

# Academic Libraries' Impact on Community College Student Success

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# Purpose

- Move from institutional focus to national scope.
- Fill community college literature gap.
- Employ statistical analysis.

# Methodology

- Multiple regression analysis
- 2012 Data from
  - Integrated Postsecondary Education Data System (IPEDS)
  - Academic Library Survey
- Includes 762 institutions
  - Public two-year community colleges
  - Completed ALS
  - Participate in Title IV
  - Awards associate degrees
- Institutions with missing or zero values omitted

# Methodology

$Y = \beta_0 + \beta_1 \text{Instruction expenses per FTE} + \beta_2 \text{Academic support expenses per FTE} + \beta_3 \text{Student services expenses per FTE} + \beta_4 \text{Institutional support expenses per FTE} + \beta_5 \text{All other core expenses per FTE} + \beta_6 \text{General circulation} + \beta_7 \text{Reserve circulation} + \beta_8 \text{Attendance at presentations} + \beta_9 \text{Reference transactions} + \beta_{10} \text{Gate count} + \varepsilon$

# Descriptive Statistics by Variable

	N	Minimum	Maximum	Mean	Standard Deviation
Full-time retention rate	762	14%	89%	57.09%	9.38%
Part-time retention rate	762	4%	87%	39.88%	10.31%
Graduation rate	762	3%	75%	21.56%	9.97%
Instruction expenses	762	\$1,639	\$14,393	\$4,992.17	\$1,560.36
Academic support expenses	762	\$51	\$5,176	\$986.29	\$549.62
Student service expenses	762	\$287	\$5,885	\$1,319.37	\$800.90
Institutional support expenses	762	\$135	\$6,921	\$1,820.39	\$855.37
All other core expenses	762	\$3	\$16,241	\$2,018.29	\$1,364.36
General circulation	762	.0357	74.1663	4.2653	6.1578
Reserve circulation	762	.0008	37.5183	1.5499	2.6488
Presentation attendees	762	.0101	10.2863	0.7227	0.6933
Reference transactions	762	.0001	53.8378	2.3023	3.8068
Gate count	762	.0269	10.4046	1.2863	1.0384

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# Graduation Rate

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Standard Error	Beta		
Constant	15.719	1.423		11.048	.000
Instruction Expenses	.001	.000	.210	5.187	.000
Academic Support Expenses	-.002	.001	-.103	-2.782	.006
Student Services Expenses	.000	.000	-.012	-.297	.767
Institutional support expenses	.002	.000	.130	3.260	.001
All other core expenses	.000	.000	-.024	-.680	.497
General circulation	.053	.058	.033	.905	.366
Reserve circulation	-.369	.134	-.098	-2.748	.006
Presentation attendance	-1.738	.543	-.121	-3.203	.001
Reference transactions	.014	.096	.005	.141	.888
Gate count	.273	.369	.028	.738	.461

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# Full-time Retention Rate

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Standard Error	Beta		
Constant	56.621	1.363		41.555	.000
Instruction expenses	.001	.000	.092	2.222	.027
Academic support expenses	-.001	.001	-.041	-1.090	.276
Student services expenses	-.001	.000	-.062	-1.559	.119
Institutional support expenses	-.001	.000	-.049	-1.198	.231
All other core expenses	.000	.000	-.025	-.696	.486
General circulation	-.051	.056	-.034	-.917	.360
Reserve circulation	.756	.129	.213	5.873	.000
Presentation attendees	-.523	.520	-.039	-1.007	.314
Reference transactions	-.231	.092	-.094	-2.517	.012
Gate count	.453	.354	.050	1.280	.201

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# Part-time Retention Rate

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Standard Error	Beta		
Constant	36.599	1.497		24.451	.000
Instruction expenses	.001	.000	.216	5.231	.000
Academic support expenses	.001	.001	.027	.713	.476
Student services expenses	-.002	.001	-.178	-4.477	.000
Institutional support expenses	-.001	.000	-.073	-1.794	.073
All other core expenses	.000	.000	-.052	-1.452	.147
General circulation	.135	.062	.081	2.193	.029
Reserve circulation	.170	.141	.044	1.202	.230
Presentation attendees	.254	.571	.017	.445	.656
Reference transactions	.001	.101	.000	.010	.992
Gate count	.041	.388	.004	.106	.916

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# Discussion

- Impact of the value of the library on community college student success is not apparent in this study.
- Does size of impact matter? Or just negative/positive relationship?
- Complexity of the higher educational environment may make it challenging to build a model that considers every variable that may impact student success.

# Conclusion

- Important to grow the literature of library impact on community college student success.
- Libraries can lead the charge to examine their role in supporting community college students.
- Need to build an inclusive, robust model.
- Qualitative or mixed method approaches may be useful.

# Contact Information

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