**Using For $ale: The Game of Property and Prosperity**

**in Principles of Microeconomics: One Economist’s Attempt at Making Learning Economics Fun**

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2015

**Abstract**

As part of *GOAL21: Gaming Opportunities in Academic Libraries*, a grant awarded to MidAmerica University, the game For $ale: The Game of Property and Prosperity was played in a Principles of Microeconomics class during Spring of 2015. This paper discusses why For $ale was chosen, how it was introduced to the class and played, how the class was debriefed, and the results of a paper assigned for each student to complete. In general, students enjoyed playing For $ale and felt it was a good addition to Principles of Microeconomics.

***Keywords:*** teaching, microeconomics, games, For $ale

**Using For $ale: The Game of Property and Prosperity in Principles of Microeconomics: One Economist’s Attempt at Making Learning Economics Fun**

Teaching economics to college undergraduates is a challenging task. Students complain that economics is “hard,” “has too much math,” and “they will never use it because it is not related to the real world.” The old “chalk and talk” (Becker and Watts 1996) method of teaching economics is a hard sell to most of this tech savvy generation of students. Part of the problem is that economics requires a knowledge of the world, as well as critical thinking. Critical thinking skills are on the top of Bloom’s Taxonomy (Bloom et al. 1956). The typical student’s passive method of learning – reading or skimming the text, listening to the lecture as they look at the PowerPoint slides and surf the web or text – does not lend itself to learning problem solving and critical thinking. Often at this point in life, students have not really been a part of the economy. Certainly they are experienced consumers, but usually have not worked in a job where they have a vantage point that enables to see the economy working. So frequently students complain that what is taught in class is not related to the real world.

In an attempt to motivate disinterested students, authors have illustrated economic concepts through the use of films (Sexton 2006), music (Tinier and Khandke 2000), Shakespeare (Farnham 1931) (Kish-Goodling 1998), and great books (Hartley 2001). Even episodes of the Simpsons have been used as a pedagogical tool (Luccasen and Thomas 2010) (Hall 2014).

*Goal21: Gaming Opportunities in Academic Libraries*, is a grant awarded to MidAmerica University with Dr. Mark Hayse as principal investigator. The goal of the grant is to “identify gaming mechanisms that draw out the use of 21st century skills – specifically, critical thinking and problem solving, creativity and innovation, communication and collaboration, and flexibility and adaptability.” (*Goal21: Gaming Opportunities in Academic Libraries* 2015*)*. A collection of games that can be explored in one class session and that can be integrated into an undergraduate course will be obtained and housed in Mabee Library at MidAmerica Nazarene University. As a participant in this grant, I used the game For $ale: The Game of Property and Prosperity in my Principles of Microeconomics Class during Spring 2015.

BoardGameGeek (<http://boardgamegeek.com/boardgamecategory/1021/economic>) lists 10 games under the Economics category. For $ale was not listed in the Economics category. For $ale was published in 1997 and is currently produced by Gryphon Games. (<http://boardgamegeek.com/boardgame/172/sale> ) BoardGameGeek ranked For $ale 207 out of 5,700 on January 26, 2015. The list price is $25.99. It is described as a family card game. To see instructions for playing For $ale, go to <https://www.youtube.com/watch?v=W11fYjv6NTE>.

For $ale is a card game for three to six players that involves the demand and supply of properties, strategy, and critical thinking. Part of a class period was spent instructing students on playing the game by dividing them into groups and playing the game step-by-step. The next class period students played For $ale twice. The third session involved debriefing the students about the gaming experience. A week after the debriefing each student submitted a reflection paper. Copies of the For $ale Paper assignment and the For $ale Games Results Form are in Appendices A and B, respectively.

**Why For $ale was Chosen**

Of the many economic board games that are available, the author chose For $ale which was developed by Stefan Dorra for several reasons. First, it had rules that were easy to learn and did not take long to play. Some of the games were very complicated and could take hours to complete. Since this was game was to be an enrichment to the course, I did not want to devote more than three class periods to teaching students how to play For $ale, playing the game, and debriefing the students about their experience playing the game according to Dr. Hayse’s protocol. According to the game instructions, the expected duration of a game is 20 to 30 minutes. Since the class period is 50 minutes, students could play two rounds of For $ale during one class. I wanted students to play For $ale at least two times. The first game would be to get a feel for the game and determine a strategy. The second game would be played to refine the strategy.

