

## **SESSION 3: MARGINAL ANALYSIS**

### **Session Description**

Students will analyze the marginal costs and marginal benefits of solutions to economic problems.

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### **Talking Points**

1. People cannot have everything they want. As a result, they must make decisions.
2. Family budgets are limited by the incomes they earn. Incomes are dependent on the quantity and quality of human resources (people working) and any income the family might earn from other types of resources it owns (natural, capital, and entrepreneurial ability).
3. Families must make decisions about how to spend their income. For example, if more money is spent on clothing and electronic gadgets, less money can be spent on food and other items.
4. Governments also have limited budgets based on tax revenue collected and direct ownership of resources. For example, if additional funds are budgeted for police patrols, less money is available to hire more parks and recreation workers.
5. Identifying and systematically comparing alternatives allows people to make more informed decisions and to recognize often overlooked relevant consequences of choices.
6. To make decisions that provide the greatest possible return from the resources available, people and organizations must weigh the benefits and costs of using their resources to do more of some things and less of others. Examples include the following:
  - A student might decide between spending another hour studying or talking with friends.
  - School officials might decide among spending funding on tablets for students, more equipment for sports teams, or more equipment for classrooms.
  - Business owners and managers regularly decide which products to make and whether to increase or decrease the amount they produce.
  - The president, Congress, and other government officials regularly decide which public spending programs to increase or decrease.
7. In economics, comparing changes in benefits with changes in costs is referred to as marginal analysis.
8. Decision makers maximize utility by pursuing an activity as long as the marginal benefit of the action is greater than or equal to the marginal cost.
9. It is impossible to change how resources were used in the past. Past decisions only establish the starting point for current decisions on the allocation of resources.

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### **Tools for Teaching the Arkansas Economics and Personal Finance Course**

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## Session 3: Standards and Benchmarks

### Arkansas Economic Standards

Strand: Economic Decision Making

*Content Standard 1: Students will make decisions after considering the marginal costs and marginal benefits of alternatives.*

- EDM.1.E.2 Justify various economic solutions to problems affecting an individual or society using marginal costs and marginal benefits.

### Common Core State Standards

- CCSS.ELA-Literacy.SL.9-10.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-Literacy.SL.11-12.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-Literacy.L.9-10.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- CCSS.ELA-Literacy.L.11-12.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- CCSS.ELA-Literacy.L.9-10.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 9-10 reading and content*, choosing flexibly from a range of strategies.
- CCSS.ELA-Literacy.L.11-12.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 11-12 reading and content*, choosing flexibly from a range of strategies.
- CCSS.ELA-Literacy.L.9-10.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- CCSS.ELA-Literacy.L.11-12.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- CCSS.ELA-Literacy.RH.9-10.1 Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.

- CCSS.ELA-Literacy.RH.11-12.1 Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
- CCSS.ELA-Literacy.RH.9-10.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social science.
- CCSS.ELA-Literacy.RH.11-12.4 Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines *faction* in *Federalist No. 10*).
- CCSS.ELA-Literacy.RH.9-10.7 Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.
- CCSS.ELA-Literacy.RH.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
- CCSS.ELA-Literacy.RH.9-10.10 By the end of grade 10, read and comprehend history/social studies texts in the grades 9-10 text complexity band independently and proficiently.
- CCSS.ELA-Literacy.RH.11-12.10 By the end of grade 12, read and comprehend history/social studies texts in the grades 11-CCR text complexity band independently and proficiently.

## Session 3: Resources

1. Economics in Action: 14 Greatest Hits for Teaching High School Economics (*Virtual Economics*® 4.5)
  - a. Lesson 6: The Economic Way of Thinking: Three Activities to Demonstrate Marginal Analysis
    - i. Use the “Diminishing Marginal Utility” activity.
    - ii. Use the “Fluffernutter Production” activity.
    - iii. Use the “How Clean Is Clean Enough?” activity.
2. High School Economics (*Virtual Economics*® 4.5)
  - a. Lesson 3: Marginalism
3. Lesson: Dumptown, USA (EconEdLink)
  - a. Go to <http://www.econedlink.org>.
  - b. Search for and then choose “Dumptown, USA.”
4. Lesson: Utility (EconEdLink)
  - a. Go to <http://www.econedlink.org>.
  - b. Search for and then choose “Utility.”
5. Video: Welker’s Wikinomics: Law of Diminishing Returns (Jason Welker; 13:35); [https://www.youtube.com/watch?v=CfioxJ4E\\_h4](https://www.youtube.com/watch?v=CfioxJ4E_h4)