



Money skills you need for life.

Hands on Banking[®]



How Hands on Banking[®] / El futuro en tus manos[®] Aligns with Arkansas 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:

- *Arkansas State Mathematics Standards* (2006)
- *Arkansas Social Studies Curriculum Frameworks* (2007)
- *Arkansas K-12 English/Language Arts Curriculum Framework*, (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 (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)
- 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 Arkansas State Mathematics Standards (2006)

GRADE 4

Standard 1 Number Sense:

Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems

NO.1.4.2

Use the *place value* structure of the base ten number system and be able to represent and compare *whole numbers* to millions

NO.1.4.6

Use the *place value* structure of the base ten number system and be able to represent and compare decimals to hundredths

NO.1.4.7

Write an *equivalent* decimal for a given fraction relating to money

Standard 3: Numerical Operations and Estimation

Students shall compute fluently and make reasonable estimates

NO.3.4.1

Demonstrate, with and without appropriate *technology*, *computational fluency* in multi-digit addition and subtraction in *contextual problems*

NO.3.4.2

Demonstrate fluency with combinations for multiplication and division facts (12 x 12) and use these combinations to mentally compute related problems

(30 x 50)

NO.3.4.3

Attain, with and without appropriate *technology*, *computational fluency* in multiplication and division using *contextual problems* using

- two-digit by two-digit multiplication (larger numbers with *technology*),
- up to three-digit by two-digit division (larger numbers with *technology*),
- *strategies* for multiplication and dividing numbers,
- performance of operations in more than one way,
- *estimation of products and quotients* in appropriate situations, and
- relationships between operations

NO.3.4.4

Solve simple problems using operations involving addition, subtraction, and multiplication using a variety of methods and tools

Standard 13: Systems of Measurement

Students shall identify and use units, systems and processes of measurement

M.13.4.5

Apply money concepts in *contextual situations*

Ex.

- determine the better buy
- determine change back with the least amount of currency
- compare money

GRADES 5

Standard 1 Number Sense:

Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems

NO.1.5.1

Use models and visual representations to develop the concepts of the following:

Percents:

- part-to-100

NO.1.5.2

Develop understanding of decimal *place value* using models

NO.1.5.3

Identify decimal and *percent equivalents* for *benchmark fractions*

NO.1.5.4

Round and compare decimals to a given *place value* (*whole number, tenths, hundredths*)

Standard 3: Numerical Operations and Estimation

Students shall compute fluently and make reasonable estimates

NO.3.5.1

Develop and use a variety of *algorithms* with *computational fluency* to perform *whole number* operations using addition and subtraction (up to five-*digit* numbers), multiplication (up to three-*digit* x two-*digit*), division (up to two-*digit* divisor) interpreting remainders, including real world problems

NO.3.5.2

Develop and use *algorithms*:

- to add and subtract numbers containing decimals (up to thousandths place)
- to multiply decimals (hundredths x tenths)
- to divide decimals by *whole number* divisors

NO.3.5.3

Solve, with and without appropriate *technology*, two-step problems using a variety of methods and tools (i.e. objects, mental computation, paper and pencil)

NO.3.5.4

Develop and use *strategies* to *estimate* the results of *whole number* computations and to judge the reasonableness of such results

GRADES 6

Standard 1 Number Sense:

Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems

NO.1.6.1

Demonstrate conceptual understanding to find a specific *percent* of a number, using models, real life examples, or explanations

NO.1.6.2

Find decimal and *percent equivalents* for proper fractions and explain why they represent the same value

NO.1.6.3

Round and compare decimals to a given *place value* including thousandths

Standard 3: Numerical Operations and Estimation
Students shall compute fluently and make reasonable estimates

NO.3.6.1

Apply, with and without appropriate *technology*, *algorithms* with *computational fluency* to perform *whole number operations* (+, -, x, /)

NO.3.6.2

Develop and analyze *algorithms* for computing with fractions (including mixed numbers) and decimals and demonstrate, with and without *technology*, *computational fluency* in their use and justify the solution

NO.3.6.3

Solve, with and without appropriate *technology*, multi-step problems using a variety of methods and tools (i.e., objects, mental computation, paper and pencil)

NO.3.6.4

Estimate reasonable solutions to problem situations involving fractions and decimals

NO.3.6.7

Determine the *percent* of a number and solve related problems in real world situations

Ex. tip, sales tax, discounts, etc

GRADES 7

Standard 1 Number Sense:

Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems

NO.1.7.1

Relate, with and without models and *pictures*, concepts of *ratio*, *proportion*, and *percent*, including *percents* less than 1 and greater than 100

NO.1.7.4

Find decimal and *percent equivalents* for mixed numbers and explain why they represent the same value

