



Money skills you need for life.

Hands on Banking®



How Hands on Banking® / El futuro en tus manos® Aligns with District of Columbia 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:

- *District of Columbia Mathematics, Pre-K through 12 Standards, 2006*
- *District of Columbia Reading/English Language Arts Pre-K through 12 Standards, 2006*
- *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 (1997)
- *Standards for the English Language Arts*, sponsored by the National Council of Teachers of English and the International Reading Association (1996)
- 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 *District of Columbia Mathematics, Pre-K through 12 Standards, 2006*

Number Sense and Operations

Grade 4

4.NSO-N.1. Exhibit an understanding of the base 10 number system by reading, modeling, and writing whole numbers to at least 100,000; demonstrating an understanding of the values of the digits; and comparing and ordering the numbers.

4.NSO-N.3. Round whole numbers to 100,000 to the nearest 10, 100, 1,000, 10,000, and 100,000.

4.NSO-N.5. Read and interpret whole numbers and decimals up to two decimal places; relate to money and place-value decomposition.

4.NSO-F.11. Recognize, name, and generate equivalent forms of common decimals (0.5, 0.25, 0.2, 0.1) and fractions

4.NSO-F.12. Select, use, and explain models to relate common fractions and mixed numbers

4.NSO-F.13. Represent positive decimals to the hundredths.

4.NSO-C.14. Demonstrate an understanding of and the ability to use conventional algorithms for the addition and subtraction of multi-digit whole numbers.

4.NSO-C.19. Demonstrate understanding of and ability to use the conventional algorithms for multiplication of up to a three-digit whole number by a two-digit whole number. Multiply three-digit whole numbers by two-digit whole numbers accurately and efficiently.

4.NSO-C.20. Demonstrate understanding of and the ability to use the conventional algorithm for division of up to a three-digit whole number with a single-digit divisor (with or without remainders). Divide up to a three-digit whole number with a single-digit divisor accurately and efficiently. Interpret any remainders.

4.NSO-C.22. Mentally calculate simple products and quotients up to a three-digit number by a one-digit number.

Example: 400×7 $320 \div 8$ $350 \div 7$ 500×3

4.NSO-C.23. Multiply and divide money amounts in decimal notation by using whole-number multipliers and divisors.

4.NSO-C.24. Determine the unit cost when given the total cost and number of units.

4.NSO-C.25. Select and use appropriate operations (addition, subtraction, multiplication, and division) to solve problems, including those involving money.

4.NSO-E.28. Estimate and compute the sum or difference of whole numbers and positive decimals to two places.

Example: Estimate and compute the following: $\$0.43 - \$0.29 = ?$ $0.74 + 0.80 = ?$

4.NSO-E.29. Estimate the answers to calculations involving addition, subtraction, or multiplication; know when approximation or a rounded solution is appropriate and use it to check the reasonableness of answers.

4.NSO-E.30. Select and use a variety of strategies (e.g., front-end, rounding, and regrouping) to estimate quantities, measures, and the results of whole-number computations up to three-digit whole numbers and amounts of money to \$1,000 and to judge the reasonableness of answers.

Grade 5

5.NSO-N.4. Compare and order integers (including negative integers) and positive fractions, mixed numbers, decimals, and percents.

5.NSO-F.9. Interpret percents as parts out of 100, use % notation, and express a part of a whole as a percentage.

5.NSO-F.10. Identify and determine common equivalent fractions, mixed numbers (with denominators 2, 4, 5, and 10), decimals, and percents, and explain why they represent the same value.

- 5.NSO-C.14. Add and subtract positive decimals.
- 5.NSO-C.15. Solve problems involving multiplication and division of any whole number.
- 5.NSO-C.16. Demonstrate proficiency with division, including division with positive decimals and long division with multi-digit divisors.
- 5.NSO-C.19. Multiply positive decimals with whole numbers.
- 5.NSO-E.23. Estimate sums and differences of whole numbers, positive fractions, and positive decimals. Estimate products of whole numbers and products of positive decimals with whole numbers. Use a variety of strategies and judge reasonableness of answers

Grade 6

- 6.NSO-N.1. Explain the properties of and compute with rational numbers, expressed in a variety of forms.
- 6.NSO-N.5. Identify and determine common equivalent fractions, mixed numbers, decimals, and percentages.
- 6.NSO-C.8. 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 percentages.
- 6.NSO-C.10. Accurately and efficiently add, subtract, multiply, and divide (with multi-digit divisors) whole numbers and positive decimals.
- 6.NSO-C.13. Calculate given percentages of quantities, and solve problems involving discounts at sales, interest earned, and tips.
- 6.NSO-E.18. Estimate results of computations with whole numbers and with positive fractions, mixed numbers, decimals, and percentages. Determine reasonableness of estimates.

