PURCHASING A USED CAR

Grades 10 - 12

Cari Ann Squier
Hutchinson High School

2014 Thrivent Financial Personal Finance Eduactor Award
Secondary, 1st Place

JUNE 18, 2014
Purchasing a Used Car

Innovation
This is an original lesson. I came up with the idea when my husband and I were looking to buy a used car. I have always discussed buying cars in my personal finance class, but until 2 years ago, I never had the students go through the car buying process as described in this lesson. The lesson is innovative because it simulates the steps one would go through to purchase a used car. It requires students to navigate used car website(s) and learn how to find cars based on criteria such as price, make, model, etc. Through researching the car’s history on the website CARFAX, students learn about important information that one should consider when purchasing a used car. In addition students learn how to find the market value of a used car by using the Kelley Blue Book website. Finally students calculate loan payments and consider other monthly car ownership expenses.

Overview
Students will use the Internet to look up used cars. They will use websites such as “CarSoup.com” or “Craig’s List” to search and record information for two different cars within 50 miles of their hometown. Students will record information such as make/model, price, mileage, MPG, VIN, and other relevant or important features. In addition, students will use the Kelley Blue Book site to estimate the value of the vehicle, look up information on the vehicle history, calculate monthly loan payment, and cost per month to drive.

Grade Level and Time Required
Grades 10-12
90 minutes

Learning Objectives
1. Students will be able to research and compare used cars online using a used car website, Kelley Blue Book site, and CARFAX.com.
2. Students will compute monthly loan payments based on the price of the used car.
3. Students will estimate the monthly cost to operate this vehicle including loan payment, gas, maintenance and insurance.
4. Students will make a decision of what car to purchase by analyzing the opportunity cost, wants vs. needs, insurance implications, and operating expense of each vehicle.

Economic Concepts Covered
Borrow, budget, choice, consumer, credit, debt, decision-making, insurance, interest, price, wants/needs, tradeoff, term, opportunity cost

MN Economic Standards
Grades 9-12
Strand 2. Economics
Substrand 1. Economic Reasoning Skills
Standard: 1. Understand that people make informed economic choices by identifying their goals, interpreting and applying data, considering the short- and long-run costs and benefits of alternative choices and revising their goals based on their analysis.

Grades 9-12
Strand 2. Economics
Substrand 3. Fundamental Concepts
Standard 3. Understand that because of scarcity, individuals, organizations and governments must evaluate trade-offs, make choices and incur costs.
Materials Needed
Visuals 1A and 1B: CarSoup.com (only need if do not have some way to project computer)

Visual 2: CARFAX and Auto Loan Calculator (only need if do not have some way to project computer)

Activity 1: Used Car Evaluation Form

Activity 2: Summary Check for Understanding/Reaction Paragraph
Computer Lab

Preparation
Before teaching this lesson for the first time, one should familiarize themselves with the used car site, vehicle history site and the auto loan calculator site. I found it best to work through the lesson from the student’s perspective in order to anticipate some questions.

Procedure
1. Hook the class by relating your “first car” story.

2. Explain that we will be researching used cars online. You will be looking at cars in two different price ranges: $2,000-$7,000 range and $10,000-$20,000 range. You will find specific descriptive information about each vehicle, along with the book value, vehicle history report, and the cost of financing and operating the car. After researching, you will evaluate each alternative with regards to value, cost of loan, cost of ownership, debt to income ratio, budget, and needs vs. wants. Based on your evaluation you will make a decision with regards to what car you would purchase and why.

3. Ask: What information would one want to find out about a used car? (Answers will vary but would include: mileage, number of owners, maintenance history, accidents, type of engine, book value options, price, etc.)

4. Explain that in this exercise we will assume that the car purchased will have to be financed with a 20% down payment, and either a 2, 3 or 4 year term.

5. Ask: If one is thinking about getting a car loan, what kinds of information will the bank ask in order to determine one’s credit worthiness? (Answers will vary but would include: how much one makes, how long at current employer, other debts, pay bills on time, how long at present address, debt to income ratio, credit score, co-signer, etc.)

6. Distribute Activity 1: Used Car Evaluation Form so students can follow along as you show them how to find the information.

Note: If teacher does not have an interactive whiteboard or computer projector, they can use Visuals 1-2 for steps 7-10.

7. Demonstrate how to navigate and find needed information on the CarSoup.com (or other used car site) website using an interactive whiteboard or computer projector. Point out where a free CARFAX would be indicated. Tell them that the cars they research must have a free CARFAX available. If one was really searching for a used car, one would more than likely have to purchase a car history if this information was desired. Answer any questions students may have regarding the CarSoup site.
8. Navigate to the CARFAX website and demonstrate how to find information. Cover all areas shown on Activity 1. Explain that a vehicle history report such as CARFAX only gives information that has been supplied to them and that it is only one tool to aid in the used car search. Answer any questions.

9. Navigate to the Kelley Blue Book website and demonstrate how to use. Explain the various information that the site asks for and answer any questions.

10. Navigate to www.autoloancalculator.com explain how to use this website to calculate monthly payments and total cost of the loan.

11. Briefly review what students are to do when they get to the computer lab.

12. Once in the lab students should complete Activity 1: Used Car Evaluation Form. Assist as needed.

13. Back in the classroom; divide the class into groups of 3-4.

   Distribute Activity 2: Summary Check for Understanding/Reaction Paragraph. Students should discuss and answer questions 1-4.

14. Read aloud the directions for the reaction paragraph. Have students write down some brainstorm thoughts the group comes up with as possible ideas for inclusion in the reaction paragraph.

15. Students return to their seats. Assign the reaction paragraph.

16. Closure. Select 2-3 students (as time allows) to read their reaction paragraphs to the class. Lead a group discussion based on the reaction paragraphs. Make sure that the discussion includes the lesson’s learning objectives and key concepts.

Evaluation and Reflection
The first time I taught the lesson, I just used Activity 1 and did not have students answer the check for understanding questions. This year I added the questions, group discussion and reaction paragraph. These changes definitely helped me to gage student learning better. The first trimester I taught the lesson this year, I had the students also look up their “dream car” down payment and monthly loan payment. I took that part out the next time I taught the lesson because I wanted to focus on just used vehicles which are more realistic for young adults.

I will use this lesson every time I teach Personal Finance. I like it the way it is now, though, as with all of my lessons, I will continue to tweak as needed. Students respond well to the lesson and they enjoy looking up cars and they learn practical knowledge they will use in the future.

Assessment is done through observation and questioning during the process of looking up the information online, the answers students give on Activity 1 and the class summary discussion. Summative assessment is done through a unit test which includes the economic vocabulary and short answer questions.
# Used Car Evaluation Form

<table>
<thead>
<tr>
<th>Make/Model/Year</th>
<th>Car One ($2,000 - $7,000)</th>
<th>Car Two ($10,000 - $20,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mileage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPG</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Important Feature Comparison  
(List features that would affect your decision to buy this car versus another car) | ![Checkmark] | ![Checkmark] |
| Free CARFAX report – comment on each report area. If damage or accident, look further for details and list. | ![Checkmark] | ![Checkmark] |
| Look further through the report and list one additional item the report shows. | ![Checkmark] | ![Checkmark] |
| Kelley Blue Book Value | | |
| Purchase Price  | | |
| 20% down payment | - | - |
| Total Amount to Finance  
(loans amount) | = | = |
| Go to [www.autoloancalculator.com](http://www.autoloancalculator.com)  
Use the current used car interest rate to calculate the *monthly payments*. | Term 2 years | Term 3 years | Term 3 years | Term 4 years |
| Total Finance Charge or Cost of Loan | | |
| Estimate your monthly gas expense  
(estimated miles driven per month / MPG x price per gallon) | | |
| Monthly Insurance  
(will use $100) | | |
| Other expenses | | |
| Cost Per Month to Operate  
(loan + gas + insurance + other) | | |

**Activity 1**
1. Explain why and how the mileage of a car affects the price.

2. Why should one check the Kelley Blue Book value? How could this help one negotiate a price?

3. Why do you think it might matter how many owners the car had?

4. Discuss the pros and cons of extending the term from 2 to 3 years or from 3 to 4 years.

Write a reaction paragraph describing which car you would purchase and why. Your answer must include a discussion of the opportunity cost of your choice, possible insurance cost implications of your choice, what term you would choose and why and whether your credit would qualify you for a loan at 18 years and what your options might be.
### Luther We Buy Event

<table>
<thead>
<tr>
<th>Year Make Model</th>
<th>Mileage</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 Chrysler Town &amp; Country SVWB</td>
<td>126,423 mi</td>
<td>$4,988</td>
</tr>
<tr>
<td>2010 Toyota Camry LE</td>
<td>56,583 mi</td>
<td>$13,988</td>
</tr>
<tr>
<td>2010 Chevrolet Malibu LT w/1LT</td>
<td>54,367 mi</td>
<td>$12,976</td>
</tr>
<tr>
<td>2005 Toyota Camry LE</td>
<td>131,792 mi</td>
<td>$9,995</td>
</tr>
<tr>
<td>2007 Dodge Caliber R/T</td>
<td>77,490 mi</td>
<td>$9,477</td>
</tr>
</tbody>
</table>

### Search Make & Model

- **Make:** Buick
- **Model:** All Models
- **Price:** $7,500 or less
- **Zip:** 55350

### Car Details

- **1999 Buick Regal GSE**
  - Midnight Blue Pearl
  - FWD
  - Automatic
  - V6 3.8L
  - 4 Door Sedan
  - 18/27 MPG (city/hwy)
  - 763-780-1010
  - BLAINE LOCATION
  - 01ER - ACCIDENT FREE AUTOCHECK
  - Chrome Wheels, Leather Seats, Steering Wheel Radio Controls, Digital Climate Control
  - Read More

- **2005 Buick Rendezvous CX**
  - BLACK
  - FWD
  - Automatic
  - 3.4L V6 MPI
  - SUV/Crossover
  - Up for sale: 2005 Buick Rendezvous in very good condition; it has second row seats (so you can use it as minivan or SUV), Good...
  - Read More

### Visual 1A
2005 Buick Rendezvous CX

Overview  Features & Equipment  Reviews

Price: $8,965
Color: BLACK
Mileage: 114,000
Body Style: 4-Door Wagon / Sport Utility
Fuel Type: Gasoline
Engine: 3.2L V6
Drive: Front Wheel Drive
Transmission: Automatic
VIN: 1G5CA23685S87710
Quick Search #: 10516

Why Buy This Vehicle:
Up for sale 2005 Buick Rendezvous is in very good condition. It has 114,000 miles (so you can see it as new or very low). Good tires. 21 kPa, synchro all over. No oil leaks. There are oil changes. There are oil changes. It has A/C. It has two keys and a couple of keys. Price: $8,965. Located in San Diego. For more info, please call 763-706-7236. 30 days warranty!}

- Air Conditioning
- Alloy Wheels
- Anti-Lock Brakes
- 6x4 Rear Blind Spot
- Cargo Lamp
- Child Proof Locks
- Cloth Upholstery
- Compact Disc
- Cruise Control
- Cup Holders
- Daytime Running Lights
- Driver Air Bag
- Front Wheel Drive
- Keyless Entry
- Off Road Lights
- Passenger Air Bag
- Power Brakes
- Power Driver Seat
- Power Locks
- Power Mirrors
- Power Steering
- Power Windows
- Rear Defrost
- Remote Trunk Lid
- Tinted Windows
- Warranty
“This CARFAX Vehicle History Report is based only on information supplied to CARFAX and available as of 6/7/13 at 10:52:58 AM (EDT). Other information about this vehicle, including problems, may not have been reported to CARFAX. Use this report as one important tool, along with a vehicle inspection and test drive, to make a better decision about your next used car.”