# **IIICAP Project**

# **MODULE 4: VIDEO 6.2 OUTLINE**

SLIDE 1: ADJUSTMENTS AND SENSITIVITY ANALYSIS IN A COST ANALYSIS TEMPLATE: AMORTIZATION

Fiona Hollands, Ph.D.

Senior Researcher

Department of Education Policy and Social Analysis (EPSA)

Teachers College, Columbia University

### SLIDE 2: TYPES OF ADJUSTMENT TO MAKE DURING THE ANALYSIS STAGE

- Inflation Adjustment
- Arrow pointing to Amortization
- Discounting/compounding
- Geographical Adjustment

# SLIDE 3: TABLE 2: KEY PARAMETERS (RR vs. FFW Study)

- Screenshot of Table 2. Key Parameters
- Arrow pointing to the Number of years over which start-up personnel costs are amortized: 7

# SLIDE 4: SPREADING THE COSTS OF TRAINING OVER THE TEACHER LEADER'S EXPECTED TENURE

Icon representing amortization

# SLIDE 5: TABLE 2: KEY PARAMETERS (RR vs. FFW Study)

- Number of years over which start-up personnel costs are amortized: 7
- Number of years over which start-up materials are amortized: 7
- Number of years over which facilities construction costs are amortized (Both start-up and ongoing): 30
- Number of years over which start-up facilities rental costs are amortized: 7

Number of years over which start-up other inputs are amortized: 7

# SLIDE 6: TABLE 3: INTEREST RATES (DEFAULT FOR 2017)

- Number of years: 7
- Rate (%): 2.16%

### SLIDE 7: RATES TAB: WHERE TO ADD OR CHANGE INTEREST RATES

- Screenshot of rates tab highlighting the year column years 2001 2025
- Arrow pointing to Rates tab

#### SLIDE 8: READING RECOVERY PERSONNEL TAB: AMORTIZATION ADJUSTMENT

- Screenshot of Personnel tab.
  - Cost stage: "Ongoing" label is highlighted
- Arrow pointing to:
  - Period over which the cost is spread (Yrs): 1
  - Interest Rate (% per year): 0.00%

#### SLIDE 9: READING RECOVERY PERSONNEL TAB: AMORTIZATION ADJUSTMENT

- Screenshot of Personnel tab
- Arrows pointing to:
  - Formula bar
  - Percentage of costs to include in this analysis column
  - National salary inflation adj. (US\$) column
  - National average fringe rate (% of salary) column
  - National Cost column

## SLIDE 10: NATIONAL COST CALCULATION INCLUDING AMORTIZATION

- National cost
- = Quantity of Ingredient
- Multiplied by % of time spent on program
- Multiplied by Inflation-adjusted national avg. salary multiplied by (1 plus fringe benefit rate)
- Multiplied by % of costs to include in this analysis
- Multiplied by Interest rate multiplied by (1 + Interest Rate) raised to the power of the Period over which the cost is Spread

• Divided by (1 + Interest Rate) raised to the power of the Period over which the cost is Spread -1

# SLIDE 11: AMORTIZED NATIONAL COST OF THE RR TEACHER LEADER'S TIME FOR TRAINING

- National cost
- = 1 Teacher Leader
- Multiplied by 100% time spent on program
- Multiplied by \$71,372.88 x (1+ 0.54)
- Multiplied by 100% of costs to include in this analysis
- Multiplied by 0.0216\*(1+0.0216)<sup>7</sup>
- Divided by (1+0.0216)<sup>7</sup> -1
- Equals **\$17,087**

## SLIDE 12: READING RECOVERY PERSONNEL TAB: AMORTIZATION ADJUSTMENT

- Screenshot of Personnel tab
- Arrow pointing to the National Cost (US\$): \$17,087

#### SLIDE 13: READING RECOVERY PERSONNEL TAB: AMORTIZATION ADJUSTMENT

- Screenshot of Personnel tab.
- The following data is highlighted:
  - Period over which the cost is spread (Yrs): 7
  - Interest rate (% per year): 2.16%

#### SLIDE 14: READING RECOVERY PERSONNEL TAB: AMORTIZATION ADJUSTMENT

- Screenshot of Personnel tab
- The following data is highlighted:
  - Period over which the cost is spread (Yrs): 15
  - Interest rate (% per year): #N/A

# SLIDE 15: TABLE 3: INTEREST RATES (DEFAULT FOR 2017)

- Screenshot of Table 3. Interest rates
- The following data is highlighted:
  - Rate (%): 2.33% for 10 years
  - Rate (%): 2.65% for 20 years

 Arrow labeled 2.49% pointing to midpoint between 2.33% and 2.65%

#### SLIDE 16: READING RECOVERY PERSONNEL TAB: AMORTIZATION ADJUSTMENT

- Screenshot of Personnel tab
- Interest Rate (% per year): 2.49% is highlighted

### SLIDE 17: READING RECOVERY PERSONNEL TAB: AMORTIZATION ADJUSTMENT

- Screenshot of Personnel tab
- National Cost (US\$): \$8,871 is highlighted

### SLIDE 18: READING RECOVERY PERSONNEL TAB: AMORTIZATION ADJUSTMENT

- Screenshot of Personnel tab
- Interest Rate (% per year): 5.00% is highlighted
- National Cost (US\$): \$10,589 is highlighted

# SLIDE 19: TYPES OF ADJUSTMENT TO MAKE DURING THE ANALYSIS STAGE

- Inflation Adjustment (check-marked)
- Amortization (check-marked)
- Discounting/compounding
- Geographical Adjustment