Herschel's World of Economics®

Herschel Goes into Business

Teacher's Guide



Developed by the Indiana Council for Economic Education 2011

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Teacher's Guide to Accompany Programs 1-5

The Herschel's World of Economics® curriculum was developed by the Indiana Council for Economic Education (ICEE), based at Purdue University in West Lafayette, IN. The Indiana Council, an affiliate of the Council on Economic Education, is part of a national network of State Councils and University Centers.

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Lynn Grebus is the originator of Herschel and is the puppeteer in all the Herschel programs. (Used with permission.)

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Correlation of Herschel's World of Economics®

With the National Standards for Economics*

→ Standards	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
1. Scarcity				√	√
Economic Wants					
Goods and Services	√				
Producers	√				
Consumers					
Productive Resources		√		√	
Human Capital		,			√
Opportunity Cost	√	√			√
2. Decision-Making (Marginal Costs/Benefits)		√	√	√	√
3. Allocation of goods and services					
4. Incentives	√				
5. Trade					
6. Specialization (Interdependence)				√	√
7. Markets and Prices		√	√	√	
8. Role of Prices		√	√	√	
9. Competition and Market Structure			√		
10. Economic Institutions					
11. Money and Inflation					
12. Interest rates					
13. Income	√				
14. Entrepreneurship	√	√			
15. Economic Growth (Productivity)				√	
16. Role of Government and Market Failure					
17. Government Failure					
18. Economic Fluctuations					
19. Unemployment and Inflation					
20. Monetary and Fiscal policy					

^{*} Voluntary National Content Standards in Economics, Council for Economic Education, 2010. (2nd ed.)

Introduction to the Herschel's World of Economics© Curriculum

The Importance of Economics

There is a growing realization on the part of teachers and opinion makers that to be effective citizens, students must have a basic understanding of economics and personal finance. Individuals without this basic understanding are essentially adrift in a complex, fast-paced world in which economics is a critical - perhaps *the* critical - driving force.

Simply put, individuals who understand the economic and financial world around them will make better decisions as consumers, producers, savers, investors, and voting citizens.

It is also very important to begin economics instruction when students are young - very young. People are surprised when they learn that the Indiana Council and its parent organization, the Council for Economic Education (www.councilforeconed.org), have many programs for elementary students. But experience has taught us that young students easily grasp - and very much enjoy learning about - the fundamentals of economics when these are taught creatively within the context of students' real world experiences.

Teaching the Herschel's World of Economics Curriculum

Get ready to watch your students interact with Herschel - a feisty little puppet dog who will charm and fascinate your students!

Use this four-step approach for each program:

- 1. Introduce the concept using KidsEcon Posters®
- 2. Show a Herschel's World of Economics© program.
- 3. Read a children's literature book that focuses on the specific concepts taught in the Herschel program.
- 4. Do a short teaching activity to reinforce the concepts.

Each of these steps is described in more detail below.

Step 1: Introduce the Program Using KidsEcon Posters: The economics content of both Herschel's World of Economics® DVDs is based around the popular KidsEcon Posters®, which cover concepts found in most state social studies standards. The KidsEcon Posters® curriculum contains another kinds of posters as well as supplementary materials such as KidsEcon Posters® Bingo and Activity cards, economics buttons, and the curriculum booklets, Half-Pint Economics, and Pint-Size Economics. These materials are all available at www.kidseconposters.com.

To begin a lesson, hold up and read the appropriate posters. Briefly explain the concepts and go over the examples given on the posters. Take questions and ask students to give other examples of the concept. Don't expect students to understand the concept immediately.

- Step 2: Watch and Discuss the Herschel DVD Program: Tell students they are about to see a program about Herschel, a little dog who really doesn't understand much about economics but often thinks he does! Show and discuss the program. Ask students the questions provided in this teacher's guide. Encourage students to ask their own questions.
- Step 3: Read a Children's Literature Book: Read one of the recommended children's stories. Each emphasizes the economic concepts taught in the program. Be sure to go to the KidsEcon Posters@ web site (www.kidseconposters.com) and click on Literature Connection. There you can print out short lessons on each book that provide you with guided questions to ask your students as you read. The questions, of course, focus on the specific economic concepts. At the Literature Connection, site you will notice that there are many more books you can use.
- **Step 4:** Do a Teaching Activity: Finally, do one or more of the suggested teaching activities. Most are easy to do and don't take much time, but they reinforce the concepts and help you see if students have learned them. Use as many of the activities as you like!

