

Indiana Department of Education – Division of College & Career Preparation Indiana Career and Technical Education Course Description and Standards

Information Guide for

Career and Technical Education Course Assessment Tools

Personal Financial Responsibility

July 2012

Assessment-Tool Development Team

This Team included equal representation of Business teachers and Family & Consumer Sciences teachers. Names are listed alphabetically.

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Information Guide for

Indiana Career and Technical Education Course Assessment Tools

Personal Financial Responsibility

During June and July 2012, the team of teachers listed on the cover page developed three standards-based assessment tools for the Indiana high school course, *Personal Financial Responsibility* course: (1) **Test Blueprint**, (2) **Content Outline**, and (3) **Bank of Multiple Choice Test Items**. In preparation for their work, team members completed an online tutorial that provided an overview of assessment fundamentals and principles of standards-based assessment, plus guidelines for developing the three assessment tools. The team met in person once, in a day-long work session. The balance of their work was done online through weekly web-conferencing sessions, sharing of information and documents on an online team Worksite, and e-mail communications. The draft materials the team developed were posted on an online review site where other teachers examined them and provided feedback. Team members and project staff used the reviewers' input to revise, finalize, and validate the assessment tools.

In this project, the work was <u>standards-based</u>. The Domains and Standards in the current Indiana Course Framework were the starting-point and continuous foundation for the work. In contrast to standards-referenced efforts that begin with existing materials and then locate matching standards, the team's deliberations started first with the standards, and the assessment tools were developed from there.

The **Test Blueprint** is presented on page 4 of this document. The Blueprint shows the standards-based weighting and item distribution recommended by the team for a statewide course assessment. It is important to distinguish between a test blueprint and the overall course curriculum. The Test Blueprint shows the recommended weighting of a 65-item multiple choice test. This may or may not be the same as the weighting of the course curriculum. Other types of assessment may be more suitable for some of the domains and standards included in the Course Framework. Therefore, a domain that is given less weight in the Test Blueprint could be given more emphasis in the overall course, and student achievement would be locally evaluated using other types of assessment tools.

The **Content Outline** also is provided on the pages that follow. It identifies and describes essential topics related to the course standards. The Content Outline is the team's consensus on the <u>essential topics</u> that should be <u>consistently</u> addressed <u>statewide</u> in the course, and which would be expected to be represented in the statewide assessment. The additional details given in the Content Outline provide a framework for local course design, curriculum, and instruction. The Content Outline also will enhance teacher collaboration and consistency of the course across the state. It is important to note that a content outline is <u>not all-inclusive</u> of the topics addressed in the Course Framework nor in a local course, where additional topics may be included.

The Test Blueprint and Content Outline provided the basis for the third assessment tool the team developed, the **Bank of Multiple Choice Test Items**. The items in this bank are based on the essential topics listed in the Content Outline. Items are distributed across these topics, at three levels of cognitive complexity as further explained on the next page. The four-option multiple choice test items each have one correct answer. A large number of items are included in the bank, enabling each online test to be a unique combination of items selected from the item bank through stratified random sampling, based on the weighting indicated in the Test Blueprint. For test security purposes, the bank of test items is controlled by the Indiana Department of Education. An online pretest/posttest course assessment for this course will be provided by the DOE for schools/teachers to use on a voluntary basis beginning in the spring semester of 2013.

Test Items and Levels of Cognitive Complexity

The test items included in the test bank were examined and classified in two ways. First, the items were to focus on an essential topic from the Content Outline. Secondly, the items were to represent varying levels of cognitive complexity, or types of thinking required. The Cognitive Complexity Three Level Framework (Fox & Laing-Kean, 2012) was used to classify the test items based on the three levels shown in the center column of the chart below. This Framework draws on classifications by AAFCS (2010), Fox (2001), and Haladyna (2004). Overall, test items classified as Level 1 focus on recall and understanding of an individual fact or concept. Level 2 items involve combined knowledge of at least two familiar facts or concepts to complete an analysis and reach a conclusion. Level 3 questions require understanding and applying relationships among three or more components and typically involve selecting and/or providing relevant information in order to calculate, predict, or make a judgment.

