Money: Make it Work for You!

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GOALS AND OBJECTIVES

Money: Make it Work for you! Has two primary objectives. First, it is meant to provide students with familiarity regarding financial concepts. Second, we want students to understand more advanced topics such as how news impacts them financially, our economy's basic concepts, personal financial goals, and risk tolerance. In this way, our students will be able to have meaningful conversations with financial planners in the future.

Behavioral Objectives

- Learn how to research, acquire knowledge, assimilate new information into existing schema, and apply new information to practical use
- Develop creative problem-solving and perseverance
- Improve ability to work collaboratively
- Have a greater understanding of how investments work, the different types of investment available, and how cash loses purchasing power over time.

Academic Objectives

- Meet various Florida standards from different disciplines in a single project
- Learn basic investing concepts with the option of learning more advanced concepts
- Leveraging gaming concepts as a catalyst to spark curiosity in learning finance
FLORIDA STANDARDS

MA.912.F.4.1
Develop personal budgets that fit within various income brackets.

MAFS.912.S-MD.1
Calculate expected values and use them to solve problems.

SS.7.E.1.2
Discuss the importance of borrowing and lending in the United States, the government's role in controlling financial institutions, and list the advantages and disadvantages of using credit.

SS.8.FL.3.1
Explain that banks and other financial institutions loan funds received from depositors to borrowers and that part of the interest received from these loans is used to pay interest to depositors for the use of their money.

SS.912.E.2.1
Identify and explain broad economic goals.

SS.912.E.2.2
Use a decision-making model to analyze a public policy issue affecting the student's community that incorporates defining a problem, analyzing the potential consequences, and considering the alternatives.

SS.912.FL.1.2
Explain that people vary in their willingness to obtain more education or training because these decisions involve incurring immediate costs to obtain possible future benefits.

SS.912.FL.2.Su.a
Compare consumer decisions based on the price of goods or services and the price of alternatives.
SS.912.FL.4.3

Explain that loans can be unsecured or secured with collateral, that collateral is a piece of property that can be sold by the lender to recover all or part of a loan if the borrower fails to repay. Explain why secured loans are viewed as having less risk and why lenders charge a lower interest rate than they charge for unsecured loans.

SS.K.E.1.3

Recognize that people work to earn money to buy things they need or want.
COURSE OUTLINE/OVERVIEW

This project is simple in design and goals. Many students are familiar with the gameplay and multiplayer mechanics of online gaming. This financial project aims to use online gaming mechanics to spark curiosity in learning about finance and investments. Rather than beginning with instruction and then introducing students to the game, this course aims to throw students into the game first and teach financial concepts slowly over time. Students will be instantly able to recognize these concepts’ applications on their gaming portfolio. The game’s gameplay mechanics have real-world value because many stock trade applications such as Robinhood, M1-Finance, TD-Ameritrade, and WeBull use similar, if not the same mechanics.

The purpose of this project is to rid ourselves of the taboo regarding discussions about money and discover how to make money work for us. Teachers will first teach how to create a budget as this is the bedrock of financial literacy. Teachers will then create a free account using a stock simulator program hosted by TDBank (virtualstockmarket.tdbank.com). Next, they will separate their students into teams. They will then generate a challenge appropriate to their students’ grade level and ability, and invite the student groups into their new Challenge. In this program, students will be given $100,000.00 and asked to invest it. The teacher will act as the facilitator in the classroom and provide the tools and knowledge required for the students to determine and gauge their investments. At the end of the project, students will be ranked by the amount of wealth accumulated. Students will also be required to create a rationale for their investment strategy (dividend vs. growth investments), a risk profile, and lessons learned from successful and unsuccessful investments. An essential component of the final report is whether they would have done anything differently? All these documents are put together as part of their final portfolio to turn in at the end of the project.
Lesson Plans:

The teacher can tailor these broad lesson plans to fit their individual needs and student populations. This general plan is most effective for grades 6 – 8 although it can be tailored for use in Elementary School.

General recommendations for teachers

Materials:

- Dedicated laptop/desktop
- Internet connection
- 2 hours for an introductory lesson about Budget mechanics
- 15 to 30 minutes after that

Instructions:

If the teacher requires financial lessons to get started, these can be attained from multiple websites, including some recommended by your district in their pacing guides. However, https://www.td.com/us/en/personal-banking/wowzone/ has some fantastic lesson plans that span from K-12, and they are free.
1. Begin with teaching students how to create a budget. A lesson plan available to assist with this instruction can be located here https://www.tdbank.com/wowzone/lessons/Gr6-8Lesson3.pdf.

2. Have students search apartments or Homes for Rent in their immediate area. They can use Zillow or Redfin to help their search. Students will often ask if they can share apartments with their friends. This depends on the teacher, the general recommendation is for it to be allowable, but the rent must be split evenly. Student(s) must save the listing as part of this project.