Herschel Puppets: <u>Consider using the new 12" Herschel hand puppets in some of your teaching activities!</u> Some puppet activities are posted on the <u>KidsEcon Posters@</u> web site. <u>ADD WEB LINK TO PUPPET!!</u> If you have a new idea for using the Herschel puppet, e-mail the office of the Indiana Council and we may add it to our current list of puppet activities!

Summary

We are confident that if you follow these four teaching steps, your students will gain a clear understanding of the economic concepts you are teaching. Furthermore, we are also confident that you will enjoy teaching these concepts and that *Herschel's World of Economics®* will become one of your favorite curriculum tools.

Program 1: Herschel Learns to Give, Save, and Invest

Summary of Economic Content

Income that is left over after taxes is called disposable income. People generally do four things with their disposable income: Give, Save, Spend (on consumer goods and services), or Invest (often in human capital such as education and training).



<u>Giving</u>: Individuals in the United States give away a lot of money each year, far more than other donor categories. For example, 2010 individual giving was \$212 billion out of total of \$291 billion (73%). Giving to religion was the largest individual giving category at \$101 billion. Giving to education was second at \$42 billion.

<u>Savings</u>: People generally invest their saving in financial assets such as certificates of deposit, stocks, bonds, and mutual funds. The choice of financial investment depends on many factors, including the rate of return, stage of life, and risk tolerance.

<u>Investing</u>: Economists typically refer to **investment** as spending on **capital goods**, such as tools, equipment, machinery, buildings, etc. Investment in **capital goods** helps increase *productivity*. But investment spending can also help increase the skills and abilities of workers. This type of investment increases **human capital**.

Entrepreneurs are the individuals in the economy who take the risk to start a business. In the DVD, when Herschel invests his money to start a doggie treat business, he is acting as an entrepreneur!

Teaching Program 1

Step 1: Read and discuss the Savings, Investing, and Entrepreneur posters with your students. (www.kidseconposters.com) Let students ask questions and give examples of the concepts.

Step 2: Watch and discuss Program 1, "Herschel Learns to Give, Save, and Invest." Encourage students to ask questions. Then ask students the following questions:

- a. Why was Herschel wearing a garbage raincoat? (hadn't saved enough money to fix his leaky roof)
- b. Why didn't Herschel want to save and give? (He wanted to buy goods and services, like video games, movies, candy bars, baseball bat, etc.)
- c. How did Dr. Day persuade Herschel to give some of his money away? (He told Herschel there were those in need through no fault of their own.)
- d. What charity did Herschel choose for his giving? Why? (the Lost Dog Society. It helps find lost dogs, like his friend Molly.)
- e. Why can it be a good idea to save for college? (You might be able to get a more satisfying job that will likely have a higher income.)
- f. What did Herschel decide to do instead of spending his remaining \$35 on video games, movies, etc? (invest in a doggie treat business)

- i. What was Herschel's opportunity cost when he decided to start a business? (the consumer goods he could not buy - like movies and candy!)
- j. What do we call the people who take the risk to start a business? *(entrepreneurs)*

Step 3: Read Three Cups of Rice, Alexander Who Used to Be Rich Last Sunday, or My Rows and Piles of Coins. Go to the KidsEcon Posters© web site (www.kidseconposters.com) and click on Literature Connection to get specific questions on these books to ask students as you read.

Step 4: Do some of the following activities.

- use Herschel Puppet teaching activities with your students. See
 www.kidseconposters.com/pdfs/Puppet Activities.pdf
- b. Have students research and list the education/training requirements of different jobs. Also list the average salary/wage.
- Do Pint Size Economics lesson on Saving and Investing and Entrepreneur. Available at www.kidseconposters.com)
- d. Play "Clap Clap Stomp Stomp." Students clap when you call out a consumer good, and stomp when you call out a capital good.

