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

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The contents in this presentation do not necessarily represent the positions or policies of the Office of Vocational and Adult Education or the U.S. Department of Education, and you should not assume endorsement by the Federal Government.
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;
- 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.