# Herschel's World of Economics®

A Teacher's Guide to Accompany Programs 1-6



Developed by the Indiana Council for Economic Education 2007

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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 National 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\*

<b>↓</b> Standards	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
1. Scarcity				√	√	$\sqrt{}$
Economic Wants	V	$\sqrt{}$				V
Goods and Services		$\sqrt{}$				
Producers		√				
• Consumers		$\sqrt{}$		,		
Productive Resources			√ /	√		
Human Capital			√			ı
Opportunity Cost						√
2. Marginal costs/marginal benefits					√	√
3. Allocation of goods and services				$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
4. Role of incentives				$\sqrt{}$	√	
5. Gain from trade					√	
6. Specialization and trade					√	
7. Markets - price and quantity determination		$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	<b>V</b>
8. Role of price in market system						
9. Role of competition						
10. Role of economic institutions						
11. Role of money					$\sqrt{}$	
12. Role of interest rates						
13. Role of resources in determining income		$\sqrt{}$				
14. Profit and the entrepreneur						
15. Growth						
16. Role of government						
17. Using cost/benefit analysis to evaluate government programs						
18. Macroeconomy-income/employment, prices						
19. Unemployment and inflation						
20. Monetary and fiscal policy						

<sup>\*</sup> Standards taken from the *Voluntary National Standards in Economics*, National Council on Economic Education (NCEE), 1997.

# Introduction to Herschel's World of Economics®

# 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 much 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 usually surprised when they learn that the Indiana Council and its parent organization, the National Council on Economic Education (<a href="www.ncee.net">www.ncee.net</a>), 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 content of Herschel's World of Economics© is based around the first 11 posters (Set A) in the popular KidsEcon Posters© curriculum. These posters cover concepts that are found in most state social studies standards. The KidsEcon Posters© curriculum contains another set

of 11 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 poster. Briefly explain the concept and go over the examples given on the poster. 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 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!

For lower grades, the set of lessons and activities found in the *Half-Pint Economics* curriculum are excellent. In fact, 14 out of the first 15 lessons correspond exactly with the concepts covered in *Herschel*. *Half-Pint* is available on the *KidsEcon Posters®* site. (www.kidseconposters.com)

## 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.

Harlan Day
Executive Director
Indiana Council for Economic Education

# Program 1: Goods and Services

#### Summary of Economic Content

Goods are tangible objects that satisfy people's economics wants. Services are actions, such as haircuts and car repair, which also satisfy people's economic wants.

A key point to emphasize to young children is that people must work to produce goods and services - they don't appear magically on store shelves.

When people work, they earn **income** which they use to purchase the goods and services they want. (People also typically save part of their income, and many people give some of it away.)

The desire for more goods and services is not necessarily "greedy." People often want more so they can give more to others in need, provide a better life for their children or aging parents, or make their neighborhoods more beautiful.

Teachers often make a distinction between wants and needs. However, the concept of needs can be rather subjective, and economists typically lump both terms together under the general category of wants.

#### Teaching Program 1

**Step 1:** Read and discuss the Goods and Services and the Economic Wants posters with your students. (<a href="www.kidseconposters.com">www.kidseconposters.com</a>) Let students ask questions and give examples of the concepts.

**Step 2:** Watch and discuss Program 1, Goods and Services. Encourage students to ask questions. Then ask students the following questions:

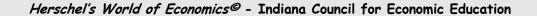
- a. What were some of Herschel's economic wants? (toys, video games, bubble gum, doggie treats)
- b. How are these different from your economic wants? (Answers will vary.)
- c. What is a good? (an economic want that we can touch or feel)
- d. When Herschel said that Dr. Day's sweater was "not good," did he understand what an economic good was? (No, Herschel was thinking only of "good" being the opposite of "bad!")
- e. What is a service? (an economic want that is satisfied by someone doing something for you; e.g. haircut, car repair, medical checkup, etc.)
- f. What were services that Herschel wanted? (doctor visit, grooming)
- g. What are examples of goods and services you want? (Answers will vary.)
- i. Is Herschel thinking at all about saving some of his money? (No! He only wants to buy things!)