3. Have students document groceries for the week by having them go to www.publix.com and go to the pickup section. They will need to use a Gmail account to access the catalog. Next, have students add grocery items for the week into their cart. Students will then use the snip-it function to record the weekly cost of groceries for themselves. A sample grocery list is helpful as students forget how much food they usually eat. Finally, have students multiply the total by four as this is a monthly budget.

4. Utilities are next: To expedite the budget process, ask students to add $150.00 a month for electricity, water, internet, and phone, and $50 for every extra person who lives in the domicile.

5. Transportation and health insurance costs are optional. It is recommended to not to include these costs, as they make it too difficult to maintain a budget at this beginner’s level.
6. For this section, I recommend visiting www.Paygrade.io; this program allows you to pay students for specific jobs done in class and the pay scales to the difficulty of the work performed. If www.Paygrade.io is not an option, have students research career choices and starting salaries for possible careers. Highly recommend using the U.S. Bureau of Labor Statistics https://www.bls.gov/ooh/ Career Occupational Outlook Handbook. This allows students to understand what the average pay for a particular career looks like in the future. However, students are not able to pick a job whose requirements they currently do not meet. This is important as it emphasizes the importance of education to achieve their dreams. Please have students subtract 20% of their gross yearly income to pay taxes, then divide their net income by 12 months. This will yield their monthly income; they must tailor their budget to fit this income.

7. Students will often ask if they can work more than one job. Of course, the answer is yes, but I usually do not let them go over 60 hours a week between both jobs.

8. Do not concern yourself with making everything perfect. The goal here is a sudden realization of the practical importance of education and financial planning. The main takeaway is to make sure students’ budgets fit within their incomes. Then explain how an emergency can suddenly derail someone financially; therefore, we have credit cards.

9. A follow-up lesson on Credit Cards and debt can follow this lesson if the teacher wishes. Including what an annual percentage rate is and how credit scores affect multiple aspects of a person's life. However, at this point, students are best prepared to enter the Stock Simulation Game.
Lesson Plans:

These lesson plans are purposefully broad as they need to be tailored to your individual needs and student population. The stock market game is generally recommended as age-appropriate for grades 6-12.

General recommendations Stock Market Game

Materials:

- Dedicated laptop/desktop
- Internet connection
- 2 hours for the introductory lesson about Stock Market Game mechanics
- 15 to 30 minutes after that

Instructions:

The teacher must first create an educator account at https://virtualstockmarket.tdbank.com/ see below for a screenshot of the registration screen. Please note that the number of Teams and Student Username Prefix are not important at this time.
1. Once registered, you will need to log in and create a challenge. The "create a challenge" option is available in the lower left-hand corner of the dashboard, under teacher resources.

2. Give your Challenge a name and fill in the details, such as the length of time to complete the Challenge. The length of time is significant because it applies to any lessons assigned (you can set lessons with shorter dates than the Challenge, but you cannot assign lessons after a challenge is over). Be sure to mark your Challenge private; otherwise, you may have non-students entering your class.
3. Next, complete the portfolio settings for your class. I recommend a $100,000.00 starting amount with additional weekly deposits set for 50-100 dollars to encourage further investing.

4. Next, set your trade settings. I recommend activating all equities, including CryptoCurrencies, as students are interested in Bitcoin, Ethereum, Litecoin, and other cryptos. I also recommend Mutual Funds and Bonds; I do not recommend activating Forex unless the teacher can explain what Forex is and how it works. **I highly recommend setting interest on cash to -2%.** This is to encourage investment and help students to attain the mindset that inflation eats away at the purchasing power of uninvested cash.
5. Finally, all students who join your Challenge will automatically be assigned any lessons you give them. These lessons are rich in videos, animations, and print that are extremely useful in explaining difficult concepts such as "What is a stock." They are available from beginner to advanced level. I recommend assigning all beginner lessons, although you may want to also assign some advanced lessons depending on your class. You can also assign lessons later under Manage Assignments with different start and end dates.

6. At the confirmation page, you have a few options. You can copy a link to have students join your Challenge automatically (works well with Teams), or you can create their accounts. If you prefer to put your students in groups as I recommend, then it is better to create the student groups yourself.
FOR GROUP ASSIGNMENTS (Recommended)

Role explanations:

**Team Lead:** The Lead’s job is to act as an organizer for the team; this person must take extensive notes and ensure all the other members fulfill their roles. The planner's main skill is organization. Along with the team, they develop a goal, a set level of acceptable risk tolerance, and lead the team to research and analyze information on stocks to determine if and when they should buy additional shares or begin to rebalance their portfolio. They are ultimately responsible for the final report.

