

Lesson Plan

Text: Financial Algebra
Chapter: Prepare a Budget (Ch. 10)
Unit number: 10-4
Developed by: Kyle Acord
Date: June 26, 2012

Short Description:

Use Excel Spreadsheet to create, use and modify a Year-Long Expense Budget Plan.

LESSON PLAN

TEACHER: Teacher Prep/ Lesson Plan

- **Lesson Objectives:** Given a set of cash flow data, students will be able to set up a year-long expense budget spreadsheet and determine positive or negative cash flows.
- **List of prerequisite skills needed:** Excel (Spreadsheets), Understanding of simple budgeting
- **Vocabulary:** Cash Flow, Cash Flow Analysis, Budget Plan
- **State Standards addressed:** *(You may use your District's Power Standards if applicable, Highlight "Green" Standards)*
Math: A1.6.B Make valid inferences and draw conclusions based on data.
A1.8.C Evaluate a solution for reasonableness, verify its accuracy, and interpret the solution in the context of the original problem.
A-SSE Interpret the structure of expressions.

Reading: Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.

Writing: None Applicable

Leadership:

- 1.4 The student will be involved in activities that require applying theory, problem-solving, and using critical and creative thinking skills while understanding outcomes of related decisions.
- 1.5 The student will demonstrate self-advocacy skills by achieving planned, individual goals.

- **Teacher Preparation:** *(What materials and set-up are required for this lesson?)*
 1. Computer lab with Excel software
 2. Textbook
- **Content Delivery:** *(How will the lesson be delivered? List any grouping and instructional strategies as well.)*
 1. Ask students to talk about budgets; income, fixed vs. variable expenses, savings, etc.
 2. Check for understanding of Excel; remind students how to enter formulas.
 3. Give students set of financial cash flow data.
 4. Ask students to include yearly totals for each line item and monthly totals for each budget section.
 5. Ask students to analyze finished budget plan for cash flow.
- **Instructional Documents:** *(Please attach any Worksheet, Quiz, Reading Guide, etc.)*
 1. Textbook
 2. Quiz
- **Assessment Tool used in this Lesson:** *(scoring method, guide, or rubric)*
 1. Formative points given for completion of spreadsheet
 2. Formative points given for quiz.
- **Reinforcement/Intervention/Extension Activities:**
 1. Keep track of your own personal expenses for the month and then create your own budget plan for next month. Be sure to include what you believe your income will be for the month.
- **Career Applications:** *(When will this be used in “real life”?)*
 1. Setting up a budget for individual households.

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Financial Algebra

10-4 Cash Flow and Budgeting

Quiz

1. Determine the monthly and yearly cash flows for Dave and Joan from the spreadsheet we prepared in class.
2. Why is it important to look at cash flow on a monthly as well as yearly basis?
3. What advice might you give to an individual with negative cash flow?
4. What options are available to an individual with a positive cash flow?

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Financial Algebra
10-4 Cash Flow and Budgeting
Quiz #2

1. Use the following information to determine Mr. Acord's net worth and debt-to-income ratio:

House & Land:	\$215,000.00
Balance due on home mortgage:	88,250.00
2005 F250 PU:	14,599.00
2 Horses:	3,500.00
Stock Trailer:	6,499.00
John Deere Tractor:	7,500.00
Balance due on tractor loan:	6,200.00
Savings Account:	6.33
Computer:	1,200.00
Retirement Account:	23,500.00
Balance due on student loans:	1,110.00
Gross Monthly Salary:	3,200.00
Gross Monthly Interest:	0.01

2. Is Mr. Acord's debt-to-income ratio an acceptable ratio? Why or why not?
List 2 things he could do to lower that ratio.

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Balance due on tractor loan:	6,200.00
Savings Account:	6.33
Computer:	1,200.00
Retirement Account:	13,500.00
Balance due on student loans:	1,110.00

Gross Monthly Salary:	\$3,200.00
Gross Monthly Interest:	.01

Total Assets: \$260,604.33 Total Liabilities: \$95,560.00 Net Worth: \$165,044.33

Debt-to-Income Ratio: $95,560 / 3,200.01 = 2,986\%$

2. Is Mr. Acord's debt-to-income ratio an acceptable ratio? Why or why not? List 2 things he could do to lower that ratio. Why may Mr. Acord not want to lower his ratio, and how would it be different for him as it would be for a business.

Ratio is WELL above 20% so it is definitely NOT acceptable.

Selling house and using the equity to pay off the other two loans would bring the debt-to-income ratio down to a much more acceptable rate.

Unfortunately, he'd have to live with his parents, but it would bring the ratio percentage down. As individuals, when the biggest piece of debt is a home mortgage, that debt is usually spread out over 30 years, and is unrealistic to compare it to a monthly income.