



FOUNDATION SKILLS

PATHWAY: All Pathways
COURSE: All CTAE Courses
UNIT 11.11: Cash Flow



INTRODUCTION

Annotation:

In this unit, students will identify all costs associated with an entrepreneurial enterprise. Students will create a cash flow statement.

Grade(s):

X	9 th
X	10 th
X	11 th
X	12 th

Time: Approximately 4 – 90 minute class periods or 7 – 50 minute class periods

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Additional Author(s): Stacey Orr

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



FOCUS STANDARDS

GPS Focus Standards:

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

GPS Academic Standards:

MM4P1. Students will solve problems (using appropriate technology).

MM2D2. Students will determine an algebraic model to quantify the association between two quantitative variables.

MM4P4. Students will make connections among mathematical ideas and to other disciplines.

National / Local Standards / Industry / ISTE:

NM-NUM.9-12.3 Compute fluently and make reasonable estimates

NSS-EC.9-12.13 Income and Earning



UNDERSTANDINGS & GOALS

Enduring Understandings:

- Students will understand the importance of identifying all costs associated with opening a business.

Essential Questions:

- Why is it important to understand how to complete a cash flow statement?
- Why is it important to consider all costs associated with an entrepreneurial enterprise?
- How is a product-based business different from a service-based business?

Knowledge from this Unit:

- Students will be able to explain the steps in creating a cash flow statement catered to a specific type of business.

Skills from this Unit:

- Students will create an accurate cash flow statement/analysis.



ASSESSMENT(S)

Assessment Method Type:

- Pre-test
- Objective assessment - multiple-choice, true- false, etc.
 - Quizzes/Tests
 - Unit test
- Group project
- Individual project
- Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
 - Self-check rubrics
 - Self-check during writing/planning process
 - Journal reflections on concepts, personal experiences and impact on one’s life
 - Reflect on evaluations of work from teachers, business partners, and competition judges
 - Academic prompts
 - Practice quizzes/tests
- Subjective assessment/Informal observations
 - Essay tests
 - Observe students working with partners
 - Observe students role playing
- Peer-assessment
 - Peer editing & commentary of products/projects/presentations using rubrics
 - Peer editing and/or critiquing
- Dialogue and Discussion
 - Student/teacher conferences
 - Partner and small group discussions
 - Whole group discussions
 - Interaction with/feedback from community members/speakers and business partners
- Constructed Responses
 - Chart good reading/writing/listening/speaking habits
 - Application of skills to real-life situations/scenarios
- Post-test

Assessment(s) Title:

Cash Flow Quiz with KEY

Assessment(s) Description/Directions:

Students will complete a short quiz on the components of a cash flow statement.

Attachments for Assessment(s):

Cash Flow Quiz with KEY



LEARNING EXPERIENCES

Sequence of Instruction

1. Interest Approach

The following interest approach may take some time to set up, but will be of value to introduce the lesson. In this lesson there is a Cash Flow Activity Sheet, with the following headings:

The New Entrepreneur

Step One—What are your expenses?

Step Two— What do you expect to make?

Step Three—Put it on a chart.

Each heading has dialogue identical to what is seen below (provided for your reference). Print a copy of the Cash Flow Activity Sheet and cut out each heading and dialogue so it can be utilized in the interest approach.

- The New Entrepreneur—So you're ready to start your own business...that's great. Before you begin there are some things you should be asking yourself. It just so happens that there is a group of experts here today that can help you with these questions.
- Step One—What are your expenses? Before you do anything else, ask yourself, how much will my business cost? What items will I need to begin? Think about starting your own buffet restaurant-- you will need a building, food, kitchen equipment, tables, chairs, etc. What will you need for your business? Always consider what your expenses will be, and create a complete list before you begin.
- Step Two—How much do you plan on making? Before you say, "Lots," remember that the idea here is to be as specific as possible. If we plan to start our own restaurant, we might say...I plan on selling 50 buffet plates per day at \$10 each. That means I will make \$14,000 every month (if you are open seven days a week and assuming every month has four weeks). I hope to have 50 people eating at my restaurant everyday, so that means I plan on making \$168,000 annually. (That's \$14,000 times twelve months)...and yes, you need to be that specific! However, there will of course be money taken out for paying employees, food and drink costs, etc.
- Step Three—Put it on a chart. When you go to the bank to get a loan to start your restaurant, you want to be able to present these expenses and estimated income in a neat concise way. To do that you will need to create a chart known as an income statement. Don't worry, there is a format already set up; all you need to do is plug in the numbers!

