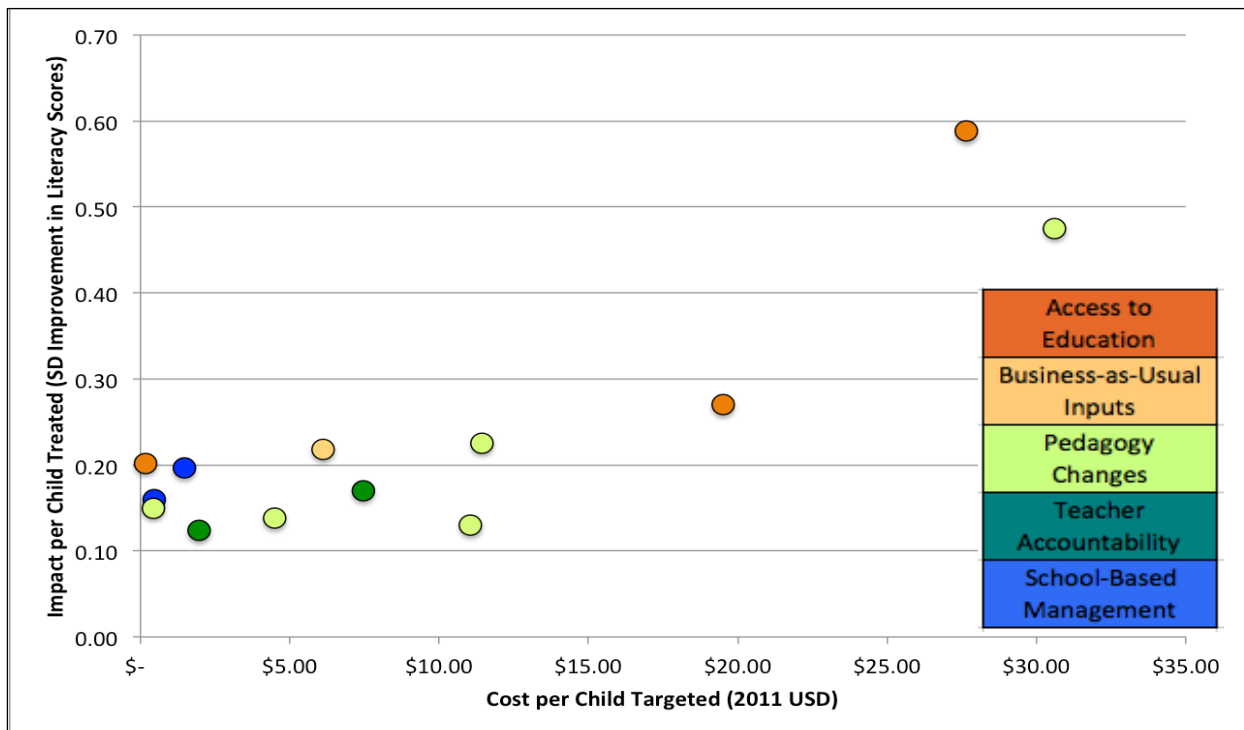# Making cost-effectiveness estimates more useful for policy:
An argument against standardization

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Increasingly governments and donors seek to invest in programs and policies that are cost-effective rather than those that just maximize impact. Cost-effectiveness analysis aims to estimate how much an intervention costs per outcome delivered and benchmark this against similar metrics estimated for alternative interventions targeting the same outcome. Often the results of this comparative analysis take the form of a league table or chart, where each estimate of cost-effectiveness is expressed either as the dollar amount required to achieve a standardized outcome (for example, a 1 standard deviation increase in test scores) or the improvement in an outcome for a standardized amount of spending (for example, for every $100 spent per child), where the program with the highest impact per dollar or the lowest spending per unit of impact is considered the best.

In this paper, we argue that this approach is problematic for at least three reasons. First, given that there is wide variation in interventions' costs and benefits across contexts, extrapolating from observed costs and benefits in order to standardize either impacts or costs requires an assumption of linearity between spending and outcomes that has little empirical support in the education sector in low-income countries. Second, moving away from estimated average treatment effects further obscures the distribution of impacts across the population, particularly for low-cost, low-impact interventions. Finally, using estimates of cost-effectiveness measured from multiple countries to suggest policy options for other countries assumes homogeneity across contexts in either desired impacts or space in education budgets.

We propose an alternative way of presenting the main components of cost-effectiveness – namely, unit costs and average treatment impacts - that avoids out-of-sample estimates of either impact or cost, that preserves information about the distribution of impacts coming from experimental or quasi-experimental studies, and that presents a menu of options for different country contexts. In particular, we propose that we replace league tables with charts like the following that display unit cost alongside estimated average treatment effects.