j. What do we call the money people earn from working? *(income)* 

Step 3: Read How Much Is That Doggie in the Window (Economic Wants), To Market, To Market (Goods), and Rumplestiltskin's Daughter (Services). Go to the KidsEcon Posters@ web site (www.kidseconposters.com) and click on Literature Connection. Then click on Economic Wants, Goods, and Services to get lessons with specific questions on these books to ask students as you read. Other books and lessons are also available for you to use.

**Step 4:** Do some of the following activities.

- a. Do lessons on Economic Wants, Producers, and Consumers in *Half-Pint Economics.* (available at www.kidseconposters.com)
- b. Do Lesson 1, Goods and Services, in the *Play Dough Economics* curriculum. (available at www.ncee.net)
- c. Cut out pictures from magazines to make a large "Wishing Well" bulletin board entitled, "Things That People Want." Classify these economic wants into goods or services.
- d. Draw and color pictures to accompany this title, "People Work To Produce Goods and Services."
- e. Play "Clap Clap Stomp Stomp." Students clap when you call out a good, stomp when you call out a service.



# Program 2: Producers and Consumers

#### Summary of Economic Content

**Producers** are people who make goods or provide services. Producers receive **income** for their work. After paying **taxes**, people **spend** their remaining income, **save** it, or **give** some of it away.

Consumers are people who buy goods and services. Consumers face many choices about what to buy. They cannot buy everything they want with their limited incomes. People's choices about what goods and services to buy ultimately determine what producers will produce and, therefore, how productive resources will be used.

#### Teaching Program 2

Step 1: Read and discuss the Consumers and the Producers 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, Producers and Consumers. Encourage students to ask questions. Then ask the following questions:

- a. Did Herschel have a lot of economic wants? (yes!) In this regard, is he different from other people? (No, people have many economic wants.)
- b. What are goods and services? (Goods are economic wants we can touch or feel. Services are economic wants that are satisfied by people doing things for us, such as a haircut.)
- c. Where do goods and services come from? (They must be produced!)
- d. What are producers? (People who make goods or provide services.)
- e. What do we call the money that producers earn? (income)
- f. What did Herschel want to produce when he grew up? (doggie treats!)
- h. What are consumers? (people who buy goods and services)
- i. What were services Herschel consumed? (vet services, grooming, dog walking, kennel)
- j. Do people have many choices to consider when they go shopping? (yes!) Why can this be challenging? (There are so many things to buy but income is limited - people can't buy everything they want.)

j. When you shop, you are a consumer. What are some goods or services <u>you</u> buy? (Answers will vary.)

Step 3: Read The Little Red Hen Makes a Pizza (Producers) and Bennie's Pennies (Consumers). Go to the KidsEcon Posters@ web site and click on Literature Connection. (www.kidseconposters.com) Then click on Producers and Consumers to get lessons with specific questions on these books to ask students as you read. Other books and lessons are also available.

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

- a. Do lessons on Producers and Consumers in Half-Pint Economics. (See www.kidseconposters.com.)
- b. Cut out pictures of people who are producing something and make these into a "Producers" bulletin board. You can also categorize the pictures into people producing a good or service.
- c. Write a paragraph entitled, "What I Want to Produce When I Grow Up."
- d. Cut out pictures of things people purchase as consumers. Make a bulletin board of the pictures entitled, "What We Purchase as Consumers."
- e. Write a paragraph entitled, "Goods and Services I Consume Each Week."
- f. Plan a simple budget for a week. List how many goods and services you will consume. How much will you save or give away?
- g. Cut out coupons from magazines. Compute how much money you would save from using them.

