

Lesson Plans - **Entrepreneurship**

Lesson Plan 5 - Finances - Understanding the Numbers Behind the Business

As an entrepreneur, understanding the role of financial accounting, planning and cash flow will be paramount to business success. Every marketing, operations, information technology and human resource decision has financial implications. Many businesses fail from insufficient financial planning and a lack of a clear understanding of numbers behind the business.

- **Importance of cash flow**
- **Understanding different kinds of costs and pricing a product or service**
- **Using financial statements**

Grade level: 9th Grade and up

Duration: 5 Class Periods - 57 minutes each

Media Type: You Tube video from WDSE Making it Up North -- Iron Range Makerspace

Subject Integration: Entrepreneurship

Minnesota Department of Education Business and Marketing Education – Learning Targets Performance Indicator/Standard Measure/Benchmarks addressed in this lesson:

- 01.02 Examine and employ business and economic principles and concepts.
- 01.01.01 Solve mathematical problems using numbers and operations.
- 01.01.04 Perform data analysis to make business decisions.
- 01.03 Demonstrate mathematics knowledge and skills required to pursue the full range of education and career opportunities.
- 01.01.02.03 Comprehend key elements of oral and written information.
- 01.02.04 Evaluate oral and written information.
- 02.05 Analyze cost/profit relationships to guide business decision-making.
- 02.05.01 Use correct grammar punctuation and terminology to write and edit documents.
- 03.01 Use critical thinking skills independently and in teams to solve problems and make decisions.
- 05.01.02 Evaluate a new business venture concept's potential for success.
- 05.01.03 Determine the resources needed for start-up viability of a business venture.
- 10.02 Establish maintain control and plan the use of financial resources to protect solvency.

Objectives: To introduce students to the vocabulary and basic financial statements used for tracking and planning in an early-stage business.

Assessment: Vocabulary Quiz

Vocabulary

Revenue	Variable Expenses	Cash flow
Income Statement	Balance Sheet	Interest Rate
Accounting	Transaction	Asset
Liability	Owners Equity	Fixed Expenses

Day 1 - Highlighted Entrepreneur - Andrew Hanegmon

Class Discussion - Watch the Youtube video - [Iron Range Makerspace](#) - Making it Up North

Classroom discussion questions:

What was Andrew's vision? What do you think the next phases of development might be? How much do you think a membership would cost? This appears to be a very capital intensive start-up business - How do you think that this business has paid for the expense of the equipment and space?

Show the website on the smartboard - [Iron Range Makerspace](#)

What do you like about the website? What (if anything) do you think is missing? Are there any other business models similar to this?

Day 2 - Guest Speaker Andrew Hanegmon - Iron Range Makerspace, or locally available entrepreneur

Andrew will take us through his story and concentrate on the financial hurdles that he has and how he uses financial management to help grow his business.

Some class questions will include:

Were you able to obtain any government or business area financing - if so, please take us through this process. How often do you use spreadsheets to organize your inventory and financials? Were you able to utilize debt or equity financing to start and run your business - if so, please share your experiences.

Day 3 - Importance of cash flow

Student Assignment - read [8 Financial Tips for Entrepreneurs Launching a Startup](#) - Entrepreneur

Group Discussion - Discuss all eight areas with class and encourage students to bring up a vocabulary word or concepts that is unknown or unfamiliar.

Lecture - [Google Slide](#) Analogy with personal finance and business cash flow.

Student Assignment -

Students pull up Google Classroom and fill out Google Sheet entitled [Cash Flow](#) and complete sheet according to instructions from slide presentation.

Class Discussion - How does this same cash flow issue affect the growth and stability of a company?

Student Assignment - Read this article, "[What is Cash Flow and Why is it so Important?](#)"

Class Discussion -- What did you learn from this article? How do you think most businesses fail?

Day 4 - Fixed Costs, Variable Costs and Pricing

Group Discussion - Think about a type of item you might want to make for the bake sale. Write down a list of the ingredients you will need.

- Teacher will go over fixed and variable costs and can show the glossary [video](#) definition given by Professor Gavin Cassar. The teacher can write or read the following list (items to make fudge) and then students will determine whether the items are fixed or variable costs.
 - a. Cooking Pan
 - b. Condense Milk
 - c. Chocolate Chips
 - d. Mixing Bowl
 - e. Butter
 - f. Spoons
 - g. Knife
 - h. Paper Napkins
- Teacher will then show the glossary [video](#) definition of revenue presented by Professor Wayne Guay. Go over how the students should decide how much to sell their products for and then estimate the revenue, using the information from variable costs to help guide their decisions.
- For this project, students can assume the fixed costs are taken care of. We will not worry about those since this is not a long-term business, but if we were to set up a bake sale business, then the company would need to consider those items and include it in the finances. For this exercise, students need to research the cost of each variable cost. From there, they need to figure out how many of the products they could make and then suggest a cost.

Group Assignment - Hand out [Student Worksheet](#)- After the teacher goes through each part, students will work in partners to answer the three questions on the worksheet. Teacher should remind students that they must support their answers.

- Students will work on the variable cost and figure out how many items they could make and what the cost would be to make that many.
- Students will work on estimating the revenue.

Group Discussion - Students will state what they are going to make, how much it will cost, how many they will make and what the potential revenue will be.

Day 5 - Using financial statements

Lecture - Slides Presentation [Basic Business Finances](#)

Go through slides 1-4 introducing the vocabulary and the basic accounting equation.

Student Assignment - Using the information from slide #5, have the students construct an accounting equation on a blank piece of paper.

Group Activity

Students compare answers with group of 2-3 according to slide #6. Discuss and agree on a group answer.

Share answers with class.

Instructor then introduces income statement vocabulary in slide #7.

Student groups use the information from slide #8 and fill in an Income Statement (slide #9) that can be printed out as a handout (one for each group). Group answers are shared with the group.

A new company is introduced by instructor in slide #10 - groups then take this information and fills out a balance sheet (slide #10) that can be printed out as a handout (one for each group). Group answers are shared with the group.

Resources:

Web Site

[Iron Range Makerspace](#)

Youtube/Videos

[Iron Range Makerspace](#) - Making it Up North

[Fixed and Variable Costs](#) - The Wharton School

[Definition of Revenue](#) - The Wharton School

Handouts/Articles

[What is Cash Flow and Why is it so Important?](#) - Kashoo Blog

[Fudge Accounting Worksheet](#) - The Wharton School

[8 Financial Tips for Entrepreneurs Launching a Startup](#) - Entrepreneur