**Buy It, Build It**

**Overview**: The following procedure is the culmination of the three lesson plans on financial readiness. Students must apply their knowledge and skills in math and finance to create a proposal to buy a house that is financially correct given the information for each group.

**Time**: The project time can vary, but the introduction and most of the proposals can be completed in one class period time (roughly 50 minutes to an hour). The second day can be used to finish the proposal and start building. Building can vary depending on how fast and how creative the students are going to be with their houses.

**Materials:**

* Group Bio-Cards
* Descriptions of Houses
* Materials and Resources to build a house
  + Poster board, hot glue guns, popsicle sticks, toothpicks, paint, markers, sharpies, etc…

**Procedure:**

1. Split students into groups of 2-3 students
2. Introduce the project and tell the students the objective of the project
   1. “Today, you and your partners will engage in the process of buying a house. You must use the financial skills and knowledge you learn in the previous classes to make a financial proposal. This proposal must not only be able to buy the house but also consider all other aspects of lifet hat would require money.”
3. Recall previous lessons and terms that the students should know.
   1. Budgeting, Savings, Mortgages, Interest, Emergency Funds
4. Hand out Bio-Cards

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| --- | --- | --- | --- |
| Group Name: | | | |
| Group Members: | | | |
|  | **Job** | **Income/year** | |
| **Person #1** | Teacher | $50,000 | |
| **Person #2** | Teacher | $50,000 | |
|  | | | |
| **Amount of money needed for Monthly Budget:** | $1500/month | | **Group #** |
| **Financial Situation:** | As seasoned teachers, you have been able to pay off your loans from college. You do not have any major debt and have been good with financial decisions before. You accumulated a large amount of savings in case. | | **1** |
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* 1. Here is an example of a bio-card for a group. The two jobs that the group has along with the income are listed
  2. A monthly budget will be provided. This include things such as groceries and other necessities that are needed in a budget but is not pertinent to explain in this project, since the focus is on the buying of the house
  3. Finally is the “Financial Situation” of the group. This provides the group a more unique experience, as the situation can be created to be anything. The financial situation can explain the reasoning for the monthly budget or explain possible financial pitfalls that the group could experience.

1. After explaining the bio-cards to the groups, the teacher should show the possible houses that the students can buy. Explain to them the differences of the house and that the goal is to not buy the most expensive house, but to buy a house that will make the most financial sense.
2. Explain to the students what they need to do.
   1. They need to create a well written out and organized proposal that shows all the calculations and decisions they are making with their money.
      1. They need to be able to defend their decisions using the knowledge of savings, budgeting, and mortgages.
      2. The students should consider the monthly budget they have, the amount of income they receive, how much the houses could cost each month, and their savings.
      3. Also, students must consider the money they should save in order to make repairs to the house and add renovations to it such as fencing, a pool, and solar panels. As explained later on, students must add one renovation to the house and are encourage to add as many as possible by making the correct money decisions.
   2. Once students have completed their proposal, they will hand it into the banker, who should be the teacher.
      1. Here, the banker should look over the proposal and see how well the group’s financial decisions are.
      2. Is the proposal well written? Organized?
      3. Do their proposal make sense? Can they actually afford the house they want? Are they saving enough money not only for renovations but also regular savings?
      4. If the proposal does not meet expectations or is incorrect, the group must go back and reassess their work.
      5. If there proposal is good, then they completed the “Buy It” part of the project and can move on to the “Build It” part of the project.
3. “Build It”
   1. Now that students have successfully bought their house, they must go about building their house with the blueprints they received.
   2. Students must adhere to the dimensions of the house and use the scale factor provided to correctly measure their house.
   3. Students can use any material or resource that is available to build the house.
      1. We suggest white poster board, hot glue gun, toothpicks, and popsicle sticks to build the structure.
      2. Paint, markers, or other coloring tools can be used to add creativity to the houses.
      3. Allow the students to be creative. If they want to add grass with some sort of grass-like material, or make a mini driveway with painted pebbles, those are options.
   4. Another component of the “Build It” part is for the students to add at least one of the following: a fence, pool, or solar panels.
      1. Encourage students to purchase more
      2. These renovations require the students to use the saved money from their proposal and/or geometric knowledge to correctly buy and build one of these. For example:
         1. The cost of a circle pool depends on the radius of the circle. The students must see how big of a pool they can add in their yard and figure out much it will cost.
         2. Fencing depends on how much fencing is needed. Students need to calculate the perimeter that they want to cover to figure out the cost.
         3. Solar panels, while can save money in the long run, can cost a lot of money to install. Students should consider how much solar panels they are going to install and figure out how much potential energy that can be collected in a year which in turn will save money on electricity.
4. Once students are done building their house, they can present it alongside a presentation form (poster board, powerpoint) of their proposal.

As evident throughout the procedure, there are many opportunities for the teacher to create details of the project that are relevant to the students. Create jobs that the students are interested in, or make them similar to jobs that their parents have. Also, let two groups have the same jobs and see what different strategies or money decisions they make depending Allow the students to be as creative with the building process as possible, so they can give their house their own unique taste to it.

There is a lot of preparation on the teacher side before implementing this project in the classroom. The Bio-Cards need to be created, the houses they can buy need to be created and the teacher should be able to quickly figure out the mortgage payment for each group, and the materials needed to build the house should be ready to go.

Included on the website will be the bio cards that were created for the introductory group for this lesson along with the housing options. Feel free to use the same materials given by us, change the jobs, or add different components to the project.