Program 2: Herschel Starts His Own Business

Summary of Economic Content

Total revenues are the money a business makes by selling goods and services. However, businesses must pay their **expenses**, or **business costs**, out of those revenues. Expenses include paying for **productive resources** such as workers,

capital equipment, ingredients, etc. When expenses, including all opportunity costs, are subtracted from total revenues, the remaining money is called **economic profit**.

Some opportunity costs that should be considered when computing profit are the opportunity costs of one's time. For example, in the program Herschel had to give up time playing video games and baseball in order to produce doggie treats. This time may not be "officially" counted in some profit calculations, but it's a real cost to consider!

Businesses often try to increase the **demand** for their profits through **advertising**. However, paying for advertising is a business expense, so deciding to advertise entails some real **risk**!

Teaching Program 2

Step 1: Read and discuss the Profit and Supply/Demand, and Opportunity Cost posters with your students. (www.kidseconposters.com) Let students ask questions and give their own examples of the concepts.

Step 2: Watch and discuss Program 2, "Herschel Starts His Own Business." Encourage students to ask questions. Then ask the following questions:

- a. How much did Herschel earn by selling doggie treats? (\$180) How much did he have left after giving and saving? (\$140)
- b. Herschel wanted to spend all of the \$140. What did he forget about? (He forgot about the costs of his productive resources!)
- c. What were the expenses, i.e. the costs of his productive resources? (wages \$40, \$10 to purchase capital resources like the bowls and spoons, and \$20 for ingredients.)
- d. What do we call the money that producers earn after subtracting expenses/costs from the money earned from sales? (profit)
- e. What was his final accounting profit? (\$70) What was his reaction? (He was not happy!)
- f. What else did Dr. Day tell Herschel he had to consider when computing his profit? (the opportunity cost of his <u>time</u> he now has no time to play video games, baseball, etc.)
- g. What did Dr. Day suggest as a way of increasing the demand for Herschel's doggie treats? (advertising in the Doggie Journal!)
- h. What was Herschel's response? (He did not like

- the idea because it took money to advertise and he wanted to make money, not spend it!)
- i. Is advertising risky? (Yes. You never know if the increase in sales revenues will cover the costs of the advertising.)
- j. What did Herschel want to do instead of advertising? (raise the price to \$5)
- k. What did Dr. Day think about that? (It seemed more risky than advertising, since fewer people would buy Herschel's doggie treats.)
- Do you think Herschel's idea to raise his price to \$5 is a good one? Why or why not? (Answers will vary.)

Step 3: Read How the Second Grade Got \$8,205.50 to Visit the Statue of Liberty (profit), The Goat in the Rug (productive resources), and Paperboy (profit, demand). Go to the KidsEcon Posters@ web site and click on Literature Connection. (www.kidseconposters.com) to get questions to ask students. Other books and lessons are available at the site.

Step 4: Do some of the following activities with your students:

- a. Do lessons on Productive Resources in Half-Pint Economics and lessons on Profit and Supply/Demand from Pint-Size Economics. (See www.kidseconposters.com.)
- b. You are opening your own lawn mowing business.
 Write a paragraph explaining how you can increase the demand for your lawn service.
- c. Cut out examples of effective advertising and explain why the ads are effective.

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Program 3: Herschel Faces Competition

Summary of Economic Content

One of the key concepts in economics is the **Law of Demand**. According to this law, assuming nothing else changes, people will buy more at lower prices and less at higher prices. This is what Herschel discovers when he raises the price of his doggie treats from \$3 to \$5.

Another key idea is that prices change as a result of changes in supply and demand. Assuming other things don't change, as supply increases and/or demand decreases, the price of a good or service will fall. As supply decreases and/or demand increases, the price will rise. One thing that causes the supply of a good or service to increase is new businesses entering the market. This happens in the DVD when Rover and Clover decide to produce and sell doggie treats, to Herschel's consternation! This time, Herschel decides to advertise to increase the demand for his own doggie treats.

Teaching Program 3

Step 1: Review the concepts of supply, demand, competition, and price using the Supply/Demand and Price posters. (See www.kidseconposters.com)

Step 2: Watch and discuss Program 3, "Herschel Faces Competition." Encourage students to ask questions. Then ask the following questions.