Revised Bloom's Taxonomy Anderson & Krathwohl	Cognitive Complexity Three Level Framework	Depth of Knowledge Indiana RISE
Remember	Level 1 – Facts, Concepts Known truth or experience.	Level 1 – Recall
Understand	Involves knowledge of individual facts and abilities to identify familiar examples or non-examples.	Level 2 – Skill/Concept
Annly	Level 2 - Procedures	
Apply	Series of events that lead to a result. Involves remembering and	
Analyze	understanding at least two types of information to reach a conclusion.	Level 3 – Strategic Thinking
Evaluate	Level 3 – Principles	
Evaluate	Relationships among rules, theories, methods, concepts, or probabilities.	
Create	Involves multiple facts, concepts, and procedures to predict events.	Level 4 – Extended Thinking

W.S. Fox & C.A.M. Laing-Kean, Teach Sharp LLC, 2012

The above chart illustrates the relationships among the Cognitive Complexity Three Level Framework used in this project with the six categories of the Revised Bloom's Taxonomy (Anderson & Krathwohl, 2001) and the four categories of the Depth of Knowledge (DOK) framework used in the Indiana RISE system. As the chart shows, the other two systems are fully accounted for in the Three Level Framework. In particular, it is important to note that Level 1 in the Three Level Framework is more extensive that the DOK Level 1, including much of DOK Level 2. Level 2 of the Three Level Framework includes most of DOK Level 3, and Level 3 of the Three Level Framework is primarily comprised of DOK Level 4. Based on this comparison, the following equivalent notations could be used:

Level 1 = DOK 1+2

Level 2 = DOK 2+3

Level 3 = DOK 3+4

References

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Haladyna, T. M. (2004). *Developing and validating multiple-choice test items* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.

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Test Blueprint
for
Personal Financial Responsibility

		Number of Test Items			
Domain	Weighting	Cognitive Levels ¹			Totals
		L1	L2	L3	Totals
1. Financial Responsibility and Decision Making	10%	3	2	2	7
2. Relating Income and Careers	15%	4	3	2	9
3. Planning and Managing Money	25%	6	5	5	16
4. Managing Credit and Debt	25%	6	5	5	16
5. Risk Management and Insurance	10%	3	2	2	7
6. Saving and Investing	15%	4	3	3	10
Totals	100%	26	20	19	65

¹Proportional representation of cognitive levels within in each Domain is based on the Cognitive Complexity Three Level Framework (Fox & Laing Kean, 2012), which is correlated with the Indiana RISE Depth of Knowledge (DOK) framework.

Level 1 - 40%	Level 2 - 30%	Level 3 – 30%
Level 1 = DOK 1+2	Level 2 = DOK 2+3	Level 3 = DOK 3+4

Content Outline

A Content Outline is based on the Indiana Course Framework for a specific course. Each Content Outline was developed by a team of Indiana educators and represents their consensus on the <u>essential topics</u> that should be <u>consistently</u> addressed <u>statewide</u> in the specific course, and which would be expected to be represented in the statewide Assessment. A content outline is <u>not all-inclusive</u> of the topics addressed in the Course Framework or in a local course. Additional topics may be included in a course as time permits, to address student and community interests and needs.

For the *Personal Financial Responsibility* (PFR) course, the six major standards of the Course Framework are subdivided into 27 specific standards. These specific standards are further delineated by 61 indicators. Of the 61 indicators, 37 are designated on the Course Framework as "essential for all students to master." The PFR content outline and test blueprint are based only on the 37 essential indicators, which represent 22 of the 27 specific standards. As a result, the content outline lists "essential topics" only for the 37 essential indicators. The other 24 indicators are included in the pages that follow, but essential topics are not listed for those.

The Content Outline for *Personal Financial Responsibility* is presented on the pages that follow.

Content Outline

for

Personal Financial Responsibility

Domain 1 – Financial Responsibility and Decision Making	Weighting 10%	Number of Test Items 7
Core Standard 1:		

Students demonstrate management of individual and family finances by applying reliable information and systematic decision making.

PFR 1.1 Demonstrate taking responsibility for personal financial decisions.

PFR -1.1.a Explain how individuals demonstrate responsibility for financial well-being over a lifetime.

Essential Topics

- 1. Life cycle stages and how these relate to financial well-being.
- 2. Key Terms Single, married, divorced, with dependents and without dependents, young adult, mid-life, and retirement.
- PFR-1.1.b Analyze ways financial responsibility is different for individuals with and without dependents.
- PFR 1.2 Analyze financial information from a variety of reliable and questionable sources.
 - PFR- 1.2.a Analyze financial information for objectivity, accuracy, relevancy to given needs, and currency

Essential Topics

- 1. Media/news outlets/online
- 2. Information from financial advisors
- 3. Financial institutions

PFR 1.2.b Investigate current types of consumer fraud, including online scams

Essential Topics

- 1. Phishing
- 2. Identity theft
- 3. Debit/credit fraud
- PFR-1.3 Utilize consumer protection laws and resources. PFR-1.3.a

Describe services of Indiana's consumer protection agency and its benefits to consumers.

PFR -1.3.b Analyze consumer protection laws for the issues they address and the safeguards they provide

Essential Topics

- 1. Indiana Consumer Protection Agency
- 2. Federal protection agencies (e.g., Federal Communications Commission/FCC; U.S. Department of Agriculture/USDA)
- PFR-1.3.c Demonstrate steps for resolving a consumer complaint.
- PFR 1.4 Make financial decisions by systematically considering alternatives and consequences.
 - PFR- 1.4.a Set measurable short-term, medium-term, and long-term financial goals.

Essential topics

- 1. Short-term = Less than 1 year
- 2. Mid-term/Intermediate = 1 to 5 years
- 3. Long-term = 5 + years
- PFR-1.4.b Evaluate the results of financial decisions.

Essential topics

- 1. Opportunity Cost second best choice in a decision.
- 2. A decision-making process/evaluation
- PFR-1.4.c Apply systematic decision making to long-term goals.

- 1. Systematic multi-step decision-making process.
- 2. Long term goals may require utilizing short/intermediate goals.
- PFR 1.5 Demonstrate communication strategies for discussing financial issues.
 - PFR-1.5.a Compare and contrast the benefits of sharing financial goals and personal finance information with a potential partner before forming a partnership.
 - PFR-1.5.b Describe essential elements of a contract between individuals and between individuals and businesses.
- PFR 1.6 Demonstrate strategies to control personal information.

PFR-1.6.a Describe the actions a victim of identity theft can take to restore personal security

Essential topics

1. Attorney General Website— Outlines corrective steps to take to correct identity theft. ("Toolkit")

Indiana Attorney General Website www.indianaconsumer.com/idtheft www.in.gov/attorneygeneral/2413.htm

National website www.idtheftcenter.org

Domain 2 - Relating Income and Careers	Weighting 15%	Number of Test Items 9	
Core Standard 2: Students analyze how education, income, career and life choices relate to achieving financial goals.			

- PFR 2.1 Describe how personal factors, career choices, and economic conditions affect income.
 - PFR-2.1.a Analyze ways economic, social, cultural, education and political conditions can affect income and career potential

Essential topics

- 1. Key Terms: transferable skills, standard-of-living.
- 2. Determine the relationships between income/career and all conditions stated above.
- PFR-2.1.b Analyze the financial risks and benefits of entrepreneurship as a career choice.
- PFR 2.2 Identify sources of personal income.
 - PFR-2.2.a Compare and contrast wage, gift, rent, interest, dividend, capital gain, tip, commission, and business profit as sources of personal income

- 1. Define the terms in the above standard.
- PFR-2.2.b Analyze the advantages and disadvantages of participation in government assistance programs.
- PFR 2.3 Explain how taxes and employee benefits relate to disposable income.
 - PFR-2.3.a Analyze typical employee benefits and explain why they are a form of compensation

Essential topics

- 1. Understand the purpose of a paystub and identify the components
- 2. Key Terms typical benefits, including paid time off (PTO), health insurance premiums, retirement plans; gross pay, net pay, over-time, and payroll deductions.
- PFR-2.3.b Describe benefits of employer sponsored savings plans and other personal options for shifting current income to the future.

Domain 3 – Planning and Managing Money	Weighting 25%	Number of Test Items 16
Core Standard 3:		
Students manage money effectively by developing financial goals and budgets.		

- PFR 3.1 Develop a personal financial plan to demonstrate the ability to use money management skills and strategies.
 - PFR-3.1.a Create a basic budget with categories for income, taxes, planned savings, and fixed and variable expenses

Essential topics

- 1. Monthly budget
- 2. Key Terms fixed expenses, flexible expenses
- PFR-3.1.b Analyze and adjust budget categories to manage spending and achieve financial goals

Essential topics

- 1. Key Terms wants, needs, sources of income, and annual expenses (paid only once a year)
- PFR-3.1.c Develop a personal financial plan that shows allocation of income, spending, saving, investing and sharing/giving over a year-long time span

Essential topics

- 1. Key Term allocation
- 2. Annual budget (snapshot of all months combined)
- PFR-3.1.d Analyze a plan to secure funding for a financial goal (such as college, major consumer purchases, etc.)

Essential topics

1. Determine if saving or securing financing enables a person to meet a financial qoal

PFR 3.2 Develop a system for keeping and using financial records.

