



MODULE 2 VIDEO 2 TRANSCRIPT: DESIGNING A COST ANALYSIS PART 1: DESCRIPTIVE COMPONENTS

In this video, I'll go through the descriptive components of designing a cost analysis. I am following recommendations from the Cost Analysis Standards Project which are summarized in a checklist that accompanies this video.

Here's what the Checklist looks like. I'll use the demo example CAP Project provides illustrating a comparison between 2 reading programs to make this concrete, but the same considerations will apply to any cost analysis. The first set of questions you need to address are: what is the purpose or motivation for the analysis and in what practical context will it be conducted?

Next, you need to understand the programs or practices that will be studied, how they are supposed to be implemented and who they serve.

Finally, you'll need to plan your study, specifying how you will collect data, when, and from where, and how you will analyze the data and report results. These items will be covered in Part II of this video – that'll be Module 2, Video 3.

Starting with the study motivation and context, these are the specific items you'll need to establish.

First, what is the decision or research question your economic evaluation will inform? In the example we will be following, a medium-sized, southern, urban school district— let's call it Vale - wanted to know which of 2 reading programs being implemented at the district are helping students improve reading achievement the most, and at what cost. The information is being used to inform ongoing investments in each program.

This should lead you right into a decision about which type of economic analysis would help address the question. We covered different examples in Module 1 but, in this case, a cost-effectiveness analysis seems to be in order because the district

is interested in relative effectiveness of the 2 programs for improving a single academic outcome.

Next, will you be conducting the analysis retrospectively, concurrently, or prospectively? In our example, we collected cost data on the programs as implemented the year prior to our study, that is, retrospectively.

You should also establish at this stage whether you will be estimating total costs to implement the program, incremental costs relative to another program, or just the expenditures. In a cost-effectiveness analysis you'll always be identifying incremental costs of one program relative to the other program or programs being analyzed.

At this point you should also be clear about who the audience is for the results of the study you will conduct. In our example, the main audience was Vale's Chief Academic Officer and the Curriculum & Instruction Department at the central district office.

Knowing who your audience is can help determine the perspective of the analysis, that is whose costs to include. The district was interested in costs incurred by the district office and schools so we adopted an education agency perspective, but we also planned to estimate costs to families and others in order to additionally present the societal perspective, that is, costs to all stakeholders.

Finally, it's important to understand any prevailing conditions and policies that may influence program implementation and effectiveness, or the decision that will eventually be made about the programs. This could include information about the locale, the demographics and achievement levels of students being served; district funding policies and current financial status; governance structures; curriculum standards; regulatory constraints; the length of the school year and length of each day; and the fiscal year beginning and end. Of course, this could constitute a whole essay so I'll just point out that, in our example, one issue to note is that a Tier 3 reading intervention is mandated by the state for students reading below a certain level.

The next set of items you should address in the design stage involve description of each program being analyzed. We'll run through each of these 8 descriptive items in the next 3 slides.

First, the name of the program, the agency implementing it, and the organizational level at which the program is delivered. In our example, the 2 programs were Reading Recovery and Fast ForWord Reading. Reading Recovery is implemented district-wide and delivered 1 on 1 to students. Fast ForWord Reading is implemented at certain schools in the district and is delivered to groups of students.

You should spend some time studying the logic model or theory of change for each program so that you understand what activities or components the program involves and how it should be implemented. You can find this information in formal program descriptions, implementation guides, and maybe even journal articles for well-studied programs.

Without getting into all the details here, the main thing to know about Reading Recovery is that struggling first grade readers are pulled out of class to work one-on-one with a trained Reading Recovery teacher. Fast ForWord Reading is delivered online to groups of students who are also pulled out of regular class. Both programs involve supervision, training, and program delivery components. Reading Recovery also has an evaluation component.

The next couple of items are context-specific, meaning the information is relevant to the district, school, or other setting in which your study is taking place. You'll need to know whether each program you are studying is in a start-up or ongoing phase, that is, whether it's being newly implemented or is an established program that has been operating for a while in the context you are studying.

In our example, Reading Recovery was first implemented in the district around 30 years ago while Fast ForWord Reading was implemented around 5 years ago so they are both in ongoing phases. However, both require some start-up training for new personnel as the programs expand or personnel turn over.

Next, you'll need to determine at what scale each program is implemented in the context you are studying. At Vale, 195 students spread across 15 elementary schools participated in Reading Recovery during the study year. 195 matched students in 15 different Vale elementary schools participated in Fast ForWord Reading. Groups of 8-13 students worked online individually.

You'll also need to know whether each program is stand-alone – that means independent of any other school activities - or whether it is supplementing, replacing, or partially substituting an existing program.

In the example we're following, the reading programs were supplementing regular reading instruction, that means they provided reading instruction that was additional to the reading instruction students normally received. They may each have replaced other instructional activities, but this was just as likely for Reading Recovery as for Fast ForWord Reading.

If you haven't already established what students who are not participating in the study program are doing instead, this is the time to do it. They may be participating in an alternative new program that you'll also study, or in "business as usual" activities, which is whatever is normally done at the school or district. We've already established that the comparison students are participating in Fast ForWord Reading.

Next, you should document the main characteristics of the population served by each program under study. In our example study, students participating in both programs were first graders scoring below the 20th percentile in reading assessments.

The last descriptive item already gets you thinking about the kinds of resources that are needed to implement the program because you'll need this information in order to plan data collection instruments and strategies that will best capture resource use.

For Reading Recovery, specially trained Reading Recovery teachers and Teacher Leaders are key ingredients, and the program also needs a one-way glass room and Reading Recovery curriculum materials.

For Fast ForWord Reading, the district or school must purchase licenses and provide computers and internet access for each student. An instructional assistant supervises the students as they work online.

That covers the descriptive aspects of designing a cost analysis. We'll tackle the study design considerations and analytical choices you'll need to make in Part II. See you there shortly!