



Economics Arkansas

EDUCATION FOR REAL LIFE



Need Help as You Decide?

Use the PACED Decision Making Guide!

By: Marsha Masters
Economics Arkansas

Lesson Description

“Today was quite an awful day for me and my poor pup. The trouble was I had a mind, but I couldn’t make it up.” Dr. Seuss

We are faced with thousands of decisions daily... from the moment we wake up until we fall asleep at night. This lesson focuses on applying the economic PACED Decision Making Guide when making choices.

Grade: 3 - 6

Concepts

- **Alternative:** One of many choices or courses of action that might be taken in a given situation.
- **Benefit:** Monetary or non-monetary gain received because of an action taken or a decision made.
- **Choice:** Decision made or course of action taken when faced with a set of alternatives.
- **Cost:** An amount that must be paid or spent to buy or obtain something. The effort, loss or sacrifice necessary to achieve or obtain something.
- **Decision:** A conclusion reached after considering alternatives and their results.
- **Opportunity cost:** The second-best alternative (or the value of that alternative) that must be given up when scarce resources are used for one purpose instead of another.
- **PACED Decision Making Guide:** A decision-making process designed to help people solve problems in a rational, systematic way. It includes the following steps: State the Problem, List Alternatives, Identify Criteria, Evaluate Alternatives, and Make a Decision.
- **Scarcity:** The condition that exists because human wants exceed the capacity of available resources to satisfy those wants; also a situation in which a resource has more than one valuable use. The problem of scarcity faces all individuals and organizations, including firms and government agencies.

Standards***Arkansas Economics Standards***

- E.1.3.2 Evaluate problems, alternatives, and trade-offs involved in making a decision such as the cost-benefit decision tree.
- E.1.4.2 Apply an economic decision-making model when making decisions such as the PACED decision-making.
- G.4.5.4 Evaluate the impact that resource scarcity has on a region. This may include lack of clean drinking water, land scarcity, labor shortage, and supply chain shortages.
- E.1.6.1 Examine ways trade-offs have allowed civilizations to get the most out of scarce resources.

Arkansas State Standards**Grade 3**

- 3.CC.4.P: Use visual displays and/or audio appropriately to emphasize or enhance certain facts or details when presenting.

Grade 4

- 4.CC.4.P: Use visual displays and/or audio appropriately to emphasize or enhance certain facts or details when presenting.

Grade 5

- 5.CC.4.P: Use visual displays and/or audio appropriately to emphasize or enhance certain facts or details when presenting.

Grade 6

- 6.CC.12.P: Include multimedia and visuals to clarify information.

Objectives

Students will be able to

- identify the steps in the PACED Decision Making Guide
- apply the PACED Decision Making Guide when making a decision now or when analyzing decisions made throughout history.

Time required:

- 15 minutes for teacher preparation
- 1 class period (45-50 minutes)
- 30 minutes for the assessment

Materials required

- Visual 1 (Dr. Seuss Quote)
- Visual 2 (PACED Decision Making Guide)
- Activity 1 (PACED Decision Making Guide puzzle)
- Card stock paper if available
- Envelopes, one per group of 2-3 students
- Activity 2 (PACED Decision Making Guide Grid), one per group of 2-3 students
- Activity 3(Assessment)

Teacher Preparation

Prepare materials prior to class:

- a. Make 1 copy/per group of 2-3 students of Activity 1. Card stock paper is recommended.
- b. Cut each sheet along the lines to create puzzle pieces.
- c. Fill each envelope with one complete set of puzzle pieces.

