CAP Project

MODULE 1 VIDEO 3 TRANSCRIPT: WHAT KIND OF ECONOMIC EVALUATION SHOULD I DO?

In this video, we'll look at the kinds of questions an economic evaluation can answer, and which method can help inform specific decisions.

Each of 8 slides after this one will focus on one type of analysis, with an example of a question and a scenario to which this type of analysis could be usefully applied. Four of the methods only consider costs and resource requirements, the other four also look at the returns, that is, what you get out of the investment.

First, imagine you are the District Health Manager working on your annual budget and you need to figure out how much to include for school-based student health services. You already have a health office at each school, so you don't need to worry about facilities, but you don't have school nurses on staff. Instead, you use an external service provider to send contract nurses as needed to individual schools. And you must pay for the medical supplies they use.

What you need here is an expenditure analysis. In this case, you can use historical data on hours of nurse services provided and past invoices for supplies to calculate what you spent in previous years, and then use this to estimate the amount to put in your current budget.

Now you are a math coach, and you need to provide after-school tutoring services to 150 students at your school. To pull this off, you need to know all the resources that will be necessary, which means an analysis of total costs including:

- Teacher or tutor time-and-pay for training and for the actual tutoring
- Fees you'll have to pay whoever is providing the training
- The materials and equipment you'll need to make available and whether the school already has these somewhere or whether you have to buy more for the tutoring initiative
- And of course, how much space you will need to keep open after school for all these sessions.

Let's switch to reading. Imagine you are the Curriculum Coordinator at the district and want to know how resource needs would change if you switched all Tier III reading instruction for struggling 1st graders from Fast ForWord Reading to Reading Recovery. Here, you need to know the incremental costs of Reading Recovery compared with Fast ForWord Reading.

Fast ForWord Reading is a computer-based program while Reading Recovery provides one-on-one instruction by highly trained teachers. So, the resource requirements are going to be quite different. This comparison is one of the examples CAP Project provides on the templates page. See the Reading Recovery demo.

Note that a new program could cost more *or* less than what it is replacing, so sometimes I prefer to use the term "differential costs" instead of incremental costs.

Now you are an AP, and you need to find a social-emotional learning (SEL) curriculum that is both affordable and can be adopted without needing much additional time from teachers. You need a cost-feasibility analysis to determine what resources, including teacher time, are required to implement possible SEL curricula. Then you need to compare what is needed with what your school and staff can accommodate.

You can check what the training needs are for each SEL program under consideration and see whether that fits into available scheduled PD days, you can ask your Principal if enough ESSER funds are available to pay for the training fees and curriculum, and you can estimate the amount of weekly prep time to assess how it compares to the time teachers already spend on preparing advisory sessions.

Now you are a School Board member, and you want to know which of 3 high school dropout prevention programs piloted last year in different high schools cost the least per graduating student. The Board plans to fund that particular program going forward and drop the other two.

District staff can estimate the resource use and costs of each of the three programs retrospectively, that means "after the fact," because they were implemented last year. As these programs did not replace any pre-existing

dropout prevention efforts, they would consider all resources used in implementation, that is, total costs.

They would then divide the total costs per school by the number of graduating students to provide a cost-efficiency metric: cost per graduating student.

Note that cost-efficiency analysis is common when analysts can only collect data about costs and outputs from the treatment condition and not from any comparison condition. It does not tell you whether the program improved the pre-existing situation.

You can stick with being a Board Member but let's move to another district where you already have a dropout prevention program, Program A, in all your high schools but you want a better one. You have won an IES grant with your Research Practice Partner to test whether either of 2 new programs, B and C, costs less per extra graduate compared with A.

Each high school in the district is randomly assigned to A, B, or C.

The RPP team estimates the resource use and costs of each program concurrently with implementation - that means at the same time.

They calculate the additional or "incremental" costs of B and C over A and divide the incremental costs of B and C by the number of extra graduates compared with A to provide cost-effectiveness ratios.

They can then see whether B or C costs the least per extra graduate.

Now you are the Associate Commissioner for College, Career, and Technical Education at the State Education Agency. You oversee a portfolio of initiatives and are trying to decide where to focus competitive grant funds to districts. You want to know if the benefits of dropout prevention programs B and C outweigh their costs.

An analyst at the state education agency can piggyback on the cost-effectiveness analysis conducted at the district featured in the last slide and estimate the financial benefits to society of the extra graduates produced by programs B and C.

These would include expected earnings, and savings to the healthcare and criminal justice systems.

They would then compare these financial benefits to incremental costs to determine which is higher.

Let's get back to the district level and now you are the Chief Equity Officer in a large school district where, historically, a greater percentage of Black students have been suspended compared with non-Black students. You want to know what program the district can afford to implement to address this disproportional suspension of Black students and improve student-teacher interactions. And it must align with the district's goal to treat all students equitably and must integrate well with the Positive Behavioral Interventions and Supports framework which the district has already implemented across all schools.

So, note that there are multiple conditions or criteria being stated here, not just reducing suspensions. This calls for a cost-utility analysis that can accommodate an evaluation of multiple outcomes.

That covers all 8 types of analysis I listed at the beginning. The modules focus on estimating total and incremental costs to implement educational programs and practices. This will give you the foundation to conduct any of these types of analysis.