Cost Effectiveness of Teacher Preparation Routes

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Project INVEST

- U. S. Dept of Ed-funded field initiated study
- Purpose: To determine the costs and benefits of special education teacher preparation alternatives and to inform states’ decision making about how best to allocate training funds to assure an adequate supply of diverse and competent special educators.
Key Variables in Cost Effectiveness Model

- Costs (relates negatively to cost effectiveness)
  - Instructional
  - Administrative
- Program Size (relates positively with CE)
- Attrition (relates negatively to CE)
  - During the program
  - As a beginning teaching
- Teacher Quality
- Unique Contribution to Supply
Cost Effectiveness Model

• All other things equal...
  – High cost programs are relatively less cost effective
  – High attrition programs are relatively less cost effective
    • Low attrition may ameliorate high initial cost
    • High attrition may inflate low initial cost
  – Larger programs are relatively more cost effective
  – Programs that prepare better teachers are relatively more cost effective
  – Programs that contribute uniquely to the supply of SETs are more cost effective
Phase I Data Collection

- Interviews with Program Directors
  - Conducted by telephone, recorded contemporaneously
  - Ask about monetary support, program and institutional features, and participants

- Analysis of Program Planners
  - Gen and SE foundations and methods, field experiences

- Cost Tables
  - Excel Workbook, completed independently
  - Instructional and administrative costs, progress through and attrition during the program
Phase II: Program Case Studies

- Teaching observations (Pathwise)
  - Teacher Quality
- Prospective study of teacher attrition
- Participant Interviews
  - What training options were available to you when you entered the program?
  - Unique contribution to supply
Program Types

• Internship Program:
  Participants are hired as teachers and complete program while teaching (n = 12)

• Distance Education/Online Program:
  Courses are delivered via internet or distance education technology (n = 5)

• Paraprofessional Step-Up Program:
  Program leads to licensure and/or degree for paraprofessionals (n = 3)

• District Sponsored Program:
  School district or regional consortium provides training (n = 2)
## Program Content:
Total Hours of Instruction in Five Categories

<table>
<thead>
<tr>
<th>Program</th>
<th>GE Foundations</th>
<th>SE Foundations</th>
<th>GE Methods</th>
<th>SE Methods</th>
<th>Field Experiences</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internship</td>
<td>30.6 (0-140)</td>
<td>49.3 (0-120)</td>
<td>74.3 (0-240)</td>
<td>231.3 (120-490)</td>
<td>117.9 (55-500)</td>
<td>503.5 (137.5-1020)</td>
</tr>
<tr>
<td>Step-Up</td>
<td>112.4 (0-240)</td>
<td>71.5 (30-112)</td>
<td>198.2 (144-270)</td>
<td>295.5 (144-432)</td>
<td>219.7 (74.7-480)</td>
<td>897.3 (528-1392)</td>
</tr>
<tr>
<td>Distance</td>
<td>13.3 (0-45)</td>
<td>67.6 (0-135)</td>
<td>33.6 (0-144)</td>
<td>270.9 (84-515)</td>
<td>99.2 (0-432)</td>
<td>484.6 (144-947)</td>
</tr>
<tr>
<td>District</td>
<td>16.3 (9-23.5)</td>
<td>27.8 (10.5-45)</td>
<td>73.5 (63-84)</td>
<td>41.8 (38.5-45)</td>
<td>20 (0-40)</td>
<td>179.3 (135.5-223)</td>
</tr>
</tbody>
</table>
Program Content

Note: 1 = gen ed foundations, 2 = SE foundations, 3 = gen ed methods, 4 = SE methods, and 5 = field experiences
Program Content by Type

Internship Model

- General Foundations: 46%
- SE Foundations: 10%
- General Methods: 15%
- SE Methods: 6%
- Field Experiences: 23%
Program Content by Type

Para-Professional Step-up

- 33% General Foundations
- 24% SE Methods
- 22% General Methods
- 8% SE Foundations
- 13% Field Experiences
Program Content by Type

Distance Education

- 56% General Foundations
- 14% SE Foundations
- 20% General Methods
- 7% SE Methods
- 3% Field Experiences
Program Content by Type

District Sponsored

- General Foundations: 23%
- SE Foundations: 11%
- General Methods: 9%
- SE Methods: 15%
- Field Experiences: 42%
Program Length, %

Preservice

Internship: 503.3
Distance Ed: 499.7
Paraprofessional: 897.3
District Sponsored: 28.5
Interpretation

• Distance and Internship programs primarily involve inservice preparation, or OJT
  – And provide very little preparation before participants begin teaching

• These inservice programs include heavier emphases on SE foundations and methods
  – And may be focusing on the skills participants need immediately in their classrooms
Interpretation

• Step-up and District programs are predominantly preservice in nature
  – Which comes as no surprise in the case of Step-up programs
  – But is a surprising facet of the district sponsored programs

• Step-up programs require the most hours of instruction, because most participants are earning bachelor’s degrees as well as teaching licensure
Completers by Program Type

Average Annual Completers by Program Type

- Internship: 33
- Step-up: 22
- Distance: 39
- District: 120

Program Type
Average Cost by Program Type

- **Internship**: $9,995.64
- **Step-up**: $12,466.00
- **Distance**: $754.47
- **District**: $2,390.00
Interpretation

• Step-up programs typically are small and relatively expensive to offer
• By contrast, distance and district programs are relatively large and relatively inexpensive to offer
• Across all programs, cost per completer correlated negatively and significantly with number of completers
  (-.54, p < .02, 2-tailed test)
Food for thought

• Step-up program graduates remain in the field as teachers…
  – Will low attrition ameliorate high initial costs for step-up programs?

• Much less is known about attrition and retention of completers from distance and district programs…
  – Will high attrition inflate the low initial costs for completers of distance and district programs?