Career and Technical Education (CTE)
Accountability and Evaluation:
A Comprehensive Strategy for Technical Assistance

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Building on the past to improve the future

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The Center Partners

Partner Organizations

University of Minnesota
Cornell University
NOCTI
University of Louisville
ACTE
AED
STATE DIRECTORS
SREB
Clemson University
The Center - RFP

Purpose . . . to carry out scientifically-based research and evaluation, and to conduct dissemination and training activities consistent with the purposes of the Act.
The RFP: Four Plans of Work

- Scientifically Based Research
- Professional Development
- Tech Assistance
- Dissemination
Three strands: The work of the Center

- Develop and improve methods to address education, employment, and training needs

- Increase the effectiveness and improve the implementation of CTE programs that are integrated with coherent and rigorous content that is aligned with challenging academic standards

- Improve the preparation/professional development of faculty and administrators to improve student learning in CTE
CTE Accountability and Evaluation Portfolio

• **A Tool Kit for Measuring CTE Effectiveness Using Return on Investment and Other Related Techniques**

• **Technical Skills Inventory Project**

• **Crosswalks and Common Data Standards Project**

Additionally,

• **Serve as a neutral intermediary in matters related to accountability and evaluation**

• **Using the National Center for Education Statistics (NCES) longitudinal and survey data sets, to examine more closely the engagement, achievement, and transition of secondary and postsecondary CTE students.**
TERMINOLOGY: What Do They All Mean?

Program Evaluation and Effectiveness
- Return on Investment
- Cost Benefit Analysis
- Net Impact Analysis

Benefits
- Private Benefits
- Social Benefits

Costs
- Private Costs
- Social Costs

Benefit Cost Ratio
Net Present Value
Internal Rate of Return
Five Things to Consider When Conducting Program Evaluation and/or Program Effectiveness

- Opportunity Cost
- Time Horizon
- The Discount Rate
- Monetizing Non-monetary Benefits and Costs
- Positive and Negative Externalities
Reasons for Doing Program Evaluation and Effectiveness

- Rational Decision Making (Accountability)
- Making Informed Choices (Improvement, Accountability)
- Validating Strategic Planning (Accountability, Improvement, Marketing)
Reasons for Doing Program Evaluation and Effectiveness

- **Accountability:**
  - Program Objectives are Met
  - Better Decisions of Program Planning
  - Authorize Fiscal Payments
  - Meet Grant Obligations
  - Correctly Allocate Program Resources
Reasons for Doing Program Evaluation and Effectiveness

- Improvement:
  - Identify Program Strengths and Weaknesses
  - Create Safer Practices
  - Increase Educational Value
  - Enhance Competence
  - Test Innovative and Novel ideas
  - Diminish Planning Problems
  - Decrease Operating Costs
  - Reduce Staff Concerns
  - Establish Quality Benchmarks and Assurance Standards

Simon Priest, *A program evaluation primer*, *The Journal of Experiential Education*; Spring 2001; 24, 1; pp 34-40
Reasons for Doing Program Evaluation and Effectiveness

• Marketing:
  ➢ Advertise Past Program Effectiveness
  ➢ Indicate Successful Programming Track Record
  ➢ Promote Positive Public Relations
  ➢ Advocate and Lobby Social Policy
The five models of program evaluation and the primary questions they address are:

- Needs Assessment: What are some gaps that the program will fill?
- Feasibility Study: Given the constraints, can the program succeed?
- Process Evaluation: How is the implemented program progressing?
- Outcome Evaluation: Were program goals and objectives achieved?
- Cost Analysis: Was the program financially worthwhile or valuable?

Simon Priest, A program evaluation primer, The Journal of Experiential Education; Spring 2001; 24, 1; pp 34-40
A program logic model is a picture of how your program works – the theory and assumptions underlying the program. ...This model provides a road map of your program, highlighting how it is expected to work, what activities need to come before others, and how desired outcomes are achieved (p. 35).

### Table 1: Comparison of the Five Kinds of Program Evaluation

<table>
<thead>
<tr>
<th></th>
<th>Needs Assessment</th>
<th>Feasibility Study</th>
<th>Process Evaluation</th>
<th>Outcome Evaluation</th>
<th>Cost Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sequence position</strong></td>
<td>during diagnosis, but before design</td>
<td>during design, but before delivery</td>
<td>during delivery and/or debriefing</td>
<td>during and/or after disembarkation</td>
<td>after program completion</td>
</tr>
<tr>
<td><strong>Measures</strong></td>
<td>gap between what is and what should be</td>
<td>alternate approaches, help/hinder factors</td>
<td>gap between program plan and execution</td>
<td>satisfaction levels, objectives attainment</td>
<td>comparative merit/worth</td>
</tr>
<tr>
<td><strong>Questions asked</strong></td>
<td>what are objectives, priorities, and needs?</td>
<td>Which strategies and program procedures?</td>
<td>Are strategies and procedures working?</td>
<td>Are objectives met?</td>
<td>Should program be continued?</td>
</tr>
<tr>
<td><strong>Get input from</strong></td>
<td>clients, customers, and community</td>
<td>staff, supplier, clients, and customers</td>
<td>staff, supplier, clients, and customers</td>
<td>clients, customers, and community</td>
<td>staff, supplier, and profession</td>
</tr>
<tr>
<td><strong>Answers used to</strong></td>
<td>understand context and direct planning</td>
<td>gauge viability and best use of resources</td>
<td>monitor and modify program (midcourse)</td>
<td>improve/justify effectiveness</td>
<td>decide on future offerings</td>
</tr>
<tr>
<td><strong>Results used by</strong></td>
<td>staff and supplier</td>
<td>staff, supplier, and customer</td>
<td>staff and supplier</td>
<td>staff, supplier, customers</td>
<td>staff, supplier, and customer</td>
</tr>
<tr>
<td><strong>Conducted by</strong></td>
<td>describing context and comparing actual circumstances with intended change state</td>
<td>inventorying any resources or barriers and by examining all realistic possibilities</td>
<td>comparing arising with anticipated need and content or format with intended design</td>
<td>comparing actual result or product with expected outcome or standard benchmark</td>
<td>comparing cost ($) with benefit, effect, utility, and efficiency</td>
</tr>
<tr>
<td><strong>Other Considerations</strong></td>
<td>goals vs. objectives, unused opportunities, underlying problems, and unrealized needs</td>
<td>identify legal, moral, political, and fiscal restrictions, supports, constraints, or limits</td>
<td>identify weaknesses and strengths, remain flexible, and suggest quick adjustments</td>
<td>baseline measures may need to be taken if trying to measure change over time</td>
<td>compare with other programs, repetition ease, subjective value</td>
</tr>
</tbody>
</table>
The Context of Program Evaluation and Effectiveness

Underlying Models, Learner Segments and Stakeholder Interactions, and Paths to Employment or Further Education
What Must Happen if Program Evaluation and/or Program Effectiveness is to be Done Right

- Integrated Policy Frameworks
- Managerial Oversight and Administrative Knowledge
- Connected Data Systems and Institutional Research Expertise
Connecting Budgets, Program Plans, and Data: Return on Investment (ROI) as a Tool for CTE Effectiveness

Three Principal Audiences for the ROI Guide Book
STATE LEVEL
SYSTEMS LEVEL
LOCAL LEVEL

Program Plans

FEDERAL

STATE (Eligible Agency)

SECONDARY CTE

SCHOOL DISTRICTS

TEACHER PREPARATION GUIDANCE EQUIPMENT

POSTSECONDARY CTE

COMMUNITY COLLEGES

STUDENT SUPPORT SERVICE CURRICULUM DEVELOPMENT

DATA [Input, process, output and outcomes]