How Much Does Your Program Cost?

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Costs: 3 Major Categories

- Direct costs
  - Costs that are directly attributable to a project
    - Faculty, computers, paper, toner, travel, telephone, etc…
- Indirect Costs
  - An expense of doing business not identified with any specific project
    - Insurance, taxes, administration
- Opportunity Costs
  - What must be given up (the next best alternative) as a result of the decision
    - For example, an opportunity cost of going to college full time is giving up wages that could be earned during that period.

Why Focus on Costs?

1) Accountability
2) Improve efficiency
3) Better plan for program expansion
4) Better plan for sustainability

- Price ≠ Cost
  - What is the difference?
- Origins are from the business world; focus on efficiency and effectiveness
- Most educational institutions disagree
  - Natural cross-subsidization takes places in postsecondary education

Expenses

- Major Expense Categories
  - Personnel (Administration and Instruction)
    - Salaries, benefits, professional development
  - Risk Management
    - Insurance, worker's compensation, property
  - Operations
    - Space, utilities, maintenance, renovations
  - Student Services
    - Financial aid, libraries, counseling, health
  - Technology
    - Computers, laboratories, software, instructional materials

Revenues

- Major Revenue Categories
  - State Appropriations = 45%
  - Local tax support = 20%
  - Tuition and fees = 20%
  - Federal grants = 5%
  - Additional income from Gifts/Fundraising

Cost Formulas

- How does your institution use cost formulas?
  - To negotiate funding?
  - To assess program efficiency?
  - As a benchmarking exercise based on peer institutions?

- Cost-Benefit Analyses
  - Examine return on investment (ROI) = efficiency

Programmatic Interventions

- Cost effectiveness of specific programmatic interventions
  - Improve student outcomes (effectiveness)
  - Increase program productivity (efficiency)

- Basic assumption:
  - ⇑ resources for students over time = ⇑ levels of retention/credit hours = ⇑ revenue

Incremental Cost-Benefit Analysis

- Incremental cost-benefit analysis = additional costs per student
- Average per student costs = program $$$/# of students
- Break-even time vs. long-term fiscal benefit
  - At what point does the program break even? How much revenue will the institution realize as a result of the program?
- A shift from strategic **planning** to strategic **analysis of productivity**

ESL Learning Community Strategy at Community College of Denver

- Outcomes for program participants compared to outcomes for non-participant ESL students
- Preliminary analysis: concludes students in the intervention had higher GPAs, rates of course completion, and retention.
- But, how much did it cost to realize these improved outcomes?
- Additional average cost/student = additional input costs/# of students in program

Cost Description	Average Per Student Cost	
	Pilot Study 45 Students	To Scale 80 Students
Project Management $12,000 Pilot: 0.5 FTE project director to implement $0 To scale: no add'l cost; coordination by ESL chair	$267	$0
Student Ambassadors $975 Pilot: 1 @ $975/semester $1,950 To scale: 2 @ $975/semester	$22	$24
Instruction/Curriculum Development $3,600 Pilot: 6 instructors @ $600/semester $5,700 To scale: 7 instructors @ $600/semester plus $1,500 curriculum development	$80	$71
Educational Case Manager $8,800 Pilot: 0.4 FTE/semester = $8,800 $4,400 To scale: 0.2 FTE/semester = $4,400	$196	$55
Average per Student Cost*	$564	$151
Total Cost for Intervention**	$25,375	$12,050

* One-time cost as the intervention only lasts one term.

* *Incremental cost of providing the intervention that is above and beyond the cost already incurred for the comparison group.

Spring 2005 CCD ESL Lumina Cohort		Spring 2005	Summer 2005	Fall 2005	Spring 2006	Summer 2006	Fall 2006
Comparison	# of Students	45	11	18	17	3	10
	Total Credit Hrs	316	64	155	134	24	76
	Average Credit Hrs	7.0	5.8	8.6	7.9	8.0	7.6
	Retention Rate		0.24	0.40	0.38	0.07	0.22
Intervention	# of Students	45	14	30	27	16	18
	Total Credit Hrs	433	76	286	228	74	162
	Average Credit Hrs	9.6	5.4	9.5	8.4	4.6	9.0
	Retention Rate		0.31	0.67	0.60	0.36	0.40
Revenue per Credit Hour		$146.80	$146.80	$152.75	$152.75	$152.75	$160.55

Change in Revenue in Fall 2005

- Extra revenue comes from 2 sources
  - 1) ⇑ revenue associated with ⇑ credit hours
  - 2) ⇑ revenue associated with ⇑ retention rates

Difference Based on Credit Hours: $140.87

Additional Average/Student Retention $$: $491.63

Average Revenue per Student	Average Credit Hours	Revenue per Credit Hour	Average per Student Revenue	Retention Rate
Comparison	8.6	$152.75	$1,315.35	40.0%
Intervention	9.5	$152.75	$1,456.22	66.7%

Discussion

- Benefits
  - Increase in retention is treated as net revenue
  - Reduced costs: more returning than new students

- Caveats
  - Some revenue may be lost to additional overhead costs
  - Whether or not credit hours are fully funded depends on the state

Contacts and References

- Elaine Baker, elaine.baker@ccd.edu
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- *Left Out of the Equation: The Effects of State Community College Financing Policies on Low-Skilled Adult Students*. Breaking Through State Policy Paper. 2008.