



POWELL CENTER FOR
ECONOMIC LITERACY

Lesson Plan

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Backpack Buddies Creating a Classroom Business

Time Required

Three weeks

Economic Concepts

Demand – *the amount of a good or service buyers are willing and able to purchase at various prices at a given time.*

Specialization – *the act of devoting all or most of one's resources to the production of a single good or service.*

Wants – *all those things, tangible and intangible, people might wish to possess, but which are not absolutely necessary. It is usually contrasted with needs, or those few things humans require to sustain life.*

Overview

Many people think that young students cannot understand economics. They are right, if students are taught economic terms and principles out of context. But that is not the only way to proceed. Creating a classroom business, whether it is a month-long project or a yearlong endeavor, provides an opportunity for students to experience and relate to economic principles in a concrete setting.

In the lesson described here, two first-grade classes joined together to create a key-chain company. The children proposed and voted on their project. Then they filled out a loan application to borrow money from the school bank to purchase the supplies they determined they needed. Working one or two hours each day, the children made the product, sold it at the annual school fair, paid back the loan, and decided how they would spend the profits.

Involving students in a hands-on activity of this sort helps them begin to understand economics. Students are excited about the prospect of making money; they become committed when they believe the project has a purpose and offers tangible rewards.



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Objectives

- Students experience economics in a simulated context.
- Students decide on a product that they think is in demand.
- Students learn the difference between *wants* and *needs*.
- Students learn how to estimate their *costs* for making a product and partake in the *loan* process, including:
 - Filling out an application;
 - Understanding collateral; and
 - Paying back a loan with interest.
- Students learn how to use a *market survey* to determine the demand for an item and the cost the *consumer* is willing and able to pay.
- Students learn to construct a *demand curve* based on the *market survey*.
- Students learn why people *specialize* and the effectiveness of a division of labor.
- Students use money to make change while in a business environment.
- Students are introduced to economic terms and use them on a daily basis.

Materials and Handouts

- Supplies to make a product
- A source from which to borrow money (school bank, teacher loan, parent loan)
- A place to sell the product (school fair, before or after school, sporting event)
- Handout # 1 Market Survey Sample
- Handout #2 Demand Curve Graph

Teaching Activity

Explain to the students that they are going to operate a business. To get started, they must decide on a product that they are capable of making and that is in demand.

For some age groups, the teacher must help with this activity. Students may brainstorm popular items that they would be capable of producing. The teacher may encourage students to think of items that would be popular among their peers. In one case, students brainstormed things they collected; they voted to make and sell key chains. Key chains are a big collector item for elementary school children, who often display their collections on their backpacks.



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Explain to the students that they must decide on a name for the company.

The teacher might choose to make this a homework assignment, asking each student to come up with two names for the company. Following this procedure, one class reviewed the names and voted on them the next day, deciding on "Backpack Buddies."

Introduce the idea of a market survey. Students need to know: Who would buy their product (is there a demand for the product?); how many would they buy; and what price would they pay?

Handout #1 should be distributed to the students. The teacher may explain that before a company puts its product on the market, it may conduct a survey to find out if the product is something people think they need or want to have. Examples help to illustrate the point. In the case of the key-chain company, the class designed a market survey that asked three questions: *Would you buy a key chain? How much would you pay? How many key chains would you buy?* The students' homework was to identify seven people to whom they would most likely market their product and ask if they would be *willing* and *able* to purchase a key chain to answer the questions. Emphasize to the students that both criteria, *willing* and *able*, are necessary to obtain accurate results. If possible, it is a good idea to have a prototype, a photograph, or some type of illustration to show when doing a market survey.

Help the students to decide on a price and to decide how many of the product they will produce.

The students can use the results of their market survey to answer these two questions. In the key-chain case, the combined results of "How much would you pay?" indicated that class members would sell the most key chains if the price were set at \$1.50. Then the students tallied the results of the "How many would you buy?" question and divided the total by the number of student workers. This way they determined each student should produce six keychains. For older students, use Handout #2 to demonstrate the construction of a demand curve. Have students construct their own demand curve based on the data obtained from the market survey.

Doing this calculation also provides the teacher an opportunity to discuss supply and demand. Perhaps it would be wise if the class produced one item less, per student, than



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the calculation suggests.

It is always better to have too few than too many of the product.

Help the students price out the cost of the supplies and decide what colors to buy. Also, they must determine how much money they need to start the business.

The teacher might visit a local craft store or conduct an internet search to determine the cost of each item needed. As a class, the students then could use calculators to figure out the total cost of all the supplies needed. If time permits, the teacher might choose to take a field trip to the store and have the children buy the supplies.

Help the students complete the loan application: They must decide what to use for collateral; they need to learn about the interest they will pay on their loan; and they need to know what happens if the loan is not paid back.

(Our school has a student bank that is designed for lending money to classroom businesses. If your school does not have one, you might want to investigate the possibility of starting one.) In the case of the key-chain company, the students filled out the preliminary questions on the bank's loan application, including:

- Name of company;
- How much do you want to borrow;
- How will the money be used;
- When will you repay the loan; and
- What is your collateral?

The bank then sent several loan officers to the classroom to review the application and approve the items for collateral. The students quickly learned that things like pencils and markers were not accepted as collateral. Larger, more valuable items were necessary. They put up the class couch and reading chair for collateral. The students also learned that lending money is not a free service. Two-percent interest would be charged for the service, to be collected when the loan was repaid. The interest was a flat rate and the loan was to be paid within two weeks of the sale.

Another option is to have each student bring in money to buy stock in the company; then, as stockholders, students would help in the decision-making process. Each student would



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be paid back, plus interest, after the sale.

Devise a production schedule.

In the case of the key-chain company, production required five days. Before beginning production, the students had two tasks to complete. They had to decide what color backings they wanted for their key chains (from the color choices). And they had to fill out an order form. Then they had to begin sketching what each key chain would look like. They had voted for six categories of key chains. Each student would make one key chain for each of the categories.

Other tasks were as follows:

Day 1 -- Filling orders for the key-chainbackings

Before production began, the teacher conducted a cutting simulation to demonstrate two ways in which this task could be completed. One person could trace and cut his own backings; or one person could trace the backing and another person could cut it out. The students determined that it would be more efficient to have some people trace while others cut. They realized that breaking the bigger job into smaller components and assigning different students different stages of the process allowed them to complete the task much more quickly.

As a result, the students divided the labor between Tracers, Cutters, and Quality Control Officers. For every Tracer, there were three Cutters. The students also learned that it was important for someone to make sure the product was of good quality and could be used in the second phase of production. This task was given to the students who were named Quality Control Officers.

Day 2-5 -- Making the key chains

Each student's order of backings was filled. The Quality Control Officers gave each student a zip-lock bag with six backings that the student had ordered on his form.

The students went to work making key chains. The teacher asked each student to complete two key chains a day in order to complete all the work in the given time. The Quality Control Officers checked to make sure the students produced their best work.

The fifth day was used to finish up any work that had not been completed. Those who had finished were given the job of making advertisements and table signs. The class had



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discussed the importance of advertising their product so people would know what they were selling.

Create a work schedule for sales.

In the case of the key-chain company, sales were made at the annual school fair. A work schedule was sent home on the Monday prior to the fair. The sales day was divided into half-hour time slots. The students listed their top three choices of times to work. A set-up crew was scheduled to arrive 15 minutes before the fair opened. The class discussed the importance of arriving on time for a shift and making sure every shift would be filled.

Conduct a pre-sale.

The key-chain sellers held a pre-sale the day before the school fair, inviting their parents to come and buy their product. Parents were limited to two key chains. Each student set up his key chains and had four quarters to make change. This provided everyone with the opportunity to practice making change. The students had constructed a price chart the day before, listing the price of one key chain, two key chains, etc. This helped them calculate the price more quickly.

However you handle details, make sure to have plenty of change for the students.

Monitor the activities on sale day.

At the key-chain sale the set-up crew arrived in time to arrange the display of key chains. The children posted the advertisements around the table and vendor hall. They kept change underneath the table along with the price chart. They helped each other make change, and a teacher supervised them to make sure the correct amount was given. In an activity of this sort, parent volunteers are a big help.

Count the money. Did the students make a profit?

This can be one of the most exciting parts of the project for the students. After students have had a chance to look at and touch all of the money, they should divide it into denominations -- coins, one-dollar bills, five-dollar bills, etc. At this point, students who sold key chains were divided into groups to count the money. Every group used a calculator to keep a running total. When each group finished, the students came back



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together as a class and added their totals together on a large sheet of paper. Then they calculated the gross income, subtracted the loan and interest, subtracted the cost of supplies, subtracted a donation to be paid to the school fair, and, finally, determined the profit.

Decide what to do with the profit.

The students should list and then vote on suggestions about what they could do with the money. The key-chain groups voted to spend some of the money on a party for the workers, donate some to an animal shelter, and buy some books for their classroom library.

Considerations of how to allocate profit provide an opportunity for students to focus on the economic principles of choice, cost and consequences (Keystone Principle #1, #2 and #3.) In order to remain viable, businesses typically set aside a portion of their profits to fund future business. By doing so, future funding (capitalization) can be minimized or eliminated as a burden to the teacher or the school.

Businesses also value community relations. Using profits to “give back” to the community will help individuals and groups improve their human and capital resources.

Ask your students to make a list of things on which they would like to spend their profits. Evaluate the pros and cons (costs and benefits) of each choice. Although you may guide the discussion, it is important that the students be allowed to make the final choice.

This is also an ideal time in the lesson to discuss with your students issues of personal character, community responsibility and general value systems.

What if your business incurs a loss?

- Of course the goal of any business is to make a profit. If there is no profit, there is no reward to the entrepreneur, there will be no jobs available in the future, and there will be no community “give back”. But sometimes a classroom business will lose money. Take heart. You can use this to help your students understand a valuable lesson. They have experienced something they have in common with “real-world” entrepreneurs. According to the 2005 US Bureau of Labor Statistics, only 66% of new businesses were still in existence at the end of two years and the



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number is closer to 50% after five years. The most important thing you can do as a teacher is to resist the temptation to step in and make things right, or contribute additional money to make it seem like your students made a profit. You have a great opportunity to demonstrate how understanding a problem and dealing with it can turn failure into success! The school provides a protected setting where their mistakes will not cost them dearly and are only temporary setbacks.

Have the students go through a debriefing process and identify things that could be done differently. There are many reasons why a company incurs a loss – help your students identify theirs. The following suggestions will help you look for causes:

- select a different group for their market survey
- make a prototype of their product to show when taking their market survey
- consider a different pricing structure
- improve their attitudes toward fellow employees
- emphasize quality control
- Make more product

Help the students write an [annual report](#).

The teacher might share samples of annual reports from real corporations, helping students notice the reports' main features. Then students may write and illustrate their own annual report. The students in the key-chain company divided into groups to report on different aspects of the project. They wrote the [articles](#) together and illustrated the report. The articles featured were:

- "Economic Words That We've Been Talking About"
- "How to Set Up a Business"
- "Financial Report"
- "How to Spend Our Profits"

"Backpack Buddies Has a Successful Day at the Village Green Fair"



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LESSON EXTENSION

If your class chooses to use some of its profit to give back to your community in some way, or to assist in any philanthropic cause, use that as a logical segue into a cultural or geography lesson.



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ANNUAL REPORT

Backpack Buddies Annual Report

Economic Words that we've
been talking about:



Wants- something you might not need but you "want" it, you'd like to have it.

Needs- stuff that we have to have: food, water, air.

Supplies- is like stuff that people use to make products.

Warehouse- a place that people make the products.

Company- a group of people who work together to sell something.

Change- when someone gives someone more money than the products cost.

Price- the cost of an item(\$1.50).

Loan- the money you borrowed from someone or the bank that you have to pay back.

Interest- money we have to pay back because they gave us a loan or money.

Money- something to buy with like dimes, nickels, pennies, quarters.

Products- something to buy, something we made (keychain).

Cost- like price; how much you give to the business when they give you what you want.

Collateral- if we did not pay back the loan they would take the business.

Business- a business is a group of people making stuff to sell; making money.



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ARTICLES FOR ANNUAL REPORT

How to set up a business at the VGF!!!

1. Think of a product that people will want.
2. Name our company.
3. Do a market survey to figure out demand and price.
4. Figure out what money we need to make our product.
5. Estimate how much our supplies will cost.
6. Decide how much to borrow and what our collateral will be.
7. Complete loan application.
8. Give loan application to Cooper Cash.
9. Take loan money and buy supplies.
10. Make our product.
11. Make advertisements.
12. Plan for pre-sale; let customers know about pre-sale, set-up for sale with product, change and more fruses.
13. Conduct pre-sale.
14. Make a set-up and sales schedule for VGF.
15. Set up for sale with our product, change, supplies, more fruse decorations.
16. Sell our products-figure our profit.
17. Pay back the loan.
18. Decide what to do with our profit.

Backpack Buddies has a successful day at the VGF!!!

Wow! What an exciting day at Backpack buddies at the VGF! We were so busy. We sold out by 1:15. When I was there, there were so many people buying our keychains. A big boy bought all of them and he had to pay \$27.00!! He said he was going to give his friends some of the key chains. We had to give change to people who paid too much. I had a great time selling key chains!!! It was fun because there were so many people.

Financial Report

Backpack Buddies Total Cost of Production:	\$378.05
Minus loan plus interest (\$80.00 + \$1.60)	- \$81.60
Minus supplies from Mrs. Makler	- \$5.61
Minus key rings from Mrs. Haw	- \$8.00
Minus VGF (10% of total)	- \$29.65
PROFIT	\$198.19

How to spend our profits????

The children brainstormed to decide what they wanted to do with the profits from the Backpack Buddies sale. First they voted on how they would spend the money for other people. The results of the vote are:

1. Animal Shirts (12)
2. Rainbow Kite (14)
3. Richmond Home for Ladies (1)

Next, they voted on how they would spend the money on themselves. The results of the vote are:

1. Party (23)
2. Go to the Children's Museum (0)
3. Books for the classrooms (3)

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