Cost Feasibility Proposal

ECON 3XXX.XXX | Professor [Redacted]

 $[\hbox{Co-authors Name's Redacted}] \mid \hbox{Tyler Merrill}$ 

## **Cost As Valuation**

Deciding when to do *anything* worth doing is daunting. But nothing is more daunting than undertaking reformation of any educational practice: The practical, breathing resolve of perhaps many an administrator, or local government sub-committee. Indeed, like so much Mana in so much desert the value of every educational system can perhaps inherently be considered priceless. But resources are scarce - at least compared to all our wants and needs. Yet our education complex (often) stands in no less need of reform.

Thankfully, and perhaps regrettably, there are a slate of potential projects every would be reformer can choose from. Experts and time abound with precepts which offer perhaps time-saving techniques or brilliant sutras to suade any fabric, socio-or-econimical, to give promise to the tender years of childhood they urge they be given chance of. Left unselected, they may haunt many an arbiter with thoughts of forks closed and paths forgone. All the stronger may they cry when they might reasonably claim to have been left un-choosen on anything like a rational, or at least standard, basis.<sup>1</sup>

However, there is one truth in all this possibility: *a* choice must be made. In order to optimize resources, you need to know how much <u>more</u> one program can do with a given dollar than another. Costs and benefits must be compared. But before that step can be accomplished, one needs to know programs' proposed costs. There is no point in even looking at the *relative* worth of things that are themselves known to be unpracticable!

This short report will walk you through a simplified, hypothetical, *cost-feasibility* analysis. It can serve as a cookie-cutter guide to the entire procedure.<sup>2</sup> With this load-stone laid as a foundation,

<sup>1</sup> Though a right choice made for wrong reasons is no less so right on that account. Legerdemain of that ledger notwithstanding.

The cookie-cutter maker, on which we base our entire analysis, would be Henry Levin et al. in 'Economic Evaluation in Education: Cost-Effectiveness and Benefit-Cost Analysis'. See sources.

any further potential pro-and-con comparisons among alternatives will go much more smoothly than without.

# The Plan

We are analyzing a program designed to improve reading test scores among primary school students (K-5). It is hoped that this will improve secondary graduation rates later, leading to an overall increase in educational attainment in the district(s) where implemented. The plan will be implemented in a *single* school via an extensive reading comprehension course. Taught to students during regular school hours, for a semester.<sup>3</sup> Specifically, it is supposed that students will exchange their first morning class for this one, as it is assumed to be the most engaging period for them. Unless this conflicts with another language arts class or mathematics course. In which case, it will be slated for the next most practical slot in the school day.

During the course, students will be taught by a specially trained instructor (or faculty member) on reading comprehension through a series of open readings and class discussion reviews. It is assumed the class will be composed of the school's lowest performing students, a body of fifteen to no more than twenty four. If found to be successful it could thereafter be scaled up district wide.

## **Breakdown**

In order to determine the full costs of this program, the following ingredients, considered essential for its implementation, were purveyed:

First, labor - It would be fair to assume that the 45-60 minute program would cost the equivalent time worth of an average teacher at the school in question. Salary-wise, this is about \$30. However, this may not reflect the true value of any given teacher's time. The instructor in question might have taught another (conventionally more 'important') course instead. Indeed, this school is tight

<sup>3</sup> Or, 88 days.

on teachers as it is. Furthermore, it is assumed the instructor is specially equipped to teach the tailored group of students. Even if no extra training is required to accomplish this, this still means the equivalent value of said instructor will be higher than average. Adding all these considerations together, we stacked our numbers with similarly employed instructors across the state. Our analysis converged upon the rate of \$85 per hour. Requiring teacher training would bring this up to \$210 per hour.

Supplies - The only classroom material necessary would be notes books, a class reading set, pencils/erasers, a pencil sharpener, dry-erase markers/chalk, board-cleaner, and staples. Everything but the reading set was estimated to cost \$90 for the entirety of the semester length of the course. The reading set was estimated to cost anywhere from \$110 to an upper bound of \$335. We calculated this from sales offerings across internet marketplaces. Putting this ingredient up-to \$425 a semester.

Building/Utilities- The class is assumed to be held in an unused classroom. While this might be regarded as free from an expenditure perspective, in a fuller sense this must be compared to the dollar value of any other use the room could have been put to. We 'shadow priced' this method by assuming that for every potential class 'missed', median after (secondary) graduation incomes for *all* students comparatively fell somewhat. A rough estimate of the mean value of any *other* type of class using the room was found to be \$800 for a semester. Since this class was to be previously unused, the utilities required should be considered an additional cost. The figure of \$14 per day or around \$1200 a semester was deduced from last year's itemized budget.

Student Time - Finally, the value of the students' time must be considered. While these students might reasonably be said to be in need of extra reading assistance, they may excel in other subjects. Subjects that they may lose their grip on if too much focus is required by them for this course. While the relevant literature on child devolvement was not consulted, a baseline estimate of \$400 per student per semester was accepted. Putting this ingredient at anywhere from \$6000-\$9600 per semester.

## **Results**

Tallying up a total, the program is estimated to *economically* (actually) cost at least \$15,680 for a semester. Our hypothetical school district could only spare \$8,000 this entire year according to its annual budget. Hence, this program was rejected on grounds of untenability at this time. Other interventions will have to be considered by the district. Overall, it is clear that *every* type of educational undertaking must undergo a cost-feasibility analysis in order to begin ascertaining it's appropriateness for a given locale. If it fails this first benchmark test, it fails them all.

# **Sources**

Economic Evaluation in Education: Cost-Effectiveness and Benefit-Cost Analysis, 3rd Edition

Authors: Henry M. Levin, Patrick J. McEwan, Clive R. Belfield, A. Brooks Bowden, and Robert D.Shand. Especially chapters 3-5 and 7-10.

Professor [Redacted], University of Texas at Dallas

Personal Communication (10/13/2022).