You will need four student volunteers for this activity. It is best to set the three experts up before you begin your lesson. Station three students around your room as the experts. Each will hold one of the cards you cut out from the cash flow activity sheet (steps 1-3).

The entrepreneur/student volunteer will start by reading the first card "The New Entrepreneur" aloud to the class. Explain that the student will then journey around the room in a counter-clockwise motion and visit with each of the three experts. When the entrepreneur arrives at each station, the expert will read his or her card aloud to the entire class. The student will then continue until the last station. Check for understanding after the stations are complete.

"Today will be an exciting day. We have a series of experts here that will help us with today's topic, and our topic involves money! To start, would the "New Entrepreneur" please come to the

front of the room? Let's assume that you are about to start your own buffet restaurant. You should consider some things before you just jump into the business. Please read your card aloud and look at where you begin."

Student will read New Entrepreneur card. Then guide students to the next station/expert who will read the "Step One" card. Student will continue on journey until he/she reaches the last station.

"To get going on your new restaurant, we have set up a visit with a few local experts; the first is waiting over in the back corner for you."

Student travels through stations.

"Who will share those three steps again?"

Allow students to share

"Great! Let's give our new entrepreneur and experts a round of applause for assisting us today. Our last lesson set us up with the basic vocabulary needed to manage finances as an entrepreneur. Remember, finances are extremely important to entrepreneurs! Today we are going to dive into each of these ideas a little deeper, with the goal of each of you leaving here knowing how much you may potentially make at your new enterprise idea."

2. Creating an accurate cash flow statement/analysis

Students did some of this work if the homework was assigned from the previous lesson on financial vocabulary-11.10 "Where Do I Start? What Should I Know?" Have them share and expand on their ideas through discussion.

"Let's take a moment to brainstorm all of the costs associated with your proposed enterprise. For example, if we were going to open a DVD business, (as discussed in the previous lesson) we would have two types of costs: Variable and fixed. Who will offer some of the examples of variable costs from our last lesson?"

Allow sharing. Answers will include costs associated with producing product including cost of materials, labor, and shipping and handling.

"Great! When I say, "Go," take the next five minutes to expand your list of potential variable and fixed costs for your business. Try to think of everything that you may need to run your business. For example, if we were going to start a DVD Production business, we would need blank DVDs, an office or factory, DVD burning equipment, a DVD label maker, a computer, etc. What would your business need? Please work quietly and record your answers in your notebook. Be ready to share some of your ideas in a few moments. What questions do you have? Go."

Make a judgment call on appropriate level of time here. Less experienced students may require more time/guidance. Once the majority of students have begun to finish, assign them into small groups to share ideas.

"Thanks for working so hard on those ideas. Sometimes it can be a great benefit to bounce ideas off each other. You will each have about two minutes to share your ideas and get feedback, including additional costs or suggestions on adjusting your cost estimates. You will work with two other teammates with no more than three in a group. When you hear the word, "Role," please switch roles and allow another teammate to share. Are there any questions? Role!"

Facilitate discussions and move around the room. Make sure to facilitate switching as necessary. When finished, ask if there are any questions for the entire class and allow a short discussion. It may be a good idea to choose one potential group and allow them to share their entire list, recording the list on a writing surface. Allow the class to copy any ideas they gain from the group's list, and allow the class to add to their list with other potential ideas.

"Thanks for being good partners. So now we have the majority of our costs identified, and don't worry if something comes up along the way, we can add it back in later. You may be on your way home tonight and think... "I forgot about a copier!" That's OK, again, we can add to this list over the next couple of days. By show of hands, how many of you are planning to do your enterprise at no cost to you? Or at a cost to you? How many of you expect to make some money? Great, so let's investigate how we will do that."