- a. Why wasn't Herschel selling many doggie treats? (the price was too high!)
- b. This illustrates what economic law? (the Law of Demand)
- c. Why was the competition from Rover and Clover a problem for Herschel? (They took some his customers and offered a lower price.)
- d. Do you think this competition is fair? (In our economy it is considered fair to have the freedom to start a business.) Did Herschel think it was fair? (No!!)
- e. What did Herschel decide to do to increase the demand for his doggie treats? (advertise)
- f. Why does it cost money to advertise? (The newspaper has to make money/profit, too, or it will go out of business.)
- g. Why did Herschel decide to charge a price of \$3.50 instead of \$3.00? (He thought consumers would pay more because his treats had the secret ingredient molasses.)
- h. Was there a risk in advertising? (Yes, advertising costs money and Herschel couldn't be sure it would increase the demand enough to cover the cost of the advertising.)

Step 3: Read Arthur's TV Trouble (demand, advertising), Lemonade for Sale (demand, advertising), and Arthur's Pet Business (profit). Go to the KidsEcon Posters® web site and click on Literature Connection. (www.kidseconposters.com) Click on the Supply and Demand and Profit posters to get lessons on these books with questions to ask students as you read. Other books and lessons are also available

Step 4: Do some of the following activities:

- a. Do lessons on Supply and Demand and Profit in the Pint-Size Economics curriculum. (see www.kidseconposters.com)
- b. Do Lessons 11-13 in the *Playful Economics* curriculum. Students use modeling clay to learn
 about supply and demand! (available at
 www.councilforeconed.org)
- c. Use Herschel Puppet teaching activities with your students. See samples of activities at www.kidseconposters.com/pdfs/Puppet-Activities.pdf
- d. Two goals of advertising are to: 1. provide consumers with <u>useful information</u> about how/where to purchase the product and 2. <u>persuade</u> consumers to purchase a product. Have your students bring in ads. Have them identify how the ads provide information and how they try to persuade you to purchase something. Post ads with student analysis on a bulletin board.
- e. Have students create advertisements using music, print, Internet, etc. Do the ads provide information or persuade or both?

Program 4: Herschel Produces More

Summary of Economic Content

One of the great challenges about running a business is how to increase **productivity**, that is, how to increase the **efficiency** of business operations. Increasing productivity means producing more output using the same or fewer inputs. Productivity is basic

productivity means producing more output using the same or fewer inputs. Productivity is basically defined as a ratio: output divided by input. The most common measure of productivity is **labor productivity**, usually defined as output per hour. In agriculture, productivity is often defined as output per acre.

There are several fundamental ways to increase productivity. One is by making sure workers have an adequate supply of capital goods, such as tools and machinery. Also, improving the level of technology in production is a powerful way of improving productivity. A third way is by improving the knowledge, experience, and skills of workers. This is referred to as increasing human capital. A final way to increase productivity is through increased specialization and exchange.

A main driver of productivity is **competition**. If a business doesn't remain efficient, it is likely that other business competitors will force it to go out of business. In the DVD, Herschel faced competition from his friends, Rover and Clover, and therefore had to figure out how to improve his own business's productivity.

Teaching Program 4

Step 1: Teach the concepts of productivity, capital resources, specialization, and investing using the *KidsEcon Posters®*. (www.kidseconposters.com)

Step 2: Watch and discuss Program 4, "Herschel Produces More." Encourage students to ask questions. Then ask students the following questions.

- a. Why did Herschel have to come up with ideas to improve his business? (He faced competition from Rover and Clover, who also had a doggie treat business and who charged only \$3!
- b. How did Herschel want to solve his problem? (He wanted to persuade Rover and Clover to retire and more to Florida!)
- c. What did Dr. Day suggest that Herschel do? (be more efficient by improving productivity)
- d. How is productivity measured in the DVD? (how many doggie treats are produced per hour)
- e. How did Herschel plan to increase productivity? (by specializing i.e. dividing up the labor; also, by investing in capital the electric mixing bowl.)
- f. What did Dr. Day think could be a problem with specializing to produce doggie treats? (Molly and Spot might not <u>like</u> to specialize/divide the labor. They liked making the doggie treats themselves!)

Step 3: Read books such as Curious George Goes to a Chocolate Factory (productivity), Worm Gets a Job (specialization), Apples for Life (capital resources), and My Rows and Piles of Coins (investing). Go to the KidsEcon Posters@ web site and click on Literature Connection.