Procedure

1. Ask students to estimate the number of decisions they have made today. (Answers will vary. If they can't think of any decisions they have made, encourage them to consider decisions they made to set an alarm, get out of bed, bathe, breakfast choices, clothing choices, school choices, extracurricular choices, etc.)
2. Display Visual 1 (Seuss quote). Ask students if they have ever been faced with a similar problem. Facilitate a discussion on what decisions are hardest and easiest. Allow students to share. Ask them why they have to make choices. Economics teaches that scarcity necessitates decision making. Scarcity exists when there is not enough of a limited resource to satisfy everyone's wants. There could be scarcity of time, space or resources.
3. Tell students that a recent article in *Time Magazine* states: "Every day, we face thousands of decisions both major and minor. How does the brain decide? A new study suggests that it relies on two separate networks to do so: one that determines the overall value — the risk versus reward — of individual choices and another that guides how you ultimately behave." (Source: Making Choices: How Your Brain Decides – <http://healthland.time.com/2012/09/04/making-choices-how-your-brain-decides/>)
4. The lesson today is designed to teach how to apply the economic way of thinking in making decisions. Every choice has costs and benefits. In economics, costs are things unfavorable to a decision maker. Benefits are things favorable to a decision maker.
5. Every choice has an outcome. Sometimes the outcome is obvious. Sometimes choices have outcomes that are not don't fully recognized until later in the future.
6. Give students the following scenario:
7. Let's say that you are studying for a big test. You know that you need a good grade on this test because you are struggling to maintain a passing grade. You have been told you will lose all use of electronics if you don't make a good grade. You understand the costs involved, but a friend calls you and has some great tickets to an event that is in town tonight. You have really been wanting to go. You have to weigh the costs and benefits. The benefits would include being with your friend, attending the event and having memories for a long time. The costs could include a failing grade, losing all your electronic privileges and possibly the opportunity to get credit for the class you are taking.
8. Economics challenges us to weigh the costs and benefits of decisions by using a decision-making process called the PACED Decision Making Guide. Today's lesson will teach this puzzle. The puzzle is complete when it forms an 8 ½ by 11 inch piece of paper and has statements about the PACED Decision Making Guide.

9. Distribute the envelopes containing the PACED Decision Making Guide Grid Puzzles to groups of 2-3 students. Allow time for students to assemble the puzzles. Refer to Visual 2 to complete the puzzle if necessary.
10. As soon as most have completed the puzzle, review the steps by actually working through a PACED Decision Making Grid, Activity 2. Write the responses and actions in the appropriate part of the grid. Refer to the sample of completed grid, Activity 2a, if necessary.

Script to use with students:

- a. **State the Problem:** Problems don't have to be bad. Ask yourself what the decision is you are trying to make. It might be deciding on how to spend free time, what to do with money received as a gift, or where to go on a trip. Let's focus today on what I might do with \$50 I have just received. (Write this in the section labeled, "Problem.")
 - b. **List the Alternatives:** Alternatives are our options available in this decision. Let's say I have \$50, and I am trying to decide what my options are. I really want to go to summer camp. Mom said I have to pay $\frac{1}{2}$ of the registration which is \$125. I might go out to eat with friends and to a movie, buy a new video game I've been wanting, or buy some new clothes. (List these alternatives in the grid.)
 - c. **Identify the Important Criteria to Consider:** Criteria includes points that are important to you in relation to the problem. If I have \$50 cash, I might consider what would be fun, if it is something I have planned for or wanted, if it is something I can enjoy in the future, or if it would help me reach my long term savings goal of going to camp. (List these criteria in the grid.)
 - d. **Evaluate Each Alternative:** Using the PACED Decision Making Guide, we would actually look at each of the alternatives and the criteria and add a plus sign if it meets the criteria or a minus sign if it doesn't meet the criteria as we evaluate each. For instance, if I have "fun" as a criteria, then putting my money in a savings account would probably get a (-) sign and going to the movies and dinner with my friends would get a (+) sign. If I consider long term value, then the savings account criteria would get a (+) sign and the new clothes might get a (-) sign. (Evaluate each alternative and add a (+) sign or (-) sign as you work through the process. Answers do not necessarily have to match the sample answers on the grid.)
 - e. **Make a Decision:** If we add the plus signs, we may find that one alternative has more benefits than the others. (If the new video game receives 4 (+) signs, that might be my choice. If saving my money receives 3 (+) signs, and going to the movie and out to eat received 2 (+) signs and the new clothes received 1 (+) sign, then my next best choice would be saving since it received 3 (+) signs. It would be considered my opportunity cost. Opportunity cost is the opportunity "lost" when we make a decision. My opportunity cost is not all the alternatives, only the next best alternative. (Complete the rest of the PACED Decision Making Grid. It is important that students understand that people make different decisions because they sometimes have different alternatives or criteria that is important to them.)
11. Ask students if they think they will always carry the PACED Decision Making Grid around in their pocket. (Probably not.) Emphasize that just reminding themselves of the steps can be helpful as they weigh the costs and benefits of decisions.
 12. Optional: PACED Decision Making Grid Prezi also contains the same visuals. Viewable at http://prezi.com/88bvrixfit_/?utm_campaign=share&utm_medium=copy.

