Cost Analysis in Practice Project

III CAP Project

May 2021

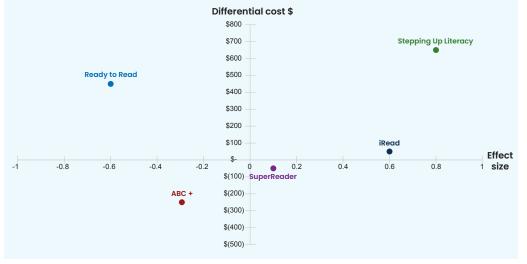
COST-EFFECTIVENESS PLANES 101

What is a cost-effectiveness plane? A CE plane¹ is a graph that allows leaders and policy makers to quickly compare differences in the costs and effectiveness of similar interventions. This comparison is helpful when considering alternative interventions that target the same student outcomes and deciding where to invest funds.

How does it work? The incremental (or "differential") costs of the intervention are plotted on the y axis and the effect size is plotted on the x axis. The origin of the chart (0,0) represents the control condition or business as usual (BAU).

How do I interpret a CE plane? Interventions in the top left quadrant are less effective and more costly than BAU. Interventions in the top right quadrant are more effective and also more costly than BAU. Interventions in the bottom left quadrant are less effective but less costly than BAU. Interventions in the bottom right quadrant are more effective and less costly than BAU.

CE plane for hypothetical elementary reading programs



GIVE IT A TRY!

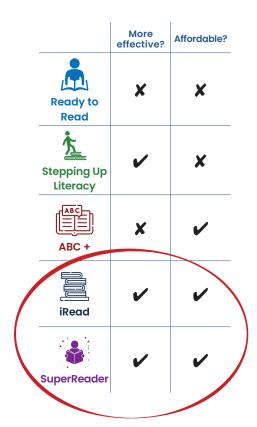
Your district has set the goal of improving student performance in grade 3 reading. The district received a grant to support reading instruction, which provides \$50 per grade 3 student. The Curriculum Committee has researched five reading interventions to consider and plotted their costs and effects on the CE plane at left. **Which one could be the best option?**

DECISION TIME...

iRead and **SuperReader** are possible contenders.

iRead might be the best option. This intervention costs slightly more than what the district is currently implementing (BAU), but it is more effective. It would likely result in improved reading performance and the cost difference would be covered by the grant. **SuperReader** may also be worth considering. It is more effective than BAU and would not require any additional funding. Choosing SuperReader could allow you to use the additional grant funding for other reading resources.

Stepping Up Literacy is the most effective, but the costs exceed the additional funds provided by the grant. **ABC +** costs a lot less but is less effective than the current program. **Ready to Read** is both more expensive and less effective than current practices making it an unlikely choice.



¹ Black, W. C. (1990). The CE plane: A graphic representation of cost-effectiveness. Medical Decision Making, 10(3), 212-214

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