The second reason I chose For $ale is that it includes both demand (buying properties) and supply (selling properties). Principles of Microeconomics studies markets. The typical sophomore in college has little understanding of how markets really work. By having all of the students play For $ale, students would be provided with a common experience from which I could draw upon to teach economic concepts. Principles of Microeconomics begins by discussing demand and supply under the assumption of a purely competitive market. Pure competition is “the market structure in which a very large number of firms sells a standardized product, into which entry is very easy, in which the individual seller has no control over the product price, and in which there is no nonprice competition” (McConnell, et al. 2015, G-17). Since there were only four, five, or six players for each group, the properties were differentiated (not standardized), there was no entry into each group, and the price was determined by an auction which the players did have some control over, the game did not model a purely competitive market. Instead, it modeled an oligopoly. An oligopoly is “a market structure in which a few firms sell either a standardized or differentiated product, into which entry is difficult, in which a firm has limited control over product price because of mutual interdependence.” (McConnell, et al. 2015, G-15). In an oligopoly market, the actions of the other firms is important. Game theory is the economic theory developed to understand and explain oligopolies. Game theory is the study of how people behave in strategic situations in which individuals must take into account not only their own possible actions, but also the possible reactions of others. Game theory was “originally developed to analyze the best ways to play games like poker and chess.” (McConnell, et al. 2015, G-8)

Even though the rules of For $ale are simple and the game is played quickly, a fair amount of strategy can be used to help a player win the game. (See <http://boardgamegeek.com/thread/89221/sale-strategy-article>) Although there is some degree of luck in playing For $ale, a player benefits by keeping track of cards that have been played (In Phase 1 Property Cards and in Phase 2 Currency Cards), and each player’s remaining money. Also, like in many games, paying attention to the other players can help to formulate a winning strategy based on the other players’ expected bids. There is also an advantage to the player who is first to bid on a property – called a first-mover advantage in game theory.

**The Class**

 Principles of Microeconomics is the course in which For $ale was played. It is a three-

credit hour course that met Monday, Wednesdays and Fridays from 2:00 to 2:50 p.m. during the

Spring semester of 2015 at MidAmerica Nazarene University in Olathe, Kansas. The

prerequisite for Microeconomics is MATH 1223: College Algebra. Approximately half of the

students had taken Principles of Macroeconomics the previous semester. Based on a survey, all

of the students enrolled in the class because it met a major requirement. The average age of the

students was 20.4 years and 32% were female. Half of the students were sophomores, three were

freshmen, six were juniors, and two were seniors. Half of the students played sports for MNU

(n=26).

The survey was also helped to determine students’ gaming profile. The following table lists the

game categories and the percentage of students playing each type of game in the previous four

weeks.

**Table 1**

**Principles of Microeconomics Student Survey Results**

|  |  |
| --- | --- |
| **Type of Game** | **Percentage of Students Playing Game****(in previous four weeks)** |
| Sports for leisure | 52% |
| Fantasy sports | 16% |
| Computer (non-console) | 16% |
| Video (Nintendo, Sony, or Microsoft console) | 56% |
| Mobile ( tablet, iPod, etc., but not phone) | 32% |
| Phone games | 76% |
| Role-playing games | 4% |
| Gambling ( casino, lottery, cards for money with friends) | 4% |
| Tabletop games | 44% |

From the above table, it is easy to see that the student in the class were familiar with game playing and, from the percentage playing games in the previous four weeks, must enjoy playing games.

**Introducing For $ale**

**Setup**

 I used a random number table to assigned students to 5 groups. Since there were 26 students, there were four groups with five players and one group with 6 players. During the class before the students played For $ale, I introduced the objective and rules of the game. For $ale is a game of buying and selling properties. The object is to be the player with the most money (Coins and Currency Cards) at the end of the game.

**Phase 1: Buying Properties**

 Phase I uses only the Property Cards and Coins. The Property Cards are numbered one to

thirty. The coins are in $1,000 and $2,000 denominations. When there are five or six players,

each player begins the game with two $2,000 coins and ten $1,000 coins. After shuffling the

Property Card deck, the same number of cards as players are turned face up. Bidding then

begins. The game directions suggest the player who lives in the largest house begins bidding,

but I started the biding in order to explain the game. Play then continues clockwise around the

classroom. Bidders have two options. One is to bid, but the new bid must be greater than the

previous bid. The other option is to pass. When a player passes, he gets the lowest valued

property left on the table. If the player who passes had previously bid, he pays one-half of his

amount rounding down. For example, if the bid was $2,000, the player would pay $1,000 and

get the Property Card and $1,000 returned to him. But if the player bid $3,000, since the lowest

denomination is $1,000, the player will in effect pay $2,000 and get the Property Card and

$1,000 returned to him. Once all other players have passed, the player who bids the highest for

the Property Card receives that property but pays the full bid. Bidding may go through several

rounds before all but one player has passed. Two rounds were played to introduce the game.