Standard 3: Numerical Operations and Estimation
Students shall compute fluently and make reasonable estimates

NO.3.7.1

Compute, with and without appropriate *technology*, with *integers* and positive *rational numbers* using real world situations to solve problems

NO.3.7.2

Solve with and without appropriate *technology*, multi-step problems using a variety of methods and tools (i.e., objects, mental computation, paper and pencil)

NO.3.7.3

Determine when an *estimate* is sufficient and use *estimation* to decide whether answers are reasonable in problems including fractions and decimals

NO.3.7.6

Solve, with and without *technology*, real world *percent* problems

GRADES 8

Standard 1 Number Sense:

Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems

Standard 3: Numerical Operations and Estimation

Students shall compute fluently and make reasonable estimates

NO.3.8.1

Compute, with and without appropriate *technology*, with *rational numbers* in multi-step problems

NO.3.8.2

Solve, with and without appropriate *technology*, multi-step problems using a variety of methods and tools (i.e. objects, mental computation, paper and pencil)

NO.3.8.3

Use *estimation* to solve problems involving *rational numbers*; including *ratio*, *proportion*, *percent* (increase or decrease) then judge the reasonableness of solutions

NO.3.8.6

Solve, with and without *technology*, real world *percent* problems including *percent* of increase or decrease

ALGEBRA I

Strand: Solving Equation and Inequalities

Content Standard 2: Students will write, with and without appropriate technology equivalent forms of equations and inequalities and systems of equations and solve with fluency.

- SEI.2.A1.5 Solve real world problems that involve a combination of rates, proportions, and percents.
- SEI.2.A1.8 Communicate real world problems graphically, numerically, and verbally.

Strand: Data Interpretation and Probability

Content Standard 5: Students will compare various methods of reporting data to make inferences or predictions.

- DIP.5.A1.3 Construct simple matrices for real life.
- DIP.5.A1.10 Communicate real world problems graphically, numerically, and verbally.

ALGEBRA A

Strand: Solving Equation and Inequalities

Content Standard 2: Students will write, with and without appropriate technology equivalent forms of equations and inequalities and systems of equations and solve with fluency.

- SEI.2.A1.5 Solve real world problems that involve a combination of rates, proportions, and percents.
- SEI.2.A1.8 Communicate real world problems graphically, numerically, and verbally.

Strand: Data Interpretation and Probability

Content Standard 5: Students will compare various methods of reporting data to make inferences or predictions.

- DIP.5.A1.3 Construct simple matrices for real life.

ALGEBRA B

Content Standard 2: Students will write, with and without appropriate technology equivalent forms of equations and inequalities and systems of equations and solve with fluency.

- SEI.2.A1.8 Communicate real world problems graphically, numerically, and verbally.

Strand: Data Interpretation and Probability

Content Standard 5: Students will compare various methods of reporting data to make inferences or predictions.

- DIP.5.A1.10 Communicate real world problems graphically, numerically, and verbally.

Connections between *Hands on Banking* and *Arkansas Social Studies Curriculum Framework (2007)*

Strand : Economics

Standard 7: Choices

GRADE 4

E.7.4.1 Evaluate the priority of economic wants and consequences of the *opportunity cost*

GRADE 5

E.7.5.1 Identify the basic economic wants and needs of all people

E.7.5.2 Recognize that choices have both present and future consequences

GRADE 6

E.7.6.1 Examine how the economic wants and needs of all people may or may not be fulfilled

E.7.6.2 Demonstrate an understanding that choices have both present and future consequences

GRADE 7

E.7.7.1 Discuss economic wants and needs of people over time

GRADE 8

E.7.8.2 Analyze the impact of present choices on future consequences

Standard 9: Markets

GRADE 4

E.9.4.1 Discuss the characteristics of money:

- *portability*
- *divisibility*
- *durability*
- *uniformity*

E.9.4.2 Describe the reasons for saving money in a financial institution:

- interest
- safety

GRADE 5

E.9.5.1 Describe the characteristics of money:

- *portability*
- *divisibility*
- *durability*
- *uniformity*

E.9.5.2 Examine the reasons for using a financial institution for saving money:

- interest (rate of return)
- safety

E.9.5.3 Identify methods people use to save and spend money

GRADE 6

E.9.6.1 Examine the characteristics of money:

- *portability*
- *divisibility*
- *durability*
- *uniformity*

E.9.6.2 Compare the various types of financial institutions that provide savings accounts:

- interest (rate of return)
- safety

E.9.6.3 Determine the advantages and disadvantages

GRADE 7

E.9.7.3 Discuss the necessity of accounting systems to document transactions

GRADES 9-12 (June 2009)

Strand: Personal Financial Management

Content Standard 11: Students shall analyze career choices, education, skills, and economic conditions affecting earnings potential.