Closure

Briefly review the concepts of decision making, choice, and opportunity cost. Ask students to share examples of times they have made a decision and identify their opportunity cost. (Answers will vary.) Review the steps in making a decision:

- Step 1: State the Problem.
- Step 2: List the Alternatives.
- Step 3: List important Criteria to consider.
- Step 4: Evaluate each Alternative.
- Step 5: Make a Decision.

Assessment

Divide the class into groups of 2-3 students. Distribute a PACED Decision Making Guide Grid (Activity 2) to each group.

Give students the following scenario:

It's Saturday morning. FINALLY! After you finish your chores around the house, you have the afternoon to do whatever you want. You've gotten a few texts from friends. Three of your friends are going to hang out at the mall. A couple of friends are going to the park to hang out. A friend just texted asking if you want to go see the latest movie out. You also thought of just staying home and playing your new video game. You check your pockets, and you have \$10. You watch the forecast and it says 40% chance of rain. You need help as you decide. Then you remember that you can use the PACED Decision Making Guide.

Task: As a group, use the PACED Decision Making Guide Grid to make your decision. Identify your opportunity cost. Be prepared to explain and share your grid with the class.

Extension Activity

1. After introducing the PACED Decision Making Guide, instruct student to analyze decisions made throughout history using the guide.
2. EconEdLink Lessons:
 - a. Dynamic Decision Making: <http://www.econedlink.org/lessons/index.php?lid=489&type=student>
 - b. The Giver: Jonas Makes a Choice: <http://www.econedlink.org/lessons/index.php?lid=1181&type=student>
3. St. Louis Federal Reserve Bank Online Courses:
 - a. Once Upon a Decision: http://www.stlouisfed.org/education_resources/once-upon-a-decision-c/ (The course is designed for elementary students.)
 - b. Opportunity Cost: <https://bts.stlouisfed.org/opportunity-cost/?p=yes> (The course is designed for middle/secondary students.)

“Today was quite an awful day for me and my poor pup. The trouble was I had a mind, but I couldn’t make it up.”

~Dr. Seuss



PACED Decision Making Guide

State the Problem.

List the Alternatives.

**List important Criteria to
consider.**

Evaluate each Alternative.

Make a Decision.

PACED Decision Making Guide

State the **Problem**.

List the **Alternatives**.

List important **Criteria** to
consider.

Evaluate each Alternative.

Make a **Decision**.

PACED Decision Making Guide

State the **Problem**.

List the **Alternatives**.

List important **Criteria** to consider.

Evaluate each Alternative.

Make a **Decision**.

Problem: _____

	Criteria: What values are important to me?					Total
Alternatives: What choices do I have?						

Evaluation:

Which alternative best meets my criteria? _____

What is my opportunity cost? _____

Decision: _____

PACED Decision Making Guide

State the **Problem**.

List the **Alternatives**.

List important **Criteria** to consider.

Evaluate each Alternative.

Make a **Decision**.

Problem: What will I do with the \$50 I just received?

Alternatives: What choices do I have?	Criteria: What values are important to me?					Total
	Fun	Something I've Planned for/Wanted	Can enjoy in the future	Can enjoy with my friends	Help with my Long term savings goal (camp)	
Put in savings account	-	+	+	-	+	3
Go out to eat and movies with my friends	+	-	-	+	-	2
Buy new video game	+	+	+	+	-	4
Buy new clothes	+	-	-	-	-	1

Evaluation:

Which alternative best meets my criteria? Buying a new video game best fits my criteria.

What is my opportunity cost? My opportunity cost is putting money in my savings account.

Decision: I'll buy the video game now and keep saving for summer camp.

Assessment

It's Saturday morning. *FINALLY!* After you finish your chores around the house, you have the afternoon to do whatever you want. You've gotten a few texts from friends. Three of your friends are going to hang out at the mall. A couple of friends are going to the park to hang out. A friend just texted asking if you want to go see the latest movie out. You also thought of just staying home and playing your new video game. You check your pockets, and you have \$10. You watch the forecast and it says 40% chance of rain. You need help as you decide. Then you remember that you can use the PACED Decision Making Guide.

Task:

As a group, use the PACED Decision Making Guide Grid to make your decision. Identify your opportunity cost. Be prepared to explain and share your grid with the class.