(www.kidseconposters.com) Then click on the poster/concept to get book lessons which give you specific questions to ask students as you read.

Step 4: Do some of the following activities with your students:

- a. Do the lesson on Productivity, Specialization, and Investing in the *Pint-Size Economics* curriculum. (see www.kidseconposters.com)
- b. Use Herschel Puppet teaching activities with your students. See samples of activities at www.kidseconposters.com/pdfs/Puppet-Activities.pdf
- c. Have students investigate and make a bulletin board display showing types of technological improvement that have improved productivity and standards of living. (e.g. tractor, combine)
- d. The United States Bureau of Statistics has a comprehensive web site on the labor market. Upper elementary students can examine the wages and salaries of hundreds of occupations at www.bls.gov/oes/current/oes_nat.htm.

Program 5: Herschel Makes a Tough Decision

Summary of Economic Content

Life is all about **trade-offs**. In other words, "There is no such thing as a free lunch," as economists are fond of saying. Because of scarcity, people must choose between various alternatives, getting one thing that they want and giving up another thing. In doing so, people are trading off and coal for another. For example, in the DVD, Harre

doing so, people are **trading off** one goal for another. For example, in the DVD, Herschel discovers that by working so many long hours at his business, he is trading off leisure time to earn more money.

Economic **specialization** occurs when people concentrate their production on a few kinds of goods or services, then **trade** to get the other kinds of goods and services that they consume. In a specific production process, specialization takes the form of **division of labor**, in which the production of a good is broken down into different tasks, with each worker performing a separate task. Herschel learned in Program 4 that he could produce more doggie treats when he and his friends specialized by dividing the labor in production.

It is important for students to understand that both specialization and the division of labor result in increased interdependence. That is, the more people specialize, the more they depend on one another. For example, Herschel was not happy when Spot didn't show up for work, leaving Herschel to operate the new mixing bowl. This was not Herschel's job and he wasn't good at it. He was depending on Spot to do it!

Teaching Program 5

Step 1: Review the concepts of specialization, interdependence, and trade-offs, using the *KidsEcon Posters®*. (www.kidseconposters.com)

Step 2: Watch and discuss Program 5, "Herschel Makes a Tough Decision." Encourage students to ask questions. Then ask the following questions:

- a. Why was Herschel so tired? (He was working very hard at his business.) How was his business doing? (Well! He making and selling more doggie treats.)
- b. Why were Spot and Molly unhappy? (They were bored having to do the same job over and over.)
 How is this an example of trade-offs? (They were trading off a more fun way of producing doggie treat in order to make more money.
- c. Why was Herschel upset at Spot? (He was missing work and Herschel had to do his job of using the electric mixing bowl. And it was hard to use!)
- d. How did this illustrate interdependence? (Herschel depended on Spot to do that job, since Herschel couldn't do it very well.)
- e. Herschel was really tired. How was this an example of trade-offs? (By working so hard at his business, Herschel was trading off leisure time playing baseball in order to get more money.
- f. What did Herschel decide to do? (He decided to work less and play more, trading off some money in order to have more fun/leisure!)
- g. What did Dr. Day think he might want to do for work? (start his own doggie treat business.) Why

was Herschel so upset with that? (That would mean more competition!)

Step 3: Read *How a House is Built* (specialization), *Letting Swift River Go* (trade-offs), and *Ant Cities* (interdependence). For questions to ask students, go to the *KidsEcon Posters®* web site and click on Literature Connection. (www.kidseconposters.com).

Step 4: Do some of the following activities with your students.

- a. Do the lessons on Specialization, Trade-offs, and Interdependence in *Pint-Size Economics. (See www.kidseconposters.com.)*
- b. Do Lesson 8 in the *Playful Economics* curriculum. Students make hamburgers out of modeling clay! (available at www.councilforeconed.org)
- c. Have students make drawings showing a production process. Show workers dividing the labor at different tasks. Put the drawings on a bulletin board.
- d. Discuss the trade-offs your students have made when they made specific decisions. Identify the trade-offs that were made between different goals.
- e. Do some of the puppet activities with the Herschel puppet!
 www.kidseconposters.com/pdfs/Puppet-Activities.pdf