**Analyst (1 or 2):** The analyst’s role is to know everything there is to know about a particular group of stocks assigned by the Team Lead. This person should know risk factors that can affect their companies, competitors, upcoming projects, and products that can help their company and threats to their bottom line. Additionally, an analyst should explain if a stock is a long-term, speculative, or dividend investment. Finally, the analyst should read the Analyst ratings and recent company news for their assigned stocks. [https://youtu.be/-yJiB1_gIi](https://youtu.be/-yJiB1_gIi) This video shows how to use the research and analyst tools available in the game.

**Researcher (1 or 2):** The researcher’s role is to take on any stock leads issued by the stock ideas section of the game and begin research on the sector that stock belongs to and whether or not it would be a good fit for their risk tolerance and portfolio type. This involves reading the detailed quote and the company profile. In addition, researchers are responsible for providing the rationale behind a stock's purchase or sale. [https://youtu.be/-yJiB1_gIi](https://youtu.be/-yJiB1_gIi) This video shows how to use the research and analyst tools available in the game.

You can have multiple analysts and researchers, but only one team lead is recommended.
Sample instructions list:

Good morning class. GOOD NEWS! We have found a long-lost relative of yours, and they have decided to leave you an inheritance of $100,000.00. So today, we begin our Stock market simulation game; we will learn the basics of creating an account and investing these $100,000.

1. Talk to your group. Read the team role explanation sheet. Then, designate the following team roles: Team Lead, Analyst(s), Researcher(s).
2. As a team, decide on a Team Name to turn in to your teacher.
3. Work together on an investment strategy. Here are some primary strategies to pursue:
   a. Dividend Investor team
      i. Invest in stocks that pay dividends, these stocks are relatively stable, and they generate income for the team for owning them. Typical dividend stocks are MLPS, REITS, and other well-established companies. First, researchers must find the dividend rates.
   b. Growth Investor team
      i. Invest in stocks that usually do not pay dividends instead; these companies reinvest all their money in growing value for their owners. The value growth is reflected in a price increase.
   c. Speculator team
      i. These teams invest in very high-risk investments such as Bitcoin, new companies, or meme stocks like GME (gamestop) or AMC (AMC Theatre). The potential for losing all of one's investments is high. However, students can also earn some very high gains. This is very rarely a good strategy, and not at all recommended.
TEAM NAME

___________________________________________________________

Assigned Roles:

Team Lead: _________________________________
Researcher 1: _______________________________
Researcher 2: _______________________________
Analyst 1: _________________________________
Analyst 2: _________________________________
Student Instructions:

1. Team lead, gather your team, and decide which investment strategy you would all like to pursue.

2. As a group, assist Researchers in selecting a group of stocks they should begin immediate research on. A list of recommend stocks can be found under research (trading ideas) in your dashboard. See below for screenshots; if you are already familiar with stocks, you can use the stock screener to filter stocks for preferences.
3. After the team agrees to a few stocks, researchers can begin researching the company. Begin by reading the company profile and the detailed quote; depending on your investment strategy, determine if this is a company that fits your strategy.

4. After the Researchers agree to a few stocks, analysts can begin a thorough analysis of the company. Begin by reading analyst rating and company news.

5. If the Analysts approve of the investment, begin purchasing stocks. When buying shares, you will need to write a rationale of your investment. The rationale must detail why this investment fits your strategy.

6. Monitor your investments weekly by checking your Profile summary. You can see your team's rank vs the rest of the class by going to “My rankings.” The team with the highest earnings wins the game.

7. At the end of the game, each team must submit the “Final Report”. This report should be a PowerPoint and show your growth or loss over time within the game with charts and total value. In addition, the team must explain their rationale for each of their trades: buys and sells, with an explanation of what they learned.
**RESOURCE LIST**

**TD Bank:** Free K-12 Lesson Plans for Financial literacy.

**TD Bank WOWZONE:** Free lesson on budgeting basics.

**Publix:** Excellent resource for creating a shopping list and ascertaining a quote on weekly grocery costs. Please go to pick up section, must have a Gmail account.
www.publix.com

**Paygrade:** Program that allows for paying students digital money for fulfilling specific job duties as described in the program or assigned by a teacher. The program provides for inputting expenses as well as having built-in investment options and most of it is done automatically.  — *This program is only partially free.* It is an option but not necessary
www.Paygrade.io

**Bureau of Labor Statistics: Career Occupational Handbook:** Great resource for Career Outlooks and growth, explains the expected growth of certain careers as well as their pay and educational requirements.
https://www.bls.gov/ooh/

**Virtual Stock Market Game (TD Bank):** This is where you register for the virtual stock market game; it is a free resource thanks to TD Bank.
https://virtualstockmarket.tdbank.com/
https://youtu.be/-yJiB1_gIiI  — How to guide on using research tools within the game.