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# Program 3: Productive Resources

#### Summary of Economic Content



Every society is endowed with **productive resources** that are used to produce goods and services. Productive resources are often classified into three groups: **natural resources**, **human resources**, and **capital resources**. Natural resources (sometimes called "land") refer to resources such as coal, water, trees, and land itself. Raw materials used in production come from natural resources. Human resources (**labor**) describe the human work effort, both physical and mental, expended in production. Capital resources are the man-made physical resources (such as buildings, tools, machines, and equipment) used in production.

Capital resources are sometimes confused with financial capital. Financial capital refers to the money used to start or expand a business. Entrepreneurship refers to the special human skills and abilities used to organize productive resources in order to start a business. Another important term is human capital. Human capital refers to the education, skills, and abilities of human resources. Education and training are ways workers can improve their human capital (and productivity), making themselves more valuable to employers.

#### Teaching Program 3

**Step 1:** Review the concepts of economic wants and goods and services. Read and discuss the Productive Resources, Natural Resources, Human Resources, and Capital Resources posters. (www.kidseconposters.com)

**Step 2:** Watch and discuss Program 3, Productive Resources. Encourage students to ask questions. Then ask the following questions.

- a. What was Herschel producing? (doggie treats) Why? (to earn income so he could buy things)
- b. What are productive resources? (the resources used to produce goods and services natural, human, and capital.)
- c. Where do goods and services come from? (*They are found in stores, but have to be <u>produced!</u>)*
- c. What are examples of natural resources? (air, land, water, forests, minerals, oil, etc.)
- d. What natural resources were needed to produce doggie treats? (water, sunshine, minerals, land)
- e. What was the "secret" ingredient? (molasses!)
- f. What human resources are needed to produce doggie treats? (people i.e. labor, to do the work)
- g. Give examples of human resources (secretary, doctor, teacher, barber, factory worker, etc.)
- h. What is the special name for the skills, training, and education people acquire? (human capital)
- i. Who helped Herschel get the human capital he needed to produce doggie treats? (his mother)

- j. What capital resources did Herschel use? (mixing bowl, oven, building, cooking spoon!)
- k. Why are productive resources so important? (Without them, we couldn't produce the goods and services that help people to live healthy, prosperous lives.)

Step 3: Read How to Make an Apple Pie and See the World (productive resources), Abuela's Weave (human resources), The Three Little Pigs and the Big Bad Pig (capital resources), and Growing Vegetable Soup (natural resources). Go to the KidsEcon Posters@ web site and click on Literature Connection. (www.kidseconposters.com) Click on Producers and Consumers 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 Natural, Human, and Capital Resources from Half-Pint Economics. (see www.kidseconposters.com)
- b. Do Lesson 2 in the *Play Dough Economics* curriculum. (available at www.ncee.net)
- c. Locate natural resources on a state map.
- d. Using pictures from magazines, make a "Capital Resources" bulletin board.
- e. Bring in real tools or equipment and discuss how capital resources help in production.
- f. Create a simple résumé listing your skills, abilities, and education/training (human capital).

# Program 4: Scarcity



Because **productive resources** are limited, there will never be enough goods and services to satisfy everyone's economic wants, which are virtually unlimited. The tension between limited productive resources and unlimited economic wants is what economists refer to as **scarcity**. Neckties, candy bars, automobiles, haircuts, a dentist's services, safety pins, and diamonds are *all* considered scarce. Scarcity is sometimes confusing to students because it does not correspond exactly to the common usage of the word. For example, are candy bars and neckties really scarce? They are readily available, so most students would instead apply the term scarcity to gold or diamonds. The key point to emphasize is that candy bars and neckties *are* indeed scarce since they are not *freely* available to everyone who wants them. They must be *produced* using scarce productive resources. To summarize, scarcity means that there are not enough goods and services for everyone to have *all* that he or she wants. It is important to emphasize that scarcity forces people to make **choices** among competing alternatives. e.g. Because my income is scarce, I must choose to purchase one item instead of another. Or, because my time is scarce, I must choose to produce one item instead of another.

Because goods and services are scarce, they command a price in the marketplace. The **price** of a good or service indicates how scarce a good or service is relative to other goods and services.

