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## A National Study of Community College Retention Rates Segmented by Institutional Degree of Urbanization

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## Academic Leadership Journal

According to the Center for the Study of College Student Retention (2008), nearly 50% of students entering higher education will not earn a degree. Higher education institutions continually define and refine strategic initiatives to increase retention rates, often devoting countless hours and resources with minimal results. A recent report by the National Center for Education Statistics (Chen & Carroll, 2007) found that students enrolled part-time lagged significantly behind full-time peers in persistence in postsecondary degree completion. Stratton, O'Toole, and Wetzel (2007) stated that enrollment status alone does not account for lower retention rates among part-time students. These researchers found that the retention differences between part-time and full-time students were closely tied to enrollment objectives. The researchers noted substantial differences in part-time student demographics, pointing out that part-time students tend to be older, married, Hispanic, financially independent, and from less-educated families.

According to Tinto (1995), the frequency and quality of contact with faculty, staff, and other students is an important independent predictor of student persistence. Wasley (2006) emphasized the difficulties faced by commuter students in connecting with and feeling a part of the educational learning community. Students are more likely to persist to graduation in settings that provide academic, social, and personal support (Tinto, 1995).

Lipka (2006) stated that a growing number of institutions, from small private colleges to large public universities, are devoting more resources to helping second-year students stay and thrive on their campuses. The researchers added that most of these programs are too new to determine their impact on retention and graduation rates. However, a second-year student program at Azusa Pacific University did significantly impact retention from the sophomore to junior year by documenting an 8% increase from 80% to 88%, since initial implementation in 2000 to 2006 (Lipka, 2006).

Ackerman and Schibrowsky (2007) found that the quality and availability of support services influenced student decisions to persist to degree completion. The authors indicated that purposeful involvement increased student satisfaction and positively impacted student retention. Students, who engage campus activities or extracurricular programs, made connections linking them to the institution. These connections increased student satisfaction and increased persistence to graduation. The researchers encouraged campus leaders to improve retention rates by responding to the retention supportive factors most important to students. Astin (1993) similarly noted the relationship between student satisfaction and retention.

Titus (2006) suggested a relationship between college completion rates and such statewide variables as state expenditures on higher education, overall fiscal conditions, and unemployment. Variables included percentage of expenditures on the following: (a) administration, (b) grants and scholarships, (c) instruction (d) research, (e) student services, and (f) total educational and general (E&G) expenditures per full-time equivalent student. The author asserted that total spending for higher education positively influenced college completion rates.

Fluharty and Scaggs (2007) noted major funding deficiencies faced by rural community colleges. These institutions are often located in poor states suffering chronic underfunding. The researchers pointed out that rural community colleges tend to serve students from a lower income status than

student counterparts residing in urban areas. The researchers questioned the legitimacy of federal guidelines which allow metropolitan community colleges to collect more community development blocks grants from the federal government than rural institutions.

Copeland et al.(2008) found that city and suburban community colleges served higher percentages of part-time students than their town and rural counterparts. These researchers pointed out the differing programming approaches required for serving part-time and full-time students and noted the subsequent implications based on institutional degree of urbanization. Substantial differences in the completion rates for full- and part-time students were also noted.

Student retention is undoubtedly of major concern in higher education. The purpose of this study was to examine retention in light of enrollment status and institutional degree of urbanization in order to enhance practice guide policy. More importantly, issues raised by the study may lead to further research for the purpose of increasing understanding of the dynamics associated with complex issue.

### Research Questions

The research questions for this study focused on retention rates for full and part-time students and were as follows:

1. What are the retention rates for full-time and part-time students at public, two-year degree-granting institutions for fall 2005 by degrees of urbanization?
2. What differences exist in retention rates for full-time and part-time students between and among public, two-year, degree-granting institutions by degrees of urbanization?

### Methodology

The authors examined retention rates for full-time and part-time students in public, two-year degree-granting institutions for fall 2005 by the four major degrees of urbanization classifications of city, suburb, town, and rural. Data were obtained from the Integrated Post-Secondary Education Data System (IPEDS) maintained by the National Center for Educational Statistics. Part-time students and full-time students were defined according to existing IPEDS definitions. Retention rates, according to IPEDS, were defined as the measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. At a community college this percentage would be first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current Fall. Classifications of city, suburban, town, and rural were developed by collapsing IPEDS subcategories into corresponding major classifications. "City" refers to inside an urbanized area inside a principle city. "Suburban" refers to inside an urbanized area outside a principle city. "Town" is a territory inside an urban cluster but outside an urbanized area. "Rural" refers to an area outside an urbanized area or cluster.

Statistical Packages for the Social Sciences (SPSS) 16.1 was used to obtain descriptive statistics and to conduct a one-way analysis of variance (ANOVA) by degrees of urbanization. The significance level was set at 0.05. Post-hoc analyses were employed utilizing the Tukey test.

### Findings

Retention rates for full-time and part-time students at public, two-year degree-granting institutions for fall 2005 appear in Table 1 and are graphed in Figure 1.