PFM.11.E.2 – Interpret factors affecting income

- Career choices and potential income
- Education and training

PFM.11.E.3 – Analyze the costs and benefits of personal choices in education and training that affect

Content Standard 12: Students shall evaluate the impact of credit on personal financial decisions.

PFM.12.E.2 – Evaluate the costs and benefits of using credit

- Interest rates
- Fees and penalties
- Reward

PFM.12.E.3 – Explain factors that affect credit worthiness

- Credit score and credit report
- Debt management (e.g., credit counseling, debt consolidation, bankruptcy)

PRM.12.E.4 – Explain ways to avoid and correct credit problems (e.g., credit counseling, identity protection, debt consolidation, bankruptcy)

Content Standard 13: Students shall evaluate wealth management choices available to individuals.

PFM.13.E.1 – Discuss the importance of establishing personal financial goals (e.g., long term, short term)

PFM.13.E.2 – Identify reasons for saving and investing (e.g., education, emergency, down payment, retirement)

Connections between *Hands on Banking* and Arkansas K-12 English/Language Arts Curriculum Framework, (2008)

GRADE 4

Standard 9 Reading Comprehension

- Organize prior knowledge and new information to make meaning of the text.
- Use inferences to expand understanding of content knowledge.

Standard 10 Variety of Texts

- Read a variety of informational texts, including comparative formats.

Standard 11 Vocabulary, Word Study and Fluency

- Use context clues to determine the precise meaning of new word.
- Use word-reference materials, including the glossary, dictionary, and thesaurus, to make meaning of unknown words.
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Standard 12 Research/Inquiry Process

Collect information about an assigned or self-selected topic using resources of the media center, including Internet, print, and media.

GRADES 5-8

Standard 9 Reading Comprehension

- Monitor comprehension in relation to questions generated
- Connect own background knowledge and personal experience to make inferences and to respond to new information presented in text.

Standard 11 Vocabulary, Word Study and Fluency

- Add content words to sight vocabulary.
- Use resources to determine meaning of technical and specialized vocabulary.

GRADES 9-12

Strand: Oral and Visual Communication

Standard 2: Listening – Students shall demonstrate effective listening skills in formal and informal settings.

- Listening for information, interpretation, critical analysis, and evaluation
 - Grade 9 (OV.2.9.2) Establish a purpose for listening and identify relevant information
 - Grade 10 (OV.2.10.2) Identify barriers to listening and generate methods to overcome them
 - Grades 11 & 12 (OV.2.11.1) 12 (OV.2.12.1) Demonstrate critical, empathetic, and reflective listening to interpret, respond to, and evaluate speakers' messages.
 - Grades 11 & 12 (OV.2.11.5) 12 (OV.2.12.6) Demonstrate attentive, reflective, critical, and empathetic listening skills to respond to and interpret speaker's message.

Strand: Reading

Standard 9: Comprehension – Students shall apply a variety of strategies to read and comprehend printed material

- Grades 9 (R.9.9.5), 10 (R.9.10.5), 11 (R.9.11.5) 12 (R.9.12.5) Draw inferences from a sentence, paragraph, passage, complete selection, multiple selections, and author's (including conclusions, generalizations, and predictions) and support them with text evidence.
- Grades 9 (R.9.9.8), 10 (R.9.10.7), 11 (R.9.11.6), 12 (R.9.12.7) Summarize and paraphrase structures in informational and literary texts, including relationships among concepts and details

Standard 10: Variety of Text – Students shall read, examine, and respond to a wide range of texts

- Grades 9 (R.10.9.1), 10 (R.10.10.1), 11 (R.10.11.1), 12 (R.10.12.1) Read across the curriculum a variety of such *practical texts* as advertisements, warranties, manuals, handbooks, agendas, labels, warnings and directions, job and career descriptions, applications, college catalogs, financial documents, and contracts.

Standard 11: Vocabulary, Word Study, and Fluency – Students shall acquire and apply skills in vocabulary development and word analysis to be able to read fluently.

- Grades 9 (R.11.9.1), 10 (R.11.10.1) Expand vocabulary through reading, listening, and discussing.
- Grades 11 (R.11.11.1), 12 (R.11.12.1) Recognize and apply specialized vocabulary
- Grades 9 (R.11.9.3), 10 (R.11.10.3), 11 (R.11.11.3), 12 (R.11.12.3) Use reference materials including glossary, dictionary, thesaurus, and available technology to determine precise meaning and usage of words and to facilitate and extend learning.

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