#### Teaching Program 4

Step 1: Review the concepts of economic wants, good and services, and productive resources using the KidsEcon Posters©. (<a href="www.kidseconposters.com">www.kidseconposters.com</a>) Then, use the Scarcity poster to discuss this new concept.

**Step 2:** Watch and discuss Program 4, Scarcity. Encourage students to ask questions. Then ask students the following questions.

- a. Why did Herschel appear rather quickly at the beginning? (He was excited about the doggie treats he had produced.)
- b. What was Herschel's scarcity problem? (He didn't have enough productive resources, including his time, to produce all the doggie treats his friends wanted.)
- c. What does scarcity force people to do? *(make choices!)*
- d. What else was scarce for Herschel? (space in his doghouse, his time)
- e. What are some scarcity problems you face each day? (Answers will vary. Specific consumer decisions, how to use one's time, etc.)
- f. What did Herschel plan to do to address his

scarcity problem? (sell his doggie treats and not just give them away.)

Step 3: Read Getting Through Thursday and The Doorbell Rang. Go to the KidsEcon Posters® web site and click on Literature Connection.

(www.kidseconposters.com) Then click on Scarcity to get lessons on these books which give you specific questions to ask students as you read.

Other books and lessons are also available.

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

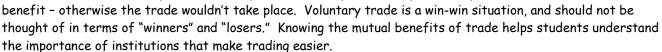
- a. Do the Scarcity lesson in *Half-Pint Economics*. (see www.kidseconposters.com)
- b. Create a "Scarce Goods" and "Scarce Services" bulletin board using pictures from magazines.
- c. Have students write a paragraph about a scarcity situation they faced when purchasing something.
- d. Have students write a paragraph about a scarcity situation involving their limited time.
- e. Discuss skills (human capital) needed for different jobs and how these skills make workers "scarce" i.e. more valuable to businesses. Have students cut out want ads. List the skills, education, and training required for each job.

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# Program 5: Trade and Money

#### Summary of Economic Content

Everyone **specializes** to some degree in what he or she produces and then **trades** (**exchanges**) with others to get many of the **goods and services** (**economic wants**) he or she consumes. Voluntary trade is a cooperative activity, and both parties expect to



Money is anything widely accepted as final payment for goods and services. Trade without money is called **barter**. Barter is costly and difficult because both parties must be willing to trade for the item the other person has. When money replaces barter, this makes exchanges less costly and easier to do. As a result, more specialization takes place, with more people using money to buy most of the goods and services they consume. This leads to higher levels of production and consumption.

The real value of money is determined by the goods and services it can buy. Doubling the amount of money in an economy overnight would not, by itself, make people better off. This is because there would still be the same amount of goods and services produced and consumed - only at higher prices.

While many different things have been used as money in history, to be effective, money should have these characteristics: scarce, portable, divisible, and durable. Money has three primary functions: most importantly, it facilitates trade; it helps people to save; and it is a measure of value.

#### Teaching Program 5

**Step 1**: Review the concepts of trade and money, using *KidsEcon Posters©*. (www.kidseconposters.com)

**Step 2:** Watch and discuss Program 5, Trade and Money. Encourage students to ask questions. Then ask the following questions:

- a. What trade did Herschel want to make? (He wanted to exchange his "homework" rock or his doggie treat for Dr. Day's candy bar.)
- b. Was Herschel successful in his trade? (No!) Why not? (He wanted what Dr. Day wanted, but Dr. Day did not want what Herschel had to offer! For trade to be successful, each person must want what the other person has.)
- c. What do we call trade without money? (barter)
- d. Why does trade (exchange) benefit both people in the trade? (Both expect to receive something they want more than the item they traded.)
- e. What was Dr. Day willing to trade? (\$1.00)
- f. Why does money make trade easier? (Money can be used to buy other goods and services. You don't have to want the exact thing the other person has.)
- g. To be effective, money should have four characteristics. What are they? (scarce,

- portable, divisible, durable)
- h. What are the three primary functions of money? (helps people to trade trade, helps people to save, is a measure of value.)