Begin discussion on income estimates. Some of the vocabulary here was taught in the previous lesson, Financial Concepts - 11.10. Refer to the lesson for definitions and examples.

"During our last class meeting, we discussed the need to calculate how much each item or service you are selling costs--Costs of Goods Sold (COGS). Hopefully, you have used this number along with your breakeven point for your fixed costs. Now let's estimate your anticipated sales by month. There are a couple points to remember as we move on:

- 1. You may not turn a profit during the first two or three months; however, your start-up investment should cover the first few months if you have a negative income.*
- 2. Your marketing plan should help your sales increase over time.*
- 3. Be sure to factor in any seasonal items as well. For example, if your enterprise involved fruit harvesting, then most likely your income will be limited to a few months and need to carry your expenses throughout the rest of the year.*

Who will share those three important points with us again?"

Allow class to review the three points and allow questions on each if necessary.

"Now let's look at an example."

Display the document, Creating a Cash Flow Statement, on a projector or overhead. Show students the example and discuss how the points above are included in the income statement. After reviewing the transparency with students, distribute the activity sheet MY Cash Flow Statement. Students will create their own cash flow sheet for a given quarter.

"Now that we have looked at an example for our DVD Company, let's try one out on our own. When you receive this activity sheet, choose one quarter and complete a cash flow sheet for your own enterprise. Remember, a service-based business will vary slightly from a product based business. So that we can make any changes, make sure you complete this worksheet in pencil! What can I clarify? Please begin!"

Circulate around the room and assist students in creating income estimates for each month. Make sure that they include all of the necessary information including the number of units sold, selling price and an accurate label of each month.

Give students time to complete worksheets. Maneuver about the room to assist as necessary. When students near completion, allow them to compare their cash flow sheets with their neighbors for accuracy and to make sure no information was omitted. At the end of the period, collect their completed work and correct them so they will have feedback the next class meeting.

“As you have seen before, another pair of eyes can be of great assistance. Let’s take five minutes to check a partner’s cash flow for accuracy and make sure they have not left anything out.”

Attachments for Learning Experiences:

Cash Flow Activity Sheet
Creating a Cash Flow Statement
MY Cash Flow Statement
Cash Flow Rubric

Notes & Reflections:

Objective 2: Creating an accurate cash flow statement/analysis relies on information learned in Lesson fs-11.10 “Where Do I Start? What Should I Know?” However, if you did not complete this lesson plan, plan to give a brief overview of the concepts covered in that lesson.

If you have access to a computer lab, you can use Microsoft Excel for creating and calculating a cash flow statement.



CULMINATING PERFORMANCE TASK

Culminating Unit Performance Task Title:

Cash Flow Statements for One Year

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Students will complete an entire year of cash flow statements by quarter. Have students expand the statement they completed in class by three more quarters. Students may also choose to complete three more statements for different types of businesses. If a computer lab is available, you can have the students complete the yearly cash flow using the Microsoft Excel template. The calculations for each quarter and the total year are automatic.

If feasible, invite a banker guest speaker to class to talk about loans and financial matters.

Attachments for Culminating Performance Task:

Yearly Cash Flow for Culminating Activity
Cash Flow Rubric



UNIT RESOURCES

Web Resources:

Attachment(s):

Materials & Equipment:

- Copy of Cash Flow Activity Sheet
- Transparency of Creating a Cash Flow Statement
- Copies of MY Cash Flow Statement for each student
- Copies of Cash Flow Rubric for each student
- Copies of Cash Flow Quiz with KEY for each student
- Copies of Yearly Cash Flow for Culminating Activity for each student

What 21st Century Technology was used in this unit:

Slide Show Software
Interactive Whiteboard
Student Response System
Web Design Software
Animation Software
Email

Graphing Software
Calculator
Desktop Publishing
Blog
Wiki
Website

Audio File(s)
Graphic Organizer
Image File(s)
Video
Electronic Game or Puzzle Maker