Although I had planned to play three rounds, students took a fair amount of time discussing the

best action. Critical thinking skills were in action!

 Students sat in groups in various parts of the classroom. So that the students could keep

track of what was going on, it was necessary to have a “helper“ record on the white board the

value of all of the Property Cards that were in play during that round. Once the bidding began,

this person recorded the bids of each player (team). One person from each group was chosen as

the “runner” to bring or receive from the front of the class, the Coins, Property Cards and

Currency Cards. It was wonderful to see the students so engaged in the game and really

thinking about the next move and wanting to win!

Professor Hayse had asked me not to include any discussion of strategies when I

introduced For $ale. This was because he hoped that each student would use critical thinking

and problem solving to develop his or her own strategies.

Phase 2: Selling Properties

Once all of the Property Cards are purchased, the next phase of the game involves players

selling their Property Cards. The same number of Currency Cards as players is turned face up.

Currency Cards vary from $0 to $15,000 with two of each value in the deck. Once the Currency

Cards are known, each player decides which Property Card to play. Players turn over their

Property Cards simultaneously. The Property Card with the highest value gets the highest

Currency Card, the second highest Property Card gets the second highest Currency Card, and so

on. This continues until all Property Cards are sold.

**Game End**

 Each player adds up the value of their Currency Cards and Coins. If two players are tied

for the highest value, the player with the most remaining Coins wins. The game is expected to

take 20 to 30 minutes to play.

**Playing For $ale**

 The following class, Wednesday, was game day! As students entered the classroom

instead of sitting in their usual seats, they joined their groups and started to set up the game.

After a short introduction and a reminder about keeping track of the game using the worksheet I

had given them because of the paper they would write, the five groups started playing. Group 1

was filmed by Professor Hayse for his grant. He also took notes of observations of other

students playing during the class. First I walked around the classroom in order to be available

for questions. There were only three questions asked to clarify the rules. (One needed a reminder

about rounding down on the bid. Another student needed a reminder that all players should turn

over the Property Cards simultaneously in Phase 2: Selling Properties. A third student needed

clarification about counting the Currency Cards and Coins to determine the winner.)

 I walked around several more times to observe students playing the game. First, I wanted

to make sure they were all playing the game correctly. Second, I wanted to observe how

students were organizing all of the pieces of the game since there were Property Cards, Currency

Cards, Coins and bids to keep track of and record. Two of the groups developed simple, but

effective ways to organize. Third I wanted to observe how the students were playing the game.

All students were engaged playing the game and were quite serious. One said that he could

really get into playing it. Another said it was fun. Several students were proud that they had won

their group’s game. A few indicated they were unhappy with themselves after a bad play.

Although the groups were randomly determined, all of the students got along very well. They

organized themselves without much trouble, and I observed no arguments. All groups finished

and cleaned up the pieces of the game within the 50 minute period.

**Debriefing**

Dr. Hayse asked each professor participating in the grant to use a debriefing protocol. Like introducing the game to the class and playing the game, the debriefing was videotaped. The debriefing occurred in the class that followed playing the game. I also assigned a paper for the students that was due one week after the debriefing.

 Dr. Hayse’s debriefing protocol included the following questions:

**Table 2**

**Professor Hayse’ Debriefing Questions**

|  |
| --- |
| What **feelings** did you experience while playing the game?  |
|  What **happened** while playing the game?* + How would you explain the game to a friend?
	+ Are there any **important moments** during the game that you recall?
 |
|  What **skills** did you use while playing the game?* + Critical thinking?
	+ Problem solving?
	+ Creativity?
	+ Innovation?
	+ Communication?
	+ Collaboration?
	+ Flexibility?
	+ Adaptability?
	+ Other?
 |
|  How does gameplay **relate to other experiences**?* + How does game play serve as a metaphor for life?
	+ How does it serve as an analogy to the workplace?
	+ How does it relate to any other experiences
 |
|  What if?* **If the game rules changed** so players could cooperate,

how would this affect gameplay?* What **other game rule changes** can you imagine that would affect gameplay?
 |
|  What next?* What strategies would you suggest for the **next time** that students play the game in this course?
* What **personal behavior changes** might you consider, resulting from insights gained through gameplay?
 |

**Figure 1**

 Polleverywhere.com was used to develop a word cloud of to find out “what **feelings** did

you experience while playing the game?” Above is the word cloud that resulted during the

debriefing.