Step 3: Read Bunny Money and A New Coat for Anna. Go to the KidsEcon Posters® web site and click on Literature Connection.

(www.kidseconposters.com) Then click on Opportunity Cost to get lessons on these books which give you questions to ask students. Other books and lessons are also available.

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

- a. Do the lessons on Trade and Money in Half-Pint Economics. (see www.kidseconposters.com)
- b. Do Lesson 6 in the *Play Dough Economics* curriculum. (available at www.ncee.net)
- Make drawings and a bulletin board illustrating the three functions of money.
- d. Compare and contrast money from different countries. Older students can investigate exchange rates.

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# Program 6: Opportunity Cost



Because of scarcity, any time a choice is made there are alternatives that are *not* chosen. More precisely, there is always one *best* alternative that is not chosen. The value of this best alternative is the **opportunity cost**. Both producers and consumers incur opportunity costs when making decisions. For example, a businessperson who uses a small building to operate an insurance business cannot use the same small building to produce pizza. A consumer who uses income to purchase a shirt cannot use the same income to purchase a pair of pants. Because there are always alternative uses for limited resources, every decision has an opportunity cost.

Help your students to recognize and evaluate opportunity costs when making decisions. As consumers, students should recognize that their opportunity cost is *not* the money they spend to buy something, but the value of the best alternative they do *not* choose. For producers, the opportunity cost is the most valuable good or service *not* produced as the result of the decision to produce something else.

Opportunity cost can also be applied to decisions to **save** or **spend**. Choosing to save means giving up the opportunity to enjoy current consumption now. On the other hand, choosing to consume means giving up the opportunity for greater *future* consumption (as the result of accrued interest).

#### Teaching Program 6

**Step 1:** Review the concepts of productive resources and scarcity, using the *KidsEcon Posters®*. (<a href="www.kidseconposters.com">www.kidseconposters.com</a>) Then, discuss opportunity cost, using the Opportunity Cost poster.

**Step 2:** Watch and discuss Program 6, Opportunity Cost. Encourage students to ask questions. Then ask the following questions:

- a. How did Herschel get the \$1.00 he had in his mouth? (by selling some of his doggie treats)
- b. What was Herschel's scarcity problem? (He could only afford one candy bar, but he wanted both!)
- c. What was the opportunity cost of his choice?

  (giving up the chance to get the yellow candy bar)
- d. When a person makes a consumer or producer choice, what is his or her opportunity cost? (the best alternative <u>not</u> chosen!)
- e. What was Herschel's economic (scarcity) problem as a producer? (He wanted to produce more doggie treats, but his time was limited. He couldn't produce more doggie treats and at the same time play video games! He had to choose how to use his limited time.)
- f. What was Herschel's opportunity cost as a producer? (When he decided to produce more doggie treats, his opportunity cost was the time given up playing video games. He couldn't do both at the same time.)

- g. What was the opportunity cost of a choice you made? (Answers will vary.)
- h. Why is there an opportunity cost to every decision? (There is always an alternative given up.)

Step 3: Read Erandi's Braids and Mailing May. Go to the KidsEcon Posters® web site and click on Literature Connection. (<a href="www.kidseconposters.com">www.kidseconposters.com</a>)
Then click on Opportunity Cost to get lessons which give you specific questions on these books to ask students as you read. Other books and lessons are also available for you to use.

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

- a. Do the lesson on Opportunity Cost from Half-Pint Economics. (see www.kidseconposters.com)
- b. Do Lessons 4 and 5 from the *Play Dough Economics* curriculum. (available at www.ncee.net)
- c. Make an Opportunity Cost bulletin board showing the opportunity cost of various choices.
- d. Write paragraphs entitled: "My Opportunity Cost," in which students describe the opportunity cost of a decision they made. Illustrate the paragraph with a drawing. Post on a bulletin board.