

Planning Instruction in Financial Literacy

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“Financial Education can be compared to a road map to the American Dream. I believe that we need to teach all Americans the necessary tools to read that map, so they can reach the dream.”

Paul O’Neill
Former Secretary of the Treasury

Chapter Overview

This section provides a structure for lesson development and sample financial literacy lessons to teach financial literacy. This is not intended to be the only way to plan a unit or lesson or an inclusive listing of activities one could utilize. Instead, this is a starting point to introduce students to financial literacy, and establish a foundation upon which the classroom teacher could expand as familiarity with the topic increases. A great place to start would be to read Chapter 5 of the *Planning a Connected Curriculum* (DPI 2003). It outlines eight principles to consider when developing instruction that connects various curricular areas.

Connecting to the Standards

Good financial literacy instruction is based on what we know about learning. Good curriculum design is based on what is needed to guarantee good instruction, what is needed to guarantee learning. The curriculum provides a set of targets so that all assessment and instruction produces the desired results, described as the curricular goals.

Standards-based curriculum units are based on progress toward the seven content standards. Units that are thematically rich should begin with the content standards. Some units are more developmental in nature, without big projects or presentations. Some units may be more summative in nature, where skills and knowledge are pulled together from previous units. In all units, however, the emphasis should be on the targeted performance that will provide students and teachers with clear evidence of progress toward financial literacy.

Another key component in financial literacy education is its many connections to other curricular areas and model academic standards. Teachers must decide what the purpose of the course and lesson is and then see how financial literacy topics are covered within the content they are teaching. Here are the questions to ask when planning a unit:

1. What do I want all students to know and do? (Rigor)
2. Why? (Relevance)
3. What do I need to know and do to get them there?
4. How will I get them there? (Teaching Strategies)
5. How will I know when they learned it? (Formative and Summative Assessment)
6. What will I do when they don’t learn it OR if they already know it?

“What are the principles of good education? Well it starts with having high standards, high expectation. It starts with having people who believe that every single child can learn.”

President George W. Bush;
Remarks at Rufus King High
School, Milwaukee, WI,
May 8, 2002

These questions can help guide unit planning. The key question is, “Why?” The *why* is where financial literacy can be the connecting factor. If the focus of the unit is financial literacy the *why* is defined by the content standards in financial literacy. But if the purpose of the unit is another content area, then financial literacy can be one of the vehicles to learn the content, bringing relevance to the content. The *why* is the greater purpose, and financial literacy can be the greater connecting purpose, bringing many content areas together. For instance, “*Why study the impact of international trade?*” One can argue that international trade is connected to understanding how and why certain products we buy as consumers come from other parts of the world. This connects to the financial literacy standards of “being a critical consumer” and “community and fiscal responsibility.” What if an English teacher asks students to read *Death of a Salesman*? Besides the connection to *Wisconsin’s Model Academic Standards for English Language Arts* (DPI 1998), the connecting *why* may be to understand the relationship between income and education, money management and planning, saving, and investing. The financial literacy standards can be one of the many bigger reasons for studying specific content. Considering the financial aspects can help students see the relevance of many curricular areas.

Teachers need to think about the standards early on in a unit. They can start with their primary content standards to answer the *what* they want student to know and be able to do but then they can use the financial literacy standards to answer the *why* they want them to know it. Start with the financial literacy content standards for the *why* and then add the core performance and grade level performance standards to question one. A teacher can use the following matrix as a tool whenever planning a unit to see if any of the financial literacy concepts connect to the curriculum. They can look through *Wisconsin’s Model Academic Standards for Personal Financial Literacy* and use those to think of connections to specific content they currently teach.

Thinking Template for Integrating *Wisconsin's Model Academic Standards for Personal Financial Literacy*

Table 2.1

Wisconsin's Model Academic Standards

Content connections (what content do I currently teach that connects with this standard?)

Relating Income and Education

- A.1 Understand how career choice, education, skills, entrepreneurship and economic conditions affect income.
- A.2 Understand the sources of income and alternative resources.
- A.3 Explain how income affects lifestyle choices and spending decisions.
- A.4 Explain how taxes and employee benefits relate to disposable income.