 When asked what happened while playing the game one student accurately summarized

in detail how For $ale was played. When asked were there any important momentsduring the

game that you recall? Several students expressed they were very competitive, so the moment

they found that they had lost the game was very upsetting. One student told us the moment she

recalled was when she realized that passing and taking the least valuable property was not the

best strategy. Another said he realized that getting a $0 Currency Card was not a good move.

 The 21st Century skills the students stated they used while playing the game were: critical

thinking, problem solving and communication. At first students had a difficult time answering

the question about how gameplay relates to other experiences. How does gameplay serve as a

metaphor for life? How does it serve as analogy to the workplace? Then one student indicated

that it is always important to observe the people that surround you. And then another student

said, “You play how you practice.” At third said that is a certain amount of luck, good or bad, in

any situation.

When asked What if? Students agreed that if the game rules changed so players could

cooperate, it would affect gameplay. This is an important insight that will help them understand

oligopoly. When asked what other game rule changes**,** they all agreed that getting rid of the $0

Currency Cards would help.

When answering the What Next question, most students agreed that they had

underestimated the strategy involved in playing For $ale, especially Phase 1. Many wanted to

play again with some of the new ideas about what strategies could help them win.

# **For $ale Paper**

**Playing the Game**

In the first section of the paper students reported on the two games that were played. Most students used the For $ale Game Report Form (See Appendix B) to provide information on what properties were bought, the price paid, the amount each property was sold for and the profit made, the total value of all Currency Cards and Coins, and the place the student came in . Each student computed the ratio of the value of all Currency Cards and Coins for the last game played divided by the value of all Currency Cards and Coins for the first game played. If this ratio was greater than one, it could mean that the student learned to play the game better. 55% of students had ratios greater than one, which indicates improved performance in the second game. The average ratio for the class was 1.1 which again indicates some learning about how to play the game better.

**Economic Concepts Used in For $ale**

 The second section of the paper asked the students to explain how the concepts of Demand,

Supply, Profit, Marginal Cost, and Marginal Revenue were used in For $ale. Demand “is a

schedule or a curve that shows the various amounts of a particular product that consumers are

willing and able to purchase at each of a series of possible prices during a specified period of

time.” (McConnell et al. 2015,48). All students understood that in Phase 1 they were acting as

demanders for the properties. Some also realized that at the start of the game when players had

more money (technically, income) for the property auctions, prices were higher. At the end of

each game, often at least one player would run out of Coins which resulted in lower prices of the

properties still being sold.

Supply “is a schedule or curve showing the various amounts of a product that producers

are willing and able to make available for sale at each of a series of possible prices during a

specific period.” (McConnell et al. 2015, 53) Many students thought the supply was the

number of properties available in Phase 1. They commented that since each property was

different, the supply of each was one. While this was not incorrect, these students seemed to

have missed the fact that in Phase 2: Selling Properties the game required students to act as

suppliers of the properties. A few students thought supply was referring to the number of Coins.

They failed to understand the Coins were demonstrating the medium of exchange and the unit of

account functions of money.

Profit “is total revenue minus total cost.” (McConnell et al. 2015, G-17) Total Revenue

is the value of all goods and services sold by the firm. Total Cost is the cost to the firm of

producing the goods and services. Most of the students calculated profits correctly. Most

realized that unlike in the classical theory of the firm, the winner in For $ale was not based on

the player with the highest profit, but instead highest values of Currency Cards and Coins.

Marginal Revenue ‘is the change in total revenue that results from the sale of one

additional unit.’ (McConnell et al. 2015, G-12) This was a new concept to students and most of

them could not explain how this was related to For $ale. Marginal Revenue was the amount each

property earned in Currency Cards.

 Marginal Cost **‘**is the change in total cost that results from the production of one

additional unit.’ (McConnell et al. 2015, G-12) Although this was also a new concept, several

students realized that the marginal cost was not just what they bid for a property unless they were

the winning bidder. When the student did not win the bid, the lowest Property Card

available was received for half of the bid, rounded down.

