

Learning Content

Alan Chen, Woorin Jang

Summary Summarize your content area in 1-2 paragraphs.

We have designed a role-playing game with the goal of teaching personal finance to children who are just becoming old enough to legally work. Because these children are likely to have never had a source of income before, they are likely to be inexperienced with the concept of managing the money they make. Ultimately, we want to teach students to be financially responsible, and to be able to make calculated decisions when considering different ways of using the money they earn.

We aim to introduce the users to Finance World. This is essentially a world where users can click on different cities in a sequence, with each city teaching one specific skill listed in the **Skills** section below. In each city, the user will be guided by a tour guide who introduces the user to various concepts in each topic (e.g. how to manage debt when in the *Borrowing Money* module), and gives the user a mini-game that utilizes using the concepts learned in the module. Once the users successfully complete a module, they'll be given missions and tasks in Finance World such as "save enough money to buy your friend a birthday present", or "you received an email that looks suspicious, how will you reply?" to encourage them to keep practicing the skills they've learned, and to move on to complete the next modules. We will design a rewards system that keeps the missions fun to complete and increase the complexity of the missions as the user completes more advanced modules.

Target User Attributes Describe the age of your user and the skills that you assume the user already has (that is relevant to your content). Your user must be in at least 3rd grade.

We aim to target children who are just beginning to be able to work (e.g. in America, around the age of 16). We assume that users will have zero experience with personal finance because the majority of our target users will not yet have ever had a job. We also assume that the user comes from low-income families who live paycheck to paycheck. This assumption implies that the user is unlikely to be aware of concepts like investing and money management, as their families most likely do not have any disposable income.

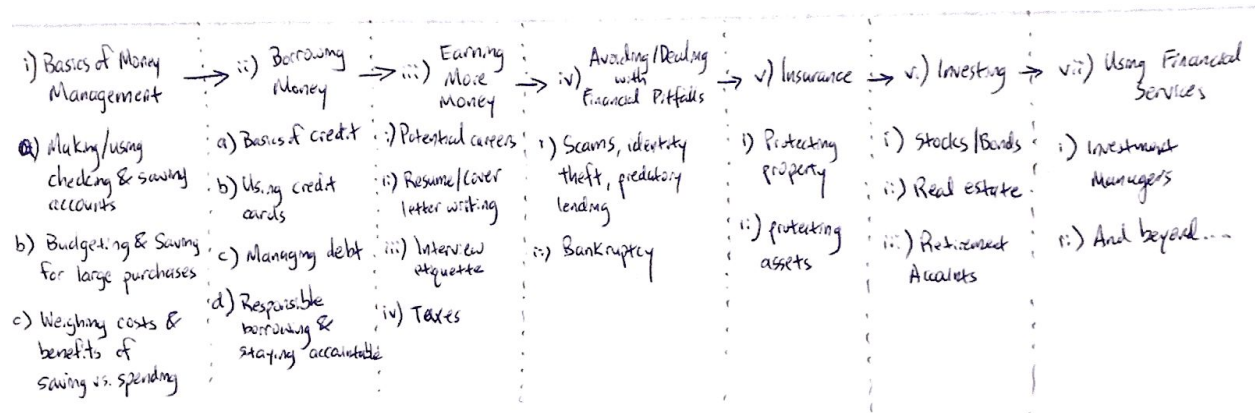
Skills Describe what skills you are going to teach your user.

We want to equip children with skills that allow them to be financially independent and to be able to make smart financial decisions with their future earnings. We have divided the skills into 7 categories:

1. *The basics of managing money*: this includes making/using checking and saving accounts, learning how to budget and save up for bigger goals, and weighing the costs and benefits of saving versus spending.

2. *Borrowing money*: we aim to teach students about credit, how to use credit cards, and how to manage debt. We want to teach students to be responsible about borrowing money and staying accountable.
3. *Learning how to earn money*: we will guide students through the process of finding a job to obtain a stable income. These skills will include resume/cover letter writing, and interview etiquette and practice. We will also teach students how to deal with taxes and paperwork that come with working.
4. *Avoiding and dealing with financial pitfalls*: we will teach students about scamming, identity theft, predatory lending, bankruptcy, and other financial pitfalls that can occur. Students will learn how to avoid these pitfalls and how to deal with them if they do occur.
5. *Insurance*: here, we will teach students how to protect their property and financial assets. This will include health, auto, and other types of insurance.
6. *Investing*: once the students have learned the basics of saving, spending, managing, and protecting their finances, we will teach them how to invest in stocks, bonds, retirement accounts, and more, and identify the different types of risks that come with such investments.
7. *Using financial services*: finally, we will teach students how to utilize services such as investment managers by understanding the risks and benefits that come with diverse services.

Learning Trajectory Diagram a learning trajectory for this subject that starts with existing relevant skills on the left-most side and progresses through knowledge they would learn in a game like yours (your game won't need to cover all of this).



Describe your sources and methodology for creating your learning trajectory. It cannot be just made up out of thin air - you need to draw upon existing examples or justify the reasons why you have created it in that way. For in-class content, you can use national standards for that content area. For out-of-class content, you could draw upon existing materials and extract the learning goals and orderings that those use.

We drew our learning trajectory mainly from these two personal finance curriculums we found online: the *High School Financial Planning Program(HSFPP)* and *NextGen Personal Finance(NGPF)*. The main backbone of our trajectory builds upon the existing curriculum of HSFPP, which had six modules ordered in the following trajectory: 1. Managing money, 2. Borrowing, 3. Earning Power, 4. Investing, 5. Financial Services, 6. Insurance. We both agreed with this curriculum that learning how to manage existing finances should be the first step in personal finance - followed by borrowing money which builds upon the skills learned in the previous module and learning how to best present oneself to increase earning power. However, we discussed the next trajectory and thought that investing is not necessarily the best next step.

We wanted to structure our game to follow a natural order so that scaffolding could be utilized - by providing a framework for novices and slowly remove the scaffolds as skills are learned. During the first part of the game, the students can focus on learning how to manage the basics without worrying about real-life financial problems of actually earning money. Once they learn how to earn money, they now incorporate managing that into the game, and we can now remove another scaffold. Teaching investing at this point does not do this - we thought of investing as a more advanced topic that can be learned after the student learns to be financially responsible and independent, and free to explore other ways of earning money.

We looked at the NGPF curriculum, which was divided into units, and saw that financial pitfalls was taught after the basics of budgeting. We agreed that this was another scaffold we could remove at this next level of our learning trajectory, and added it in. Then, we moved onto the next trajectory of protecting the assets earned through insurance, a natural extension after learning how to protect finances from pitfalls, and finally followed through with investing and financial services. This way, our learning trajectory naturally progresses as follows: spending, managing, borrowing, earning, protecting, and investing finances.

We used constructionism in building the learning trajectory as well. For example, students learn the basics of investing first, and are then equipped to move onto the next step in the trajectory, which is utilizing this knowledge to use financial services carefully. Because they know the risks and benefits of investing, they can use these skills into deciding which financial services are best for them.