Money Management

- B.1 Demonstrate ability to use money management skills and strategies.
- B.2 Understand the purposes and services of financial institutions.
- B.3 Develop a financial vision based on an examination of personal values.
- B.4 Understand the history, purposes, roles, and responsibilities related to taxation.

Credit and Debt Management

- C.1 Identify and evaluate credit products and services.
- C.2 Identify and compare sources of credit.
- C.3 Identify and evaluate interest rates, fees, and other charges.
- C.4 Interpret credit sources and reports.
- C.5 Calculate the cost of borrowing.
- C.6 Explain the rights and responsibilities of buyers and sellers under consumer protection laws.
- C.7 Understand how to leverage debt.
- C.8 Describe the implications of bankruptcy.
- C.9 Analyze the pros and cons of high cost alternative financial services.

Planning, Saving, and Investing

- D.1 Apply strategies for creating wealth/building assets.
- D.2 Match appropriate financial services and products with specified goals.
- D.3 Describe the relationships between saving and investing.
- D.4 Apply the concepts of supply and demand to stock market price changes.
- D.5 Demonstrate ability to use decision-making processes in making financial decisions related to planning, saving, and investing.

Thinking Template for Integrating *Wisconsin's Model Academic Standards for Personal Financial Literacy*

Table 2.1

Wisconsin's Model Academic Standards

Content connections (what content do I currently teach that connects with this standard?)

Becoming a Critical Consumer

- E.1 Understand the impact of contextual factors associated with consumer decision making (e.g., social, historical, political, family, cultural, philosophical).
- E.2 Investigate the purposes, strategies, and effects of various business practices, including sales schemes or scams.
- E.3 Understand the cost of interest rates and fees associated with financial services.
- E.4 Understand that verbal contracts are as binding as written agreements.
- E.5 Identify sources of consumer protection and assistance including public institutions and private organizations (professionals, publications, and Internet).
- E.6 Examine critically the impact of socio-cultural norms and demographics related to money, saving, and spending.

Community and Financial Responsibility

- F.1 Understand factors that affect citizen financial decisions and actions.
- F.2 Practice skills related to fiscal responsibility and personal decision making.
- F.3 Integrate and apply financial knowledge, attitudes, and skills.
- F.4 Understand the interdependent role of government, business, consumer, and personal finance in the economy.
- F.5 Examine the impact that government, business, consumer and financial decisions and actions have on the individual, family, community, society, and world.

Risk Management

- G.1 Understand the nature of personal financial risk and the importance of protecting against financial loss.
- G.2 Examine the need for and value of various types of insurance within the life cycle.
- G.3 Integrate and apply concepts related to personal financial risk, protection from loss, and financial planning.

Deciding What You Want Students to *Know and Do*

First and foremost, deciding what students should know and do should be a collaborative discussion with other teachers, administrators, and community members. Planning instruction in financial literacy begins with creating instructional goals using the standards. Making connections to what you are teaching will be helpful. The gap analysis, from the previous chapter, will help define what is already happening and will identify where work needs to be done. Planning instruction begins with deciding how the standards fit into the big picture. A teacher needs to ask the following questions when implementing the financial literacy standards into current curriculum:

- What is the purpose of implementation?
- How does this connect to what I am already teaching? Where do the financial literacy standards naturally fit?
- How do the financial literacy standards connect to what I want students to know and do?

The answers to these questions can come from the standards. The standards can help clarify what you are working towards in terms of knowledge and skills. For instance, performance standard D.5 states students must be able to “demonstrate ability to use decision-making processes in making financial decisions related to planning, saving, and investing.” To reach this standard a student must understand the process for making financial decisions, and the concepts of planning, saving, and investing. This is what students should *know*. They also must be able to make financial decisions, which includes identifying a problem and alternatives to the problem, developing criteria to make a decision, rank criteria, evaluate, and finally make a decision. All of this is what you want the students to *do*. Each standard that connects to the curriculum can help determine what a student is expected to *know* and *do*.

Determining the Big Ideas

The next step is to determine the big ideas or concepts that are the most important for students to understand. The big ideas come from the standards. Teachers need to see what students need to know and do, and identify the big ideas students need to walk away with. They should then build a pre-assessment around the big ideas so they can determine where they need to balance their instructional time.

The big ideas should then be turned into key questions for students to work through in a unit. For instance, grade level performance standard A.4.12.1 states, “Identify potential sources of income.” Let’s say a history teacher is teaching about women’s rights and chooses this standard as the one to cover in addition to the other social studies standards being addressed. The financial literacy concept that students need to comprehend is “income.” A key question a student could work through would be, “How does education impact potential sources of income for women?” Notice the key question is not, “What are potential sources of income?” That is a much lower level question. A student must incorporate the answer to this question into their answer for the first question.

Developing Key Questions

Questions are the key to helping teachers help students connect and understand curriculum. When students grapple with financial literacy questions, built using the standards and Bloom's Taxonomy, they begin to construct their own financial literacy. The content and core performance standards can help teachers write key questions. Teachers develop key questions that get at the heart of the content using the content standards, and then develop grade level focusing questions using the core performance standards. Here are some examples:

Standard	Sample Key Question
A.1 Understand how career choice, education, skills, entrepreneurship, and economic conditions affect income.	What factors impact income?
B.3 Develop a financial vision based on an examination of personal values.	How do personal values connect to a financial vision?
C.8 Describe the implications of bankruptcy.	How does bankruptcy impact a person's life?

Figure 2.1

Asking Key Questions During the Learning

Key questions help guide the lesson and the learning. Teachers pose questions throughout a lesson to engage students and to deepen the learning. The following chart gives examples of ways to ask questions from six levels.

Level 1—Knowledge

Exhibits previously learned material by recalling facts, terms, basic concepts, and answers.

Key Words

Who, what, why, when, omit, where, which, choose, find, how, define, label, show, spell, list, match, name, relate, tell, recall, select

Sample Questions

What is...? How is...?

How did _____ happen? How would you explain...?

Why did...? How would you describe...?

When did...? Can you recall...?

How would you show...? Can you select...?

Level 2–Comprehension

Demonstrates understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.

Key Words

Compare, contrast, demonstrate, interpret, explain, extend, illustrate, infer, outline, relate, rephrase, translate, summarize, show, classify

Sample Questions

How would you classify the type of...?

How would you compare...? contrast...?

Will you state or interpret in your own words...?

How would you rephrase the meaning...?

What facts or ideas show...?

Which statements support...?

Can you explain what is happening...what is meant...?

How would you summarize...?

Level 3–Application

Solves problems by applying acquired knowledge, facts, techniques, and rules in a different way.

Key Words

Apply, build, choose, construct, develop, interview, make use of, organize, experiment with, plan, select, solve, utilize, model, identify

Sample Questions

How would you use...?

What examples can you find to...?

How would you solve _____ using what you have learned...?

How would you organize _____ to show...?

How would you show your understanding of...?

What approach would you use to...?

How would you apply what you learned to develop...?

What other way would you plan to...?

What would result if...?

Can you make use of the facts to...?

What elements would you choose to change...?

Level 4–Analysis

Examines and breaks information into parts by identifying motives or causes; makes inferences and finds evidence to support generalizations.

Key Words

Analyze, categorize, classify, compare, contrast, discover, dissect, divide, examine, inspect, simplify, survey, take part in, test for, distinguish, list, distinction, theme, relationships, function, motive, inference, assumption, conclusion

Sample Questions

What are the parts or features of...?
How is _____ related to...?
Why do you think...?
What is the theme...?
What motive is there...?
Can you list the parts...?
What inference can you make...?
What conclusions can you draw...?
How would you classify...?
How would you categorize...?
Can you identify the different parts...?
What evidence can you find...?
What is the relationship between...?
Can you make a distinction between...?
What is the function of...?
What ideas justify...?

Level 5–Synthesis

Compiles information together in a different way by combining elements in a new pattern or proposing alternative solutions.

Key Words: build, choose, combine, compile, compose, construct, create, design, develop, estimate, formulate, imagine, invent, make up, originate, plan, predict, propose, solve, solution, suppose, discuss, modify, change, original, improve, adapt, minimize, maximize, delete, theorize, elaborate, test, improve, happen, change

Sample Questions

What changes would you make to solve...?
How would you improve...?
What would happen if...?
Can you elaborate on the reason...?
Can you propose an alternative...?
Can you invent...?
How would you adapt _____ to create a different...?
What could be done to minimize (maximize)...?
What way would you design...?
What could be combined to improve (change)...?
Suppose you could _____ what would you do...?
Can you predict the outcome if...?
Can you think of an original way for the...?

Level 6–Evaluation

Presents and defends opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria.

Key Words

Award, choose, conclude, criticize, decide, defend, determine, dispute, evaluate, judge, justify, measure, compare, mark, rate, recommend, rule on, select, agree interpret, explain, appraise, prioritize, opinion, support, importance, criteria, prove, disprove, assess, influence, perceive, value, estimate, influence, deduct

Sample Questions

Do you agree with the actions...? with the outcomes...?

Can you assess the value or importance of...?

Would it be better if...?

What would you recommend...?

How would you rate the...?

What would you cite to defend the actions...?

How would you evaluate...?

How could you determine...?

What choice would you have made...?

How would you prioritize...?

What judgment would you make about...?

Based on what you know, how would you explain...?

What information would you use to support the view...?

How would you justify...?

What data was used to make the conclusion...?

Why was it better that...?

How would you prioritize the facts...?

How would you compare the ideas...? people...?¹⁷

What Do Students Need to Do?

The financial literacy standards determine the *do* also. The performance standards clearly outline what students should do in terms of the specific content. Skills also cross disciplines and fall into five general categories: application of the basics, ability to think, skill in communication, production of quality work and connections with community. Financial literacy instruction contributes to the development of these skills. The skills are embedded in the standards. The content standards outline the basic skills and the core performance and grade level performance standards address the other areas. The skills encourage the development of shared applications, both to promote the learning of the subject content and to extend learning across the curriculum. These skills are the ones that parents, community members, and employers reference as what they expect from high school graduates. At the 2007 Business Summit, convened by State Superintendent Elizabeth Burmaster, statewide business leaders once again confirmed the importance of the five skill areas mentioned above.

¹⁷All of the questions came from the following reference: Quick Flip Questions for Critical Thinking, based on Bloom's Taxonomy and developed by Linda G. Barton.

Table 2.2

Skill Categories Across the Curriculum Standards

<i>Skill</i>	<i>Financial Literacy Example</i>
1. Application of the Basics	B.4 Understand the history, purposes, roles, and responsibilities related to taxation.
2. Ability to Think <ul style="list-style-type: none"> • Problem solving • Informed decision making • Systems thinking • Critical, creative, and analytical thinking • Imagining places, times, and situations different from one's own • Developing and testing a hypothesis • Transferring learning to new situations 	E.2 Investigate the purposes, strategies and effects of various business practices, including sales schemes or scams. D.5 Demonstrate ability to use decision-making processes in making financial decisions related to planning, saving, and investing.
3. Skill in Communication <ul style="list-style-type: none"> • Constructing and defending an argument • Working effectively in groups • Communicating plans and processes for reaching goals • Receiving and acting on instructions, plans, and models • Communicating with a variety of tools and skills 	C.8 Describe the implications of bankruptcy.
4. Production of Quality Work <ul style="list-style-type: none"> • Acquiring and using information • Creating quality products and performances • Revising products and performances 	B.1 Demonstrate ability to use money management skills and strategies.
5. Connections with Community <ul style="list-style-type: none"> • Recognizing and acting on responsibilities as a citizen • Preparing for work and lifelong learning • Contributing to the aesthetic and cultural life of the community • Seeing oneself and one's community within the state, nation, and world • Contributing and adapting to scientific and technological change 	F.5 Examine the impact that government, business, consumer and financial decisions and actions have on the individual, family, community, society, and world.

Financial Literacy Link to Standards of the Heart

The final and most important component is the *behave*, the behavior or attitudes developed. The content associated with financial literacy lends itself to inform people so they can behave in a more financially knowledgeable and responsible way. Attitudes or dispositions focus around being reflective, being a continuous learner, respectful to self and others, and being collaborative. These attitudes or dispositions are outlined in DPI's *Standards of the Heart*. Teachers can look through the *Standards of the Heart* (http://dpi.wi.gov/sspw/foster_heart.html) when planning instruction in personal financial literacy to identify what dispositions the unit and lesson focus on. The chart below can help teachers think through how to design activities and plan instruction that focus on the development of these dispositions.

Linking to Standards of the Heart

Table 2.3

<i>Standards and Indicators for Standards of the Heart</i>	<i>Strategy to Implement Into Instruction</i>
Core Values	
<ul style="list-style-type: none">• Feel ownership for core values• Have clear expectations for behavior and attitudes• Recognize and practice core values in everyday life• See the values modeled within and outside the school• Have a greater variety of ways to demonstrate success	
Safe and Orderly Places	
<ul style="list-style-type: none">• Contribute to a positive classroom climate• Understand their actions are viewed as an opportunity for learning	
Family and Community Involvement	
<ul style="list-style-type: none">• Make meaningful connections with more adults• Demonstrate good citizenship outside the school• Feel their role as a citizen is valued and supported by the home, school, and community• Welcome and encourage their family's participation in school	

“If schools can integrate personal finance into core math and reading standards, it will help promote financial education for our nation’s youth and make math and reading more relevant as well.”

Former Treasury Assistant Secretary Sheila C. Bair, Office of Financial Education Panel Discussion, May 16, 2002

Linking to Standards of the Heart

Table 2.3

<i>Standards and Indicators for Standards of the Heart</i>	<i>Strategy to Implement Into Instruction</i>
	Address Societal Issues
	<ul style="list-style-type: none">• Integrate and evaluate information about many social issues• Access a variety of programs and services that support them in making good decisions• Become better informed about community resources
	Positive Relationships
	<ul style="list-style-type: none">• Take advantage of opportunities to help other students• Develop mentor/mentee relationships• See and experience their own and others' cultures, contributions, and traditions
	Engage Students' Minds
	<ul style="list-style-type: none">• Value learning because of its connection to everyday life• Show greater acceptance and appreciation of diversity• Develop perseverance in and outside the classroom• Have many opportunities to build on their individual talents and interests• Enjoy school and want to be there
	High Expectations
	<ul style="list-style-type: none">• Strive for personal and social achievement• See expectations modeled and supported by peers and adults

Adapted from *DPI Standards of the Heart (1998)* http://dpi.wi.gov/sspw/foster_heart.html

Ways to Assess and Instruct

The next step is to decide how students will “show what they know.” Assessment gives students a chance demonstrate their level of understanding. There is a variety of times and reasons to assess. Most can be built into the planning. The financial literacy standards can be the basis of an effective assessment because they were built using the rigor and relevance model. This is where the financial literacy standards can bring relevance to other curricular areas. For instance, a high school social studies teacher may want students to be able to understand the role of a citizen as part of a civics course. A high-level, relevant assessment could ask the students to “write a paper critically examining the consequences of consumer-citizen decisions and actions on the economy, broader society, and the environment” (financial literacy standard F.12.5.2). The structure, content, and wording of the financial literacy standards can help teachers in other content areas develop rigor and relevant assessments, while at the same time connecting their content to the financial literacy standards.

Instructional Strategies

Best instructional practice in financial literacy is best practice in all other areas. It should include reading, writing, multiple perspectives, collaboration. Instructional best practice has been researched and defined in *Classroom Instruction That Works* by Robert Marzano (Marzano, Pickering, and Pollock, 2001). He and his colleagues researched and outlined teaching practices that make a difference in student learning. The practices that impact students the most are:

- Identifying similarities and differences
- Summarizing and note taking
- Reinforcing effort and providing recognition
- Homework and practice
- Nonlinguistic representations
- Cooperative learning
- Setting goals and providing feedback
- Generating and testing hypotheses
- Activating prior knowledge ¹⁸

Each content area also has certain instructional strategies that best connect the content and learning for students (see planning curriculum guides for each content area - <http://dpi.wi.gov/pubsales/index.html>). Another example of best practice is the 4MAT model of instruction. 4MAT is an open-ended model that offers teachers a method for broadening their delivery of instruction and assessment. It specifically encompasses strategies that appeal to the diverse approaches learners have to the learning process. This method requires that teachers break out of the traditional lecture approach of lesson design by using more active learning processes and strategies as well as the more reflective modes of teaching. The

¹⁸Marzano, Robert J., Debra Pickering and Jane E. Pollock. 2001. *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. Alexandria VA: Association for Supervision and Curriculum Development.

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Treasury Secretary Paul H. O’Neill

basic premise of 4MAT is that while students favor different places on the 4MAT cycle according to their learning, they all need to go through the four major steps when learning anything. The four major steps begin a cycle of learning by asking:

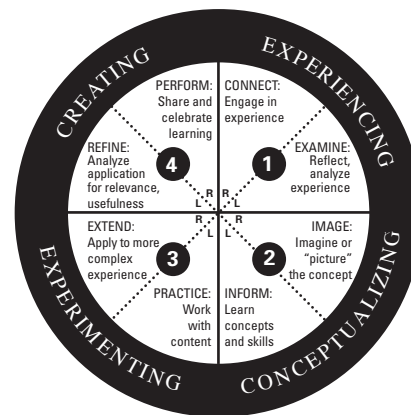
Why is this important to learn? The learner connects and attends to personal meaning of the concept being introduced.

What is the concept? This is the traditional focus we find in the classroom, informing the learner what is important to know.

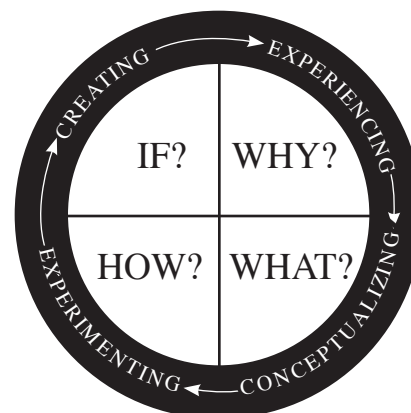
How can the learner use this? The application of knowledge is essential. The learner questions how this information fits into the real world, enabling the learner to *answer* and be able to *do something* with the information.

What are the possibilities? The final step in the learning cycle asks the learner to create new possibilities of the concept. This is where the transformation of learning takes place and the learner takes the information and makes it his/her own. You can find our more about the 4MAT model on Pages 53-56 of the *Planning a Connected Curriculum* publication (DPI 2003).

The 4MAT System: A Cycle of Learning



The 4MAT System: A Cycle of Learning



Best Practice in Financial Literacy Instruction

Best practice in instruction in financial literacy has two essential components: integration and relevance.

Integration

Financial literacy instruction naturally connects various content areas. When teachers teach financial literacy as a separate course or as a part of an integrated course students begin to understand that disciplines do not operate in a vacuum. The content and concepts of financial literacy naturally lead to disciplinary connections. Disciplinary perspectives may also differ in terms of implementing the financial literacy standards. Each discipline may look at financial literacy concepts through different lenses. An economist may look at the concept of savings much differently than a historian or mathematician. Financial literacy can determine the purpose for learning and the specific disciplines can be the vehicles for understanding.

Relevance

Instruction in financial literacy has to be relevant. There is really no possible way for students to learn how to be financially literate without directly working with the content and concepts. To understand financial literacy concepts students need to practice them. Instruction in financial literacy naturally connects to the real world. The standards are written in a way to get students engaged, and the concepts and content expected at each grade level are connected to real-life issues. Because of the relevance embedded in financial literacy it becomes natural practice to engage students. You cannot teach financial literacy with getting students engaged.

Ways to Refine, Accommodate, and Extend Learning Opportunities

The structure of the financial literacy standards also allows for an easy way to refine or extend expectations and instruction. All grade levels of the financial literacy standards connect to the same content and performance standards. This makes it easy for a teacher to help students who do not understand a concept gain a more basic understanding of the concept by using the wording from the standard of the previous grade. For instance, if a teacher finds that a student is having a problem “developing a personal concept of financial risk management” (G.12.1.2), he/she might want to ask the student to “identify different forms of financial risk” (G.4.1.2) or “explain how to reduce financial risk to self, family, and community” (G.8.1.2). A teacher can go the other way to extend a lesson for a student who comes into class with a solid understanding. The grade level performance standards can really help a teacher refine or extend a lesson depending on student needs.

See Appendix D.