**Strategy**

 **The strategy part of the paper required each student to analyze and evaluate the strategy**

**used in playing the game. Students were also asked to reflect upon what other strategies that**

**might be more successful. Possible strategies for playing For $ale were not discussed prior to**

**playing the game. Games were available in the library for student practice, but no student**

**checked one out. When the class played a practice game, some of the groups started discussing**

**strategy when determining the next move. One student found a blog that discussed strategy.**

**(**[**https://boardgamegeek.com/thread/89221/sale-strategy-article**](https://boardgamegeek.com/thread/89221/sale-strategy-article) **)** Many students didn’t

formulate a strategy, but found that was a strategy for losing.

 The most common strategy for Phase 1 was to base bids on the range of values on the

Property Cards. A small range did not require as high of a bid, because the loss in value of the

Property Card was small. A large range meant actively biding for the highest valued Property

Cards. The students with this strategy were weighing the marginal cost versus the marginal

benefit of a higher bid. The marginal benefit was less when the range of Property Cards was

smaller. At times, the range was so small, the best strategy was to pass on the initial bid so no

cost was incurred for that Property Card. Several students understood that they should limit bids

on all but the highest valued Property Cards in the first rounds of the game. This would allow

them to have Coins to bid in the later rounds. If other players had not done this, there was an

opportunity to get valuable properties at a bargain.

 In Phase 2 there was a greater element of chance – luck or misfortune – since the

Currency Cards were just dealt from the deck so no bidding took place. In a way similar to

Phase 1, the range of the Currency Cards should determine the choice of Property Cards to play.

Most students understood that a good strategy was to avoid selling a Property Card for a

Currency Card valued $0. Also most student realized that they should try to get the highest

valued Currency Cards for Property Cards valued at 25 and above.

In general, an important strategy for both Phase 1 and Phase 2 was to pay attention to the

other players in order to determine what type of strategy they were using. Knowing the

opponent’s strategy is helpful in determining a successful bid or sale of a Property Card. This

insight is one I intended to draw upon when game theory in Oligopolistic markets was discussed.

# **Your Thoughts (Student Feedback)**

The last section in the paper was to find out whether the student enjoyed playing For $ale, if the they learned more about economics by playing, and whether they would recommend that I use For $ale in future Principles of Microeconomics courses. When I discussed this part of the assignment, I emphasized that I really wanted to know what each student thought. Points would be based on whether the questions were answered, not what the answers were. All of the students except one enjoyed playing For $ale in class. She wrote “ Like earlier I said how I am a very competitive person, so this game made all from chance was hard for me to fully enjoy.” (Note: This student came in 3rd and 4th out of five students.) The class was divided about whether they learned more about economics. Nine students indicated they did learn more about economics by playing For $ale. Eleven did not feel like they learned more about economics. Many of those felt they were able to practice the economics they already knew, so playing For $ale was worth doing. All of the students except for two recommended that For $ale be used when Principles of Microeconomics is taught again.

**Table 3**

**Student Comments**

|  |
| --- |
| * “Any way to help someone who has a hard time without visuals, this game would help them better than hearing it and having to do something on their own will also help the person playing.”
 |
| * “Some people may think that it was a waste of time, but I can be a testament that it was a fresh and fun way to review important economic concepts.”
 |
| * “I would recommend the game For $ale the be used in Principles of Microeconomics because like I said before it makes things seem more like a real life perspective rather than just on pencil and paper.”
 |
| * “I believe it is really worth it to use the For $ale game to teach a Principles of Microeconomics class for a lot of reasons. First of all, it is a game, which is always more fun than a lecture. Secondly, it gets everyone involved. Moreover, theories sometimes are not enough to teach perfectly, it is good to put in practice so the students can really understand all the subject. And finally because it covers a lot of principles of microeconomics that must be taught in class.”
 |

**For $ale Paper Grades**

 **All but one of the 26 students in Principles of Microeconomics turned in the For $ale Paper. The average score on the paper was 71/90 or 79%. The number and percentage of students earning each letter grade is presented in Table 4. The correlation coefficient between a student’s grade on the For $ale Paper and his or her grade for the course was 63%, although the grade was only 9% of the total points for the course. Another paper students wrote for Principles of Microeocnmics had a correlation coefficient with the grade for the course of 18%. The correlation of the final grade and the For $ale Paper grade may mean that students who did well on the For $ale Paper learned a fair amount of microeconomics from playing the game and writing the paper and this was reflected in the course grade.**