PFR-3.2.a Utilize a system to record income and spending for categories such as purchases, services, and taxes

Essential topics

1. Utilize various types of organizational methods for keeping and filing financial records

PFR-3.2.b Demonstrate recordkeeping that utilizes digital financial management systems

Essential topics

1. Demonstrate various forms of electronic recordkeeping. (e.g., spreadsheet, money management programs, smartphone apps, online banking)

PFR 3.3 Analyze services of financial institutions.

PFR-3.3.a Evaluate different payment methods, including cash, checks, stored-value cards, debit cards, credit cards, and electronic or online payment systems

Essential topics

- 1. Define the terms in the above standard.
- 2. Consider pro's and con's of different payment methods.

PFR-3.3.b Demonstrate skill in basic financial tasks (such as bill payments, check writing, reconciling checking and debit account statements, and monitoring printed and online account statements for accuracy)

Essential topics

1. Demonstrate the tasks listed in the above standard, through workbook activities, simulations, or other direct application.

PFR-3.3.c Investigate and demonstrate ability to apply for financial assistance (such as FAFSA, 21st Century Scholars, scholarships, grants, and aid from colleges and universities).for post-secondary education

- 1. Define and understand the key components of each type of financial assistance listed in the above standard.
- 2. Demonstrate the tasks listed in the above standard and complete a financial assistance application.
- PFR 3.4 Apply consumer skills to purchase decisions.

PFR-3.4.a Evaluate impact of external factors (such as marketing, advertising and the economy) on spending decisions

Essential topics

- 1. Key Terms target markets, demographics, global economic condition
- 2. Advertising and marketing techniques
- 3. Dealing with sales people

PFR-3.4.b Justify consumer buying decisions by evaluating external factors

Essential topics

- 1. Key Terms opportunity cost, value, cost, and total cost of ownership.
- PFR-3.4.c Evaluate opportunity costs (such as owning versus renting a house, purchasing or leasing an auto).

PFR-3.4.d Recognize potential threats (such as identity fraud, scams, theft, phishing, spam, unethical internet practices) to sound financial decisions

Essential topics

- 1. Key Terms identity theft, identity fraud, scams, phishing, spam, and unethical practices.
- PFR-3.5 Connect the role of charitable giving, volunteer service, and philanthropy to community development and quality of life.

PFR-3.5.a Demonstrate budgeting financial and other resources to make contributions to a charitable organization

- 1. Tax benefits of charitable giving/tax deduction
- 2. Quality of life
- 3. Philanthropy
- 4. Including charitable contributions in monthly budget
- PFR-3.6 Examine the purpose and value of estate planning.
 - PFR-3.6.a Contrast wills, "living wills," trusts and other ways estates can be transferred.
 - PFR-3.6.b Evaluate estate planning tools (such as pensions, retirements, social security, trusts, and annuities).

Domain 4 – Managing Credit and Debt	Weighting 25%	Number of Test Items 16	
Core Standard 4:			
Students manage credit and debt to remain both creditworthy and financially secure.			

PFR-4.1 Analyze the costs and benefits of using various types of credit such as student loans, home and automotive loans, and credit cards.

PFR-4.1.a Evaluate the cost of borrowing a set amount of money using various types of credit

Essential topics

- 1. Key Terms interest, fees, credit cards, installment loans, mortgage loans
- 2. Examine example documents that show credit payment schedules for installment loans and revolving credit (i.e., amortization schedule, credit card statement)

PFR-4.1.b Explain how grace periods, methods of calculating interest, and fees affect borrowing costs.

Essential topics

1. Key Terms – interest, fees, grace period, interest rate, annual percentage rate (APR), principal, length of time money is borrowed

PFR-4.1.c Apply systematic decision making to identify the most cost-effective option for making a purchase

- 1. Systematic decision-making process
- 2. Saving v. loan
- 3. New v. used
- 4. Immediate v. deferred
- 5. Brand name v. generic
- PFR-4.2 Analyze factors that influence establishing and maintaining a good credit rating.
 - PFR-4.2.a Analyze the effect of positive and negative credit reports on credit worthiness.

PFR-4.2.b Illustrate steps to overcome a negative credit report and improve a personal financial future

Essential topics

- 1. Key Terms credit bureaus (Equifax, TransUnion, Experian), credit score, net worth
- 2. Understand impact of the 5 C's of credit: character, capacity, collateral, credit rating, capital
- PFR-4.3 Analyze methods and benefits of avoiding or correcting credit and debt problems.

PFR-4.3.a Evaluate the effect of living beyond one's financial resource

Essential topics

- 1. Physical, social, psychological, and financial stresses related to living beyond financial means
- 2. Bankruptcy, foreclosure, repossession and how they change the standard of living

PFR-4.3.b Analyze actions that a consumer can take to reduce or better manage excessive debt

- Analyze key actions, including get a second job, seek consumer credit counseling, utilize financial advisor, adjust standard of living, arrange payment plans with creditors, consider bankruptcy
- PFR-4.4 Analyze major consumer credit laws and the changing nature of these laws.
 - PFR-4.4.a Analyze online and printed resources for up-to-date information about consumer credit rights.
 - PFR-4.4.b Describe debtors' and creditors' rights related to debt that is not paid.

Domain 5 – Risk Management and Insurance	Weighting 10%	Number of Test Items 7	
Core Standard 5:			
Students analyze the features of insurance, its role in balancing risk and benefit in financial planning.			

- PFR-5.1 Examine various types of financial risk and risk management strategies.
 - PFR-5.1.a Describe ways people can manage risk through avoidance, reduction, retention, assumption, and transfer of risk.

PFR-5.2 Examine the purposes, types, and costs associated with insurance.

PFR-5.2.a Analyze the types and amounts of coverage, and features needed, for various stages of life for health, property, life, disability, and liability insurance

Essential topics

- 1. Key Terms risk, premium, deductible, co-pay, Insurer, Insured, beneficiary
- 2. Define insurance needs and types throughout the life cycle
- 3. Insurances required by law
- 4. Purpose of insurance
- PFR-5.2.b Analyze factors that can reduce or increase the amount and type of insurance coverage needed.
- PFR-5.2.c Analyze factors that affect cost of insurance for various types of insurance.

Domain 6 – Saving and Investing	Weighting 15%	Number of Test Items 10	
Core Standard 5:			
Students analyze saving and investing to build long-term financial security and wealth			

- PFR-6.1 Evaluate how saving contributes to financial wellbeing.
 - PFR-6.1.a Analyze effect of saving strategies, including "pay yourself first," payroll deduction, automatic savings options, and reflective spending practices on financial well being.

Essential topics

- Key Terms "Pay yourself first", savings account, certificate of deposit (CD), mutual fund, bond, individual retirement account (IRA)
- 2. Analyze the impact of saving on financial well-being

PFR-6.1.b Compare the interest generated by simple and compound interest at various rates

- 1. Understand the differences between simple interest and compound interest.
- 2. Understand when to apply simple interest and compound interest.
- PFR-6.2 Apply strategies for creating wealth and building assets.
 - PFR-6.2.a Compare various investing strategies for their potential to build wealth.

Content Outline – Personal Financial Responsibility (July 2012)

PFR-6.2.b Analyze investment possibilities utilizing the principles of time value of money and opportunity costs.

PFR-6.2.c Calculate the end value of lump sum and periodic investments

Essential topics

- Key Terms future value of money, present value of money, time value of money
- 2. Demonstrate how to calculate compound interest

PFR-6.3 Compare saving and investment alternatives.

PFR-6.3.a Analyze the characteristics (such as earnings, risks, liquidity) and benefits of various saving and investment options in the current economy

Essential topics

- 1. Key Terms Earnings, risks, and liquidity
- 2. Understand the difference between saving and investing
- 3. Analyze characteristics of the major categories/types of investment options (retirement accounts, stocks, bonds, mutual funds, commodities)
- Analyze characteristics of the major categories/types of savings options (regular savings account, certificate of deposit (CD), money market account, savings bond)
- PFR-6.3.b Analyze investment alternatives utilizing principles of inflation and other economic factors.
- PFR-6.4 Describe how to buy and sell investments.
 - PFR-6.4.a Compare advantages and disadvantages of buying and selling investments through various channels, including financial advisors, investment clubs, and online brokers.

PFR-6.4.b Compare the investment objectives and historical rates of return of various Investment options

- Compare objectives and rates of return of traditional investments. (e.g., real estate, stock market, mutual funds, money market, bonds, certificate of deposit (CD))
- PFR-6.5 Analyze factors that affect the rate of return on investments.

PFR-6.5.a Analyze the rate of return on investments using time value of money and economic conditions as factors

- 1. Rate of Return on Investment
- 2. Conditions such as inflation and global, environmental, and political risk factors
- PFR-6.5.b Calculate the amount of taxes on investments and income tax-free earnings.
- PFR-6.6 Analyze how agencies that regulate financial markets protect investors.
 - PFR-6.6.a Explain how federal and state financial regulatory agencies decrease savings and investing risks.
 - PFR-6.6.b Identify additional services and benefits of the Indiana Securities Division and other federal and state regulators.