The average retention rate for full-time students for all two-year, public institutions

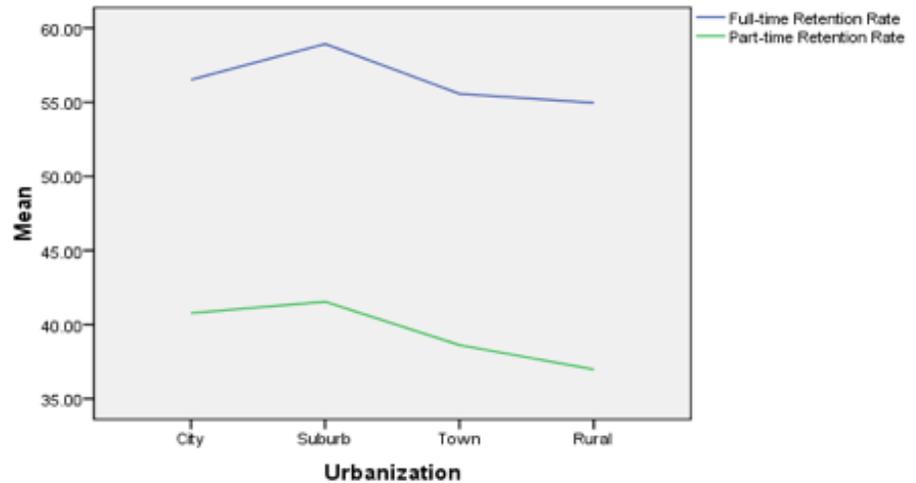
	Full-time Students	Part-time Students
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was 56.36% with a standard deviation of 11.48%. The average retention rate for part-time students for all two-year, public institutions was 39.30% with a standard deviation of 13.33%. Among both full-time and part-time students, retention rates were highest for institutions in suburban areas (M= 59.07) and least for institutions in rural areas (M=55.08). A one-way ANOVA was conducted on retention rates for full-time as well as part-time students, grouped by degrees of urbanization. Significant differences were noted between full-time student retention rates by

Urbanization	Full-time Students			Part-time Students		
	n	Mean	SD	n	Mean	SD
City	306	56.50	10.674	305	40.77	11.325
Suburb	187	59.07	9.760	186	41.55	10.608
Town	249	55.70	11.954	247	38.62	14.995
Rural	303	55.08	12.574	300	36.98	14.826

Figure 1

Full-time Student Retention Rates versus Part-time Student Retention Rates



degrees of urbanization,  $F(3, 1041) = 5.082, p = .002$ . Similarly, part-time student retention rates were significantly different by degrees of urbanization,  $F(3, 1034) = 6.359, p < .001$ . Post hoc analyses were used to determine pair-wise differences as noted in Tables 2 and 3.

Statistically significant differences existed between full-time student retention rates at suburban institutions and town institutions ( $p = 0.012$ ) and between suburban and rural institutions,  $p = 0.001$ . When looking at part-time student retention rates, a significant difference was noted between city and rural institutions ( $p = 0.002$ ) as well as between suburban and rural institutions ( $p = 0.001$ ).

### Conclusions and Recommendations

Suburban institutions posted the highest full-time student retention rates followed by city institutions. Thus, town and rural institutions trail behind the other institutions at retaining full-time students from semester to semester. Rural institutions posted lower part-time retention rates than city and suburban institutions. The significant differences in retention rates by degrees of urbanization indicate that community colleges differ. Despite the differences, some similarities were found.

When looking at full-time student retention rates, town and rural institutions were similar. City and

Table 2

Tukey post hoc analysis for full-time retention rates

Group Comparisons		Mean Difference	p
City	Suburban	-2.57	.073
	Town	0.80	.844
	Rural	1.42	.416
Suburban	Town	3.37*	.012
	Rural	3.99*	.001
Town	Rural	0.62	.921

\* $p < 0.05$

Table 3

Tukey post hoc analysis for part-time retention rates

Group Comparisons		Mean Difference	p
City	Suburban	-.7746	.923
	Town	2.15	.227
	Rural	3.80*	.002
Suburban	Town	2.93	.103
	Rural	4.57*	.001
Town	Rural	1.64	.471

\* $p < 0.05$

suburban institutions were similar for part-time students. What contributes to these similarities in retention rates? According to Copeland et al. (2008), city and suburban institutions have more part-time students than town and rural institutions. As this study confirmed, retention rates for part-time students were lower than their full-time counterparts. Even with more part-time students, community colleges in urban and suburban areas out-performed community colleges in town and rural areas. Community colleges in city and suburban areas are generally larger institutions serving more students than those in town and rural areas. Students attending two-year institutions in urbanized areas may have resources available to them that students in the more rural areas do not have. Continued research should examine if differences in funding between urban areas and rural areas are significant enough to justify the differences in retention rates by degrees of urbanization. Future research may consider investigating the differences in funding in relation to the support services offered at city and suburban institutions in comparison to town and rural. Research efforts should assess whether suburban and city institutions have fewer students requiring developmental courses in comparison to town and rural institutions. Future research might analyze the differences in the student populations by degrees of urbanization. In addition, researchers might consider comparing the completion, retention, and graduation rates of students in developmental courses, or students readmitted after suspension or academic probation. Many variables are involved in student retention. As higher education institutions strive to increase retention efforts, it is essential to consider the factors involved in retaining students.

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