube roots of perfect cubes) on real numbers.

8.N.3.1 Formulate algebraic expressions that include real numbers to describe and solve real-world problems.

8.N.3.2 Use a variety of computational methods to estimate quantities involving real numbers.

8.N.3.4 Use real number properties to perform various computational procedures and explain how they were used.

8.N.3.6 Select and use appropriate forms of rational numbers to solve real-world problems including those involving proportional relationships.

### **Strand: ALGEBRA**

Standard: Students will understand algebraic concepts and applications.

8.A.2.4 Demonstrate understanding of the relationships between ratios, proportions, and percents and solve for a missing term in a proportion.

8.A.4.4 Solve multi-step problems that involve changes in rate, average speed, distance, and time.

8.A.4.5 Analyze problems that involve change by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing, and observing patterns.

## **Connections between *Hands on Banking* and New Mexico and New Mexico Social Studies Content Standards and Benchmarks (2009)**

**Content Standard IV:** Students understand basic economic principles and use economic reasoning skills to analyze the impact of economic systems (including the market economy) on individuals, families, businesses, communities, and governments.

K-4 Benchmark IV-A: Understand that individuals, households, businesses, governments, and societies make decisions that affect the distribution of resources and that these decisions are influenced by incentives (both economic and intrinsic).

5-8 Benchmark IV-A: Explain and describe how individuals, households, businesses, governments, and societies make decisions, are influenced by incentives (economic as well as intrinsic) and the availability and use of scarce resources, and that their choices involve costs and carrying ways of allocating.

9-12 Benchmark IV 4-A: Analyze the ways individuals, households, businesses, governments, and societies make decisions, are influenced by incentives (economic and intrinsic) and the availability and use of scarce resources and that their choices involve costs and varying ways of allocating.

9-12 Benchmark IV 4-B: Analyze and evaluate how economic systems impact the way individuals, households, businesses, governments, and societies make decisions about resources and the production and distribution of goods and services.

K-4 Benchmark IV-C: Understand the patterns and results of trade and exchange among individuals, households, businesses, governments, and societies, and the interdependent qualities.

### **Connections between *Hands on Banking* and New Mexico Language Arts Content Standards and Benchmarks (2009)**

**Content Standard 1 - READING AND LISTENING FOR COMPREHENSION:** Students will apply strategies and skills to comprehend information that is read, heard, and viewed.

#### **Grade 4**

A. Listen to, read, react to, and retell information.

1. Use meta-cognitive strategies to comprehend text and to clarify meaning of vocabulary (e.g., re-read the text, consult other sources, ask for help, paraphrase, question).

3. Read a variety of texts.

B. Locate and use a variety of resources to acquire information across the curriculum.

2. Use multiple representations of information (e.g., maps, charts, photos) to find information.

C. Demonstrate critical thinking skills to comprehend written, spoken, and visual information.

2. Respond to non-fiction using interpretive, critical, and evaluative processes.

D. Acquire reading strategies.

3. Adjust speed of reading to suit purpose and difficulty of material.

5. Increase vocabulary through reading, listening, and interacting.

#### **Grade 5**

A. Listen to, read, react to, and interpret information.

4. Follow oral instructions that provide information about a task or assignment.

B. Gather and use information for research and other purposes.

D. Demonstrate competence in the skills and strategies of the reading process

1. Apply enabling strategies and skills to read by:

- expanding and refining vocabulary through wide reading, word study, content area study
- using word reference materials
- selecting key vocabulary critical to the text and applying appropriate meanings for understanding
- reading independently to increase fluency and build background knowledge

## **Grade 6**

- A. Listen to, read, react to, and interpret information
- B. Gather and use information for research and other purposes
- 2. Use multiple sources of print and non-print information in developing informational materials such as brochures, newsletters, and advertisements by exploring a variety of sources that provide information (e.g., books, newspapers, Internet, electronic databases, CD-ROMs).
- D. Demonstrate competence in the skills and strategies of the reading process
- 1. Increase fluency, comprehension, and insight through meaningful and comprehensive reading instruction by:
  - using effective reading strategies to match type of text
  - reading selections and other materials assigned
- 4. Follow oral and written directions for a procedure.

## **Grade 7**

- A. Listen to, read, react to, and interpret information.
- 2. Respond to informational materials that are read, heard, or viewed.
- B. Gather and use information for research and other purposes.
- D. Demonstrate competence in the skills and strategies of the reading process.
- 4. Use knowledge of context and vocabulary to understand informational text.

## **Grade 8**

- A. Listen to, read, react to, and interpret information.
- B. Gather and use information for research and other purposes.
- D. Demonstrate competence in the skills and strategies of the reading process.
- 3. Recognize when information presented in a text is new knowledge and describe how it can be used.
- 4. Use the various parts of a text to locate specific information (index, table of contents, glossary).

## **Grades 9-12**

### **STRAND I: READING**

- **Content Standard I:** Students read and understand a variety of materials.
  - Benchmark I-A:** Use comprehension strategies for unfamiliar vocabulary.
    - Grades 9-10
      - Use knowledge of roots, prefixes, suffixes and etymology to determine the meaning of unfamiliar vocabulary.
      - Use knowledge of word families and word suffixes to determine meaning.
      - Use general and specialized dictionaries, thesauri and glossaries (print and electronic) to determine the definition and pronunciation of unfamiliar words.
    - Grades 11-12
      - Use etymology, the principles behind spelling and usage of words to determine meaning.
      - Differentiate shades of meaning and multiple meanings of words, including the significance of both connotation and denotation.
      - Analyze the context of sentences and larger sections of text to clarify the meaning of unknown or ambiguous words, detect nuances, make inferences and differentiate among possible meanings of words.
      - Analyze texts to identify specialized terminology or jargon needing clarification or definition.

**Benchmark I-B:** Use comprehension strategies to understand the meaning of a text

- Grade 10
  - Use prior knowledge in understanding texts.
  - Recognize primary organizing structures

**Benchmark I-C:** Infer, analyze, and synthesize to increase comprehension.

- Grade 9
  - Interpret information from graphs, charts, diagrams, and the like.
- Grade 12
  - Recognize limitations in a text
  - Recognize the types of evidence offered in a text
  - Evaluate information in a text

**Benchmark I-D:** Use meta-cognitive strategies to increase comprehension.

- Grades 9-12
  - Use multiple strategies to monitor one's pace and comprehension.
  - Draw conclusions from information in texts to arrive at new knowledge.
  - Evaluate texts by determining the value to oneself.

### **STRAND VII: Informational Text**

- **Content Strand VII:** Students read and interpret a wide range of reference materials and other informational documents that may contain technical information.

**Benchmark VII-A:** Follow instructions in informational or technical text to perform specific

tasks, answer questions, or solve problems.

- Grade 10
  - Read a wide variety of informational and technical text and selections to inform oneself
  - Read critically and independently in order to follow instructions, perform specific tasks, answer questions and solve problems.
- Grade 11
  - Use written technical information in order to complete multi-step instructions, perform complex tasks, or solve problems.

### **22-13-1.1. Graduation requirements**

F. Successful completion of a minimum of twenty-three units aligned to the state academic content and performance standards shall be required for graduation. These units shall be as follows:

(8) nine elective units and seven and one-half elective units for students entering the ninth grade in the 2005-2006 school year that meet department content and performance standards. Student service learning shall be offered as an elective. Financial literacy shall be offered as an elective.

**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)**