

CAP Project

MODULE 1: VIDEO 2A

SLIDE 1: CAP PROJECT COST ANALYSIS MODULES

Introduction to Cost Analysis

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SLIDE 2: AGENDA

- What is cost analysis?
- Basics of how to do a cost analysis
- Why do a cost analysis?
- Example of a cost analysis
- Decision flowcharts for choosing type of economic evaluation

SLIDE 3: WHAT IS COST ANALYSIS?

- A form of economic evaluation
- Type, quantity, and value of all resources used to achieve or replicate a measured effect or outcome
- Applied to educational programs or interventions, it identifies resources needed for implementation
 - Ingredients method (introduced by Henry Levin, 1975)

SLIDE 4: INGREDIENTS METHOD: CATEGORIES OF RESOURCES

- Personnel
- Facilities
- Materials
- Other Inputs

SLIDE 5: DON'T I ALREADY KNOW THE COSTS?

- Price (e.g., software license fee) $\neq$ costs

- Budget $\neq$ costs
- Actual costs may differ from planned costs
- Some costs may be “hidden”
- Economic costs may be lower than expenditures

Full economic costs are captured using the concept of opportunity cost: value of the next best alternative use of every resource

SLIDE 6: HIDDEN COSTS

- Resources that are reallocated from other activities
- Resources that are donated or provided in-kind
- Resources provided by organizations other than the school or district
- Contributions from participants or families
- Durable items like buildings or equipment which are capital expenditures
- Administrative overhead

SLIDE 7: WHY CONDUCT COST ANALYSIS?

Useful addition to our analytical and decision-making toolkit:

- Practical information on what resources are needed to implement or scale up a program, or replicate it elsewhere
- Guides decisions about efficient use of limited resources
- Clarifies theory of action
- May identify reasons for uneven program performance at different sites and identify improvement opportunities
- Can uncover inequitable distribution of resources

SLIDE 8: DIGITAL MATH TOOLS EXAMPLE

A K-8 School is considering purchasing digital math tools to supplement classroom instruction. Tools under consideration:

- ASSISTments
- eSpark
- LearnZillion Illustrative Mathematics (IM)

SLIDE 9: DIGITAL MATH TOOLS EXAMPLE

Bar chart of Expenditures for ASSISTments, eSpark, and LearnZillion

- ASSISTments expenditures (highlighted) = \$3,429

SLIDE 10: DIGITAL MATH TOOLS EXAMPLE

Bar chart of Expenditures for ASSISTments, eSpark, and LearnZillion

- ASSISTments expenditures = \$3,429
- eSpark expenditures (highlighted) = \$13,125

SLIDE 11: DIGITAL MATH TOOLS EXAMPLE

Bar chart of Expenditures for ASSISTments, eSpark, and LearnZillion

- ASSISTments expenditures = \$3,429
- eSpark expenditures = \$13,125
- LearnZillion expenditures (highlighted) = \$13,675

SLIDE 12: DIGITAL MATH TOOLS EXAMPLE

Bar chart of Expenditures for ASSISTments, eSpark, and LearnZillion

- ASSISTments expenditures = \$3,429
- eSpark expenditures = \$13,125
- LearnZillion expenditures = \$13,675

SLIDE 13: DIGITAL MATH TOOLS EXAMPLE

Bar chart of Expenditures vs. Economic costs for ASSISTments, eSpark, and LearnZillion

- ASSISTments expenditures = \$3,429
- ASSISTments economic costs highlighted = (\$9,058)
- eSpark expenditures = \$13,125
- LearnZillion expenditures = \$13,675

SLIDE 14: DIGITAL MATH TOOLS EXAMPLE

Bar chart of Expenditures vs. Economic costs for ASSISTments, eSpark, and LearnZillion

- ASSISTments expenditures = \$3,429
- ASSISTments economic costs = (\$9,058)
- eSpark expenditures = \$13,125
- eSpark economic costs highlighted = \$44,481
- LearnZillion expenditures = \$13,675

SLIDE 15: DIGITAL MATH TOOLS EXAMPLE

Bar chart of Expenditures vs. Economic costs for ASSISTments, eSpark, and LearnZillion

- ASSISTments expenditures = \$3,429
- ASSISTments economic costs = (\$9,058)
- eSpark expenditures = \$13,125
- eSpark economic costs = \$44,481
- LearnZillion expenditures = \$13,675
- LearnZillion economic costs highlighted = \$9,364

SLIDE 16: TYPES OF ECONOMIC EVALUATION

Costs only...

- Expenditure analysis
- Cost analysis: total costs
- Cost analysis: incremental costs
- Cost-feasibility analysis

Costs and returns...

- Cost-efficiency analysis
- Cost-effectiveness analysis
- Cost-benefit analysis
- Cost-utility analysis