Grade 7

- 7.NSO-N.1. Compare, order, estimate, and translate among integers, fractions, mixed numbers (i.e., rational numbers), decimals, and percents.
- 7.NSO-C.10. Compute with fractions (including simplification of fractions), integers, decimals, and percentages (including those greater than 100 and less than 1) using the four operations and combinations of the four operations.
- 7.NSO-C.12. Select and use appropriate operations — addition, subtraction, multiplication, division — to solve problems with rational numbers and negative integers.
- 7.NSO-C.13. Calculate the percentage increase and decrease of a quantity.

Grade 8

- 8.NSO-N.1. Explain the properties of and compute with real numbers expressed in a variety of forms.
- 8.NSO-C.9. Solve problems involving ratio units such as miles per hour, dollars per pound, or persons per square mile.
- 8.NSO-C.11. Solve problems that involve markups, commissions, profits, and simple and compound interest.
- 8.NSO-C.15. Select and use appropriate operations — addition, subtraction, multiplication, division, and positive integer exponents — to solve problems with rational numbers, including negative rationales.

Grades 9-12

Algebra I Indicators:

Number Sense and Operations Indicators

A1.N.1 Use the properties of operations on real numbers, including the associative, commutative, and distributive properties and use them to simplify calculations.

A1.N.3 Calculate and apply ratios, proportions, rates, and percentages to solve a range of consumer and practical problems.

A1.N.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 District of Columbia Reading/English Language Arts Pre-K through 12 Standards, 2006

Grade 4

4.IT-E.1. Identify the purpose and main points of a text and summarize its supporting details.

4.IT-E.4. Identify and use knowledge of common textual features (e.g., paragraphs, topic sentences, concluding sentences, glossary).

4.IT-E.5. Ask questions and support answers by connecting prior knowledge with literal and inferential information found in texts.

4.IT-DP.6. Interpret information in graphic representations (e.g., charts, maps, diagrams, illustrations, tables, time- lines) of text.

4.IT-DP.7. Locate specific information from text (e.g., letters, memos, directories, menus, schedules, pamphlets, search engines, signs, manuals, instructions, recipes, labels, forms).

4.R.1. Identify and apply steps in conducting and reporting research.

- Use computer input devices effectively (e.g., keyboard, touch screens, glide pads, mouse, launch-and-quit applications).

- Interpret, use, and communicate the information.

Grade 5

5.LD-V.10. Determine the meaning of unfamiliar words in context using definitions and examples stated in the text.

5.IT-DP.6. Interpret details from text to complete a task, solve a problem, or perform procedures.

5.R.1. Apply steps for obtaining and organizing information from a variety of sources, documenting, and presenting research in individual and group project.

- Demonstrate basic keyboarding skills and familiarity with technology vocabulary such as cursor, software, memory, and hard drive.

Grade 6

6.LD-V.8. Use such clues as definition, example, and restatement to determine the meanings of unfamiliar words and words with multiple meanings in context.

6.LD-V.10. Determine meanings, pronunciations, alternate word choices, correct spellings, and parts of speech of words using dictionaries, glossaries, thesauri, and other resources (printed and electronic).

Grade 7

7.LD-V.10. Determine meanings, pronunciations, alternate word choices, correct spellings, parts of speech, or etymologies of words using dictionaries, glossaries, thesauri, and other resources (printed and electronic).

7.IT-DP.4. Respond appropriately to a set of instructions and complete a task.

Grade 8

8.LD-V.9. Monitor text for unknown words or words with novel meanings, using word, sentence, and paragraph clues to determine meaning.

8.LD-V.11. Determine meanings, pronunciations, syllabication, synonyms, antonyms, correct spellings, parts of speech, or etymologies of words using dictionaries, glossaries, thesauri, CD-ROMs, and the Internet.

Grades 9-12

Questioning, Listening, and Contributing

Grade 9

9.LD-Q.2. Summarize in a coherent and organized way the speaker's position on the information and ideas learned from a focused discussion.

GRADE 10

10.LD-Q.2 Formulate judgments about the ideas under discussion and support those judgments with convincing evidence.

Vocabulary Development

Grade 9

9.LD-V.8 Determine the meaning of multiple-meaning words by using context.

EXPOSITORY TEXT

Grade 9

9.IT-E.5 Support conclusions drawn from ideas and concepts in informational and technical passages.

GRADES 10,11, & 12

Continue to address earlier standards as needed.

Document and Procedural Text

Grade 10

10.IT-DP.7 ANALYZE THE PRESENTATION OF INFORMATION.

GRADES 11 & 12

Continue to address earlier standards as needed.

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