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Why an SLDS Would Make It Easier to Measure the Return on Investment of Career & Technical Education

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A. An overarching Concern: Is the federal (and state and local) investment in CTE paying off?

1. To answer this, we need to establish:
 - a) The internal efficiency of CTE by comparing the costs and benefits of implementing Perkins-funded CTE programming at the local or state levels;
 - b) Determine whether CTE has a measurable impact beyond itself. This question focuses on external effectiveness.

B. The Building Blocks

1. ROI is just one part of Program Evaluation which includes *needs assessment* (ID program gaps); *feasibility studies* (potential for program success under different constraints); *process evaluation* (implementation progress check); *outcome evaluation* (achievement of program goals); and, *cost analysis* (financial worthiness of program).
2. Need a logic model that connects inputs and process measures (*costs*), outputs and outcomes (*benefits*) to assess (internal) efficiency and (external) effectiveness. Taking the two together indicates program impact.
3. To define ROI success, need to boil it down to a number:
 - *Benefit cost ratio* (B/C; a number greater than one implies that the program is justified on both internal efficiency and external effectiveness grounds);
 - *Net present value* (NPV; a number greater than zero implies that building the program today is justified instead of waiting for the future);
 - *Internal rate of return* (IRR; when the rate of return obtained from program implementation exceeds the market interest rate; this is the measure used to determine returns from financial investing).

C. Approaches to ROI

1. An optimum approach (Common Framework) requires following four pre-conditions:
 - Integrated Conceptual Framework
 - Institutional Capacity/ Expertise
 - Sound Data Administration/ Management
 - Highly Connected Data Systems*

This approach requires, at a minimum, the explicit linking of *education and workforce databases* to measure the impact of a particular investment on both direct and indirect beneficiaries.

2. Why the Common Framework Approach is difficult to implement:
 - Standardization of inputs, process measures, outputs, and outcomes has been limited in scope;
 - No common data system;
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- Treating accountability and evaluation synonymously;
 - Weak connectivity between data and measurement; accountability and evaluation; and, research;
 - Institutional research capability limited;
 - Absence of a common protocol for conducting ROI for CTE.

As a result, ROI is usually conducted using (a) case study approach and (b) social benefits approach with vastly varying results, making ROI subjective.

3. A common protocol for ROI for CTE must address the following:

- Perspective on goals;
- Cost analysis;
- Comparators;
- Program effects;
- Outcome measures;
- Distributional consequences;
- Time effect analysis;
- Sensitivity analysis;
- Decision rule.

An SLDS would make implementing the above protocol easier and makes permissible a move towards Standardization. It allows for having a common perspective on goals (outcome measures) such as the four areas of focus within the Dept. of ED: strengthening programs of study; improving data and accountability; increasing teacher effectiveness; and, turning around low performing schools. Costs and benefits can be derived from the same data platform. Program effects can be based on a consistent set of comparators, with distributional consequences being assessed uniformly, sensitivity analyses based on a common set of parameters, and decision rules can be applied using appropriate and well-defined rules. Finally, the time frame for conducting an ROI can be made to be the same no matter which strategy, and what program, is being assessed.