**Table 4**

**For $ale Paper Grades**

|  |  |
| --- | --- |
| **A** | **8 (32%)** |
| **B** | **7 (28%)** |
| **C** | **6 (24%)** |
| **D** | **2 (8%)** |
| **F** | **2 (8%)** |

**Conclusion and Future Research**

**The School of Business at MidAmerica Nazarene University does not offer a major in Economics. One or both of the two economics courses that are offered, Principles of Microeconomics and Principles of Macroeconomics, are requirements for most of the business majors. Accounting majors are required to earn a B or better in both of these courses to be accepted in the major. Most students view these classes as something they “have” to take – hoping just to survive with a C. As a professor who has always loved economics, even having taken it back in the “chalk and talk’ days, I would like to help students see economics through my eyes. I know how important economics is to life. Many people have told me that now as an adult, they wished they had taken economics, or they wished they had paid more attention while taking economics. Non-traditional adult students often come in with a real thirst to learn and understand economics. Because they are already interested in economics, half of the battle has been won. This is not true of most undergraduates.**

**Having the students play For $ale helped students have fun in economics class. Having fun helped them to have a more positive attitude toward economics, and I think they learned more economics than they would have. By playing** For $ale, the students acted like investors in properties – not buying the properties to live in them, but buying the properties for an investment in order to make the most money. This gave these traditional sophomores a context to build upon as market structures were discussed.

The next time I use for $ale, I will spend more time before the students play the game explaining the connections between the game and microeconomics. I will have more discussion about possible strategies before the students play the game as a team to learn it, and during this learning time I will encourage students to discuss the reasoning and strategy behind their next move. I will also change the object of the game to whoever earns the most profit from buying and selling properties will win the game instead of the whoever has earned the most money (revenues) at the end of the game wins. I will develop a pretest and posttest because that methodology would be a better way of determining whether students learned some economics than asking the students.

For $ale is a deceptively simple game. Because of this, the more times it is played, the more students can see whether their strategies or lack of a strategy matters. In the future I would like to explore modifying For $ale’s rules so that it can be played several times during class. This would not only help students to better understand For $ale and develop strategic thinking, but it would help them to better understand other economic concepts. Playing with and without collusion would be a good hands-on way for students to understand oligopoly.

 I will be on the lookout for another game that might be more applicable to microeconomics. Because of the students’ positive reaction to using games in the classroom, I will also be looking for a game to use in Principles of Macroeconomics. I want to be sure that game or other device is not just for “edutainment”, but really helps the students learn economics better.

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 **Appendix A**

**For $ale: The Game of Property and Prosperity Paper**

Due February 20, 2015

**90 points**

**Playing the game (35 points)**

For two rounds of the game:

* For each property, report on the number of the property, how much you spent when you purchased it, how much you sold it for, and the profit from each property (20)
* Report the total value of all Currency Cards and Coins (6)
* Report the place you came in – first, second, … (4)

Compute the ratio of the value of all your Currency Cards and Coins for the last game played divided by the value of all Currency Cards and Coins for the first game played (5)

**Economic Concepts Used in For $ale (20 points)**

For each of the following concepts, explain how this economic concept is related to the game:

* Demand (4)
* Supply (4)
* Profit (4)
* Marginal Cost (4)
* Marginal Revenue (4)

**Strategy (20 points)**

* Explain your strategy for playing Phase I: Buying Properties. (5)
* Explain your strategy for playing Phase II: Selling Properties. (5)
* Upon reflection, comment on the success of each strategy. Would other strategies be more successful? Please explain. (10)

**Your Thoughts (15 points)**

* Did you enjoy playing For $ale? (3)
* Do you think you learned more about economics playing For $ale? Please explain. (5)
* Would you recommend For $ale be used when Principles of Microeconomics is taught again? Please explain why or why not. (7)

 **Appendix B**

**For $ale: The Game of Property and Prosperity Results**

**Game 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Round | Number of Property | Amount Paid  | Amount Received from Sale | Profit \* |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| **Game 2** |

**\*Profit = amount received from sale of property – amount paid for property**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Round | Number of Property | Amount Paid  | Amount Received from Sale | Profit \* |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |