Evaluating Workforce Investments: Short- and Long-Term Training Results and Larger Measurement Questions

Christopher T. King, Director
Ray Marshall Center
LBJ School of Public Affairs, UT-Austin

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Outline

• Background
• Data & Methodology
• Evaluation Findings & Implications for:
  – Rapid Employment Model (REM)
  – Capital IDEA
• Larger Issues with Evaluating Workforce Impacts Generally
• Concluding Observations
Background

Key issue for labor market policy is the extent to which ever scarcer public funds should be invested in low-cost, low-intensity labor force attachment (LFA) v. high-cost, high-intensity human capital development (HCD).

Also, growing concern that the conventional wisdom about the ineffectiveness of training is incorrect and is a function of inadequate measurement, faulty attribution, and untimely follow-up, among other factors.

This presentation draws upon work with Ray Marshall Center colleagues Tara Smith and Daniel Schroeder, and University of Wisconsin (soon-to-be-LBJ) colleague Carolyn Heinrich.
On the relative value of short- v. long-term workforce investments:

• Travis County and Austin (TX) have invested local tax dollars in workforce services — over and above the usual federal and state funds — since the mid-1990s
  – Investments in a number of providers include short- and long-term training, support services, adult ed, soft skills training and job search assistance

• Evaluation of locally-funded workforce services now entering its fifth year; local support for evaluation rare

Focus here on 2 programs: REM and Capital IDEA
Rapid Employment Model (REM)

- Started (2006) as partnership between Travis County, the local workforce board & training providers
- Links short-term (<6 weeks) occupational training, with soft skills training and structured job search assistance
- Training options: Truck driving, construction, administrative assistant, nurse aide
- Target population: disadvantaged residents, especially recently released offenders, Food Stamp/TANF (welfare) recipients
- Goal: reduce the time individuals are out of work
Capital IDEA

- Nonprofit, sectorally focused, workforce intermediary launched in 1999 through efforts of Austin Interfaith, City of Austin and Travis County
- Provides long-term training for high-wage, high-demand occupations (75% nursing & allied health) in growth sectors with pro-active support services
- Intensive screening to identify individuals with appropriate skills, personal/financial resources, and motivation to succeed
- Goal: lift families out of poverty through intensive career education
Data and Methodology

UI wage* and claimant records are used to measure four key outcomes: employment, earnings, UI monetary eligibility, and UI claims filed

Quasi-experimental impact analysis gauges the “value-added” of workforce services by comparing labor market outcomes for REM and Capital IDEA participants with those of a comparison group of similar non-participants who registered for WorkInTexas.com or received WIA core services

• Impacts measure marginal impacts of REM and Capital IDEA participation over and above those from receiving job referrals or JSA

* Known UI coverage issues in truck driving and construction (REM).
### Employment Outcomes

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Total Participants</th>
<th>4 Qtrs Before Service</th>
<th>Last Qtr of Service</th>
<th>2nd Qtr After Service</th>
<th>6th Qtr After Service</th>
<th>10th Qtr After Service</th>
<th>All Qtrs After Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-IDEA All</td>
<td>321</td>
<td>68.5%</td>
<td>78.8%</td>
<td>78.5%</td>
<td>76.0%</td>
<td>75.6%</td>
<td>77.9%</td>
</tr>
<tr>
<td>C-IDEA Non-</td>
<td>212</td>
<td>66.2%</td>
<td>71.2%</td>
<td>71.7%</td>
<td>69.8%</td>
<td>68.6%</td>
<td>71.2%</td>
</tr>
<tr>
<td>Completers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-IDEA Completers</td>
<td>109</td>
<td>72.9%</td>
<td>93.6%</td>
<td>91.7%</td>
<td>88.1%</td>
<td>88.9%</td>
<td>90.3%</td>
</tr>
<tr>
<td>REM 2006</td>
<td>103</td>
<td>16.3%</td>
<td>51.5%</td>
<td>59.2%</td>
<td>47.6%</td>
<td>44.0%</td>
<td>51.9%</td>
</tr>
<tr>
<td>REM 2007</td>
<td>85</td>
<td>22.1%</td>
<td>30.6%</td>
<td>55.3%</td>
<td>47.1%</td>
<td>.</td>
<td>50.4%</td>
</tr>
<tr>
<td>REM 2008</td>
<td>81</td>
<td>29.3%</td>
<td>49.4%</td>
<td>68.2%</td>
<td>.</td>
<td>.</td>
<td>65.6%</td>
</tr>
</tbody>
</table>

Note: Dot indicates too few participants or no data to report.
## Earnings Outcomes (if employed)

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Total Participants</th>
<th>4 Qtrs Before Service</th>
<th>Last Qtr of Service</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Qtr After Service</th>
<th>6&lt;sup&gt;th&lt;/sup&gt; Qtr After Service</th>
<th>10&lt;sup&gt;th&lt;/sup&gt; Qtr After Service</th>
<th>All Qtrs After Service</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C-IDEA All</strong></td>
<td>321</td>
<td>$4,429</td>
<td>$4,580</td>
<td>$5,992</td>
<td>$6,825</td>
<td>$7,261</td>
<td>$6,833</td>
</tr>
<tr>
<td><strong>C-IDEA Non-completers</strong></td>
<td>212</td>
<td>$4,044</td>
<td>$3,887</td>
<td>$4,811</td>
<td>$5,722</td>
<td>$5,742</td>
<td>$5,544</td>
</tr>
<tr>
<td><strong>C-IDEA Completers</strong></td>
<td>109</td>
<td>$5,108</td>
<td>$5,604</td>
<td>$7,787</td>
<td>$8,525</td>
<td>$9,475</td>
<td>$8,712</td>
</tr>
<tr>
<td><strong>REM 2006</strong></td>
<td>103</td>
<td>$1,953</td>
<td>$1,598</td>
<td>$3,145</td>
<td>$5,333</td>
<td>$5,291</td>
<td>$4,512</td>
</tr>
<tr>
<td><strong>REM 2007</strong></td>
<td>85</td>
<td>$2,360</td>
<td>$1,141</td>
<td>$3,191</td>
<td>$4,060</td>
<td>.</td>
<td>$3,600</td>
</tr>
<tr>
<td><strong>REM 2008</strong></td>
<td>81</td>
<td>$4,574</td>
<td>$2,981</td>
<td>$4,524</td>
<td>.</td>
<td>.</td>
<td>$3,838</td>
</tr>
</tbody>
</table>

Note: Dot indicates too few participants or no data to report.
## Employment Impacts

<table>
<thead>
<tr>
<th>Cohort</th>
<th>All Qtrs After Service Ends: Comparison Group</th>
<th>All Qtrs After Service Ends: Treatment Group</th>
<th>Unadjusted Net Effect</th>
<th>Adjusted Net Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-IDEA All</td>
<td>67.3%</td>
<td>77.9%</td>
<td>10.6%</td>
<td>10.6%**</td>
</tr>
<tr>
<td>C-IDEA Non-completers</td>
<td>70.7%</td>
<td>71.2%</td>
<td>0.5%</td>
<td>1.1%</td>
</tr>
<tr>
<td>C-IDEA Completers</td>
<td>67.8%</td>
<td>90.3%</td>
<td>22.6%</td>
<td>24.8%**</td>
</tr>
<tr>
<td>REM 2006</td>
<td>51.2%</td>
<td>51.9%</td>
<td>0.7%</td>
<td>4.6%*</td>
</tr>
<tr>
<td>REM 2007</td>
<td>55.1%</td>
<td>50.4%</td>
<td>(4.7%)</td>
<td>5.6%*</td>
</tr>
<tr>
<td>REM 2008</td>
<td>59.5%</td>
<td>65.6%</td>
<td>6.1%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

Note: **=significant at p<.01, *=significant at p<.05
Earnings Impacts Over Time

• Earnings averaged over all participants, whether employed or not (unconditional earnings)
• Earnings difference between participants and comparison group captures the program’s combined employment and earnings impacts

MESSAGE:

*Longer-term training leading to employment credentials has a large, lasting impact on earnings, while short-term training leads to an initial bump in earnings that is not sustained*
Earnings Impacts Over Time
All Capital IDEA Participants
Earnings Impacts Over Time
Capital IDEA Completers Only
Earnings Impacts Over Time
2006 REM Participants

-8 -6 -4 -2 0 2 4 6 8 10

Quarters

REM 2006  Comparison group

$0 $1,000 $2,000 $3,000 $4,000
Capital IDEA participation had statistically significant impacts (p<.01) on both UI monetary eligibility and claims

- Completers experienced almost a 26 %-point increase in UI monetary eligibility
- Completers filed 1.7 %-point fewer UI claims

REM participation produced some statistically significant UI-related impacts (p<.01)

- 2006 REM participants experienced a 7 %-point increase in UI monetary eligibility
- Later (2007 & 2008) REM cohorts filed 3-7 %-points fewer claims
The Conventional Wisdom on Workforce Investments

“We simply lack any evidence that workforce development programs work.”
— Former Assistant Secretary of Labor for Employment and Training, Emily Stover DeRocco, *The Wall Street Journal* (July 2005)

“[W]hile training may be an effective strategy for modestly improving the earnings of a small number of workers, even the best-run training programs cannot provide a stepping-stone out of poverty for any significant numbers of Americans.”

“The best available evidence indicates that public training programs are an inefficient transfer mechanism and an inefficient investment policy for low-skilled adult workers.”
Four Main Arguments

- **Impact measurement has been too narrow** compared to evaluations of other interventions (e.g., early childhood)
- **Untimely follow-up periods** have been used for evaluation
- Evaluations have made **unfair comparisons/interpretations** of information on comparative program effectiveness
- **Positive impact findings** have been largely neglected in policy discussions and in the press
Consider measuring impacts of early childhood v. workforce investments.

- **Perry Pre-school Evaluation** factored in incarceration, welfare receipt, high school graduation, earnings, taxes, and many other outcomes, all extrapolated for a lifetime.

- **Training evaluations**—e.g., National (RA) JTPA Study, Quasi-experimental WIA Impact Evaluations—have mainly focused on employment and earnings and for very limited time periods post participation. Only the recent Job Corps Evaluation has factored in incarceration costs.
Perry Pre-school Evaluation

Source: Schweinhart et al., 2005
Incorporating the Returns to Employers also Important

Estimated 5-year Costs & Returns for Texas Workforce Investments

Source: King et al. (2010)
Short- v. Longer-term Measurement

• Spending on young children has a far longer horizon — 2-3 decades — over which to produce benefits relative to spending on adults

• Yet, impacts for workforce programs typically measured over timeframes too short to capture results of more intensive investments in skills. Only in more recent analyses have longer timeframes (4-10 yrs) been used

• Growing number of studies show that training impacts typically turn positive in 2nd or 3rd years, while impacts for LFA investments are briefly positive, then fade out completely. [See: Dyke et al., 2006; Hotz et al., 2006; Card et al. 2009; Heinrich et al. 2008; Smith et al. 2009]
Impacts for Whom?

Workforce development evaluations frequently estimate impacts of *assignment* to treatment, not *receipt* of services

- Intent-to-treat design preferred
- Yet, shares of assignees actually receiving treatment typically quite low in workforce programs; impact estimates substantially diluted by large numbers of untreated in treatment group

Quasi-experiments more likely to estimate impact of treatment on treated, avoiding low take-up problem

- Recent experimental and nonexperimental studies have produced similar results about program effectiveness (see Greenberg et al., 2006; Card et al., 2009)
Concluding Observations

Wide range of public and private workforce investment strategies produce returns on par with those for many financial and other educational investments

• 10-26% v. 6-10% estimated real long-run rate of return on stocks and similarly for each year of education attained

Workforce investments produce widespread benefits for employers and society, many of which go unmeasured

• Long-run investments (e.g., Capital IDEA) yield larger, more lasting impacts than short-run LFA investments

• Returns particularly remarkable given magnitude and intensity of workforce investments relative to the size and complexity of the barriers addressed
Contact Information

Ray Marshall Center
LBJ School of Public Affairs
The University of Texas at Austin
www.utexas.edu/research/cshr

Christopher T. King, Director
512.471.2186
ctking@austin.utexas.edu