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**A COMPARISON OF GRADUATION RATES FOR COMMUNITY COLLEGE  
TRANSFER STUDENTS AND NON-TRANSFER STUDENTS AT AN URBAN,  
REGIONAL UNIVERSITY**

**by**

**Rory Jay DeShano  
B.A., May 1992, Saginaw Valley State University**

**A Thesis Submitted to the Faculty of  
Old Dominion University/Norfolk State University  
in Partial Fulfillment of the Requirement for the Degree of**

**MASTERS OF ARTS**

**APPLIED SOCIOLOGY**

**OLD DOMINION UNIVERSITY/NORFOLK STATE UNIVERSITY  
May 1995**

**Approved by:**

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## CHAPTER I

### Introduction

In the late 1960s and early 1970s community colleges deemphasized the formerly renowned function of preparing students to transfer into four-year colleges or universities. While they had previously offered demanding pre-transfer courses and required students to meet academic performance criteria prior to transferring, community colleges began to relax these standards, leaving it up to the post-transfer institution to set the entry standards (Lee, Mackie-Lewis, and Marks 1993). Thus, the end result for community colleges was low retention of students and an increasing number of community college transfer students unsuccessfully making the transition from two-year to four-year colleges. Advocates of community colleges argue that these schools offer access to higher education to socially disadvantaged and academically ill prepared high school graduates who otherwise would not be admitted to four-year colleges (Lee and Frank 1990).

Community colleges currently enroll over one-third of all students in the American higher education system, but less than a quarter of community college students eventually transfer to a four-year college (Lee and Frank 1990). Of the community college students who do transfer, only a small percentage eventually earn

bachelor's degrees. Although degree completion rates for community college transfer students vary widely from state to state, nationally community college students account for 10-15 percent of those eventually earning bachelor's degrees (Townsend, McNerny, and Arnold 1993).

Reasons for this low graduation rate are multifarious. Cohen and Brawer (1987) suggest that students experience "transfer shock" and are unable to handle the transition process. Others argue that socio-economic conditions pose the greatest obstacles for students regardless of the type of institution they attend (i.e., two-year, four-year, small college, large university) (Velez and Javalgi 1987). Still others propose that initial college aspirations and lack of preparation contribute to the low percentage of community college transfer students successfully earning bachelor's degrees (Townsend, McNerny and Arnold 1993).

Past research has focused on race and found that the open-door policy established in the early 1970s by community colleges, allows academically disadvantaged students into the higher educational system, but once the student is admitted the realistic chances of that student earning a bachelor's degree are very small. Many minority students have weak high school preparation which combined with low socio-economic conditions and a greater likelihood of being employed while in college, reduces their chances of obtaining a bachelor's degree and increases the time needed for degree completion (Lavin and Crook 1990).

Best and Gehring (1993) found that the more hours the community college students transferred with, the greater the chances of those students earning bachelor's

degrees. They also discovered that the grade point averages of transfer students compared with native students (i.e., those entering a university straight out of high school) were not significantly different. However, most of the literature does not support these findings and indicates that community college students have lower grade point averages as well as significantly lower graduation rates (Velez 1985).

Drawing meaningful conclusions from past studies is very difficult. Most took place in different states, during different time periods and at different types of four-year institutions (e.g., universities, state colleges). Taking this into account, it would be difficult for a college or university to consider appropriate transfer policies based on previous studies, unless the college or university considering transfer policies has characteristics similar to past investigated institutions. Using this rationale the current study addresses the following question: Do community college students who transfer into a specific urban, regional university have a lower graduation rate than freshmen who started their college careers at that urban, regional university?



## CHAPTER II

### Literature Review

Two-year colleges are based on the premise that they reach out to a more diverse clientele than do their four-year counterparts, providing opportunities for disadvantaged and slow-starting students. The beginnings of the two-year college movement in the United States came in the late nineteenth century. Two of the people responsible for this movement were Henry Tappan at the University of Michigan and William Watts Felwell at the University of Minnesota (Jarvie 1963).

In the beginning, the primary functions of the two-year academic institutions (junior colleges) were to prepare students for transferring to a four-year institution. In the 50s and 60s junior colleges became community colleges. At this time the two-year institutions began an open-door policy and started offering a wide variety of academic courses ranging from general education to vocational studies. The open-door policy allowed students to be admitted into the two-year institution regardless of their previous academic progress (Lee, Mackie-Lewis, and Marks 1993; Clowes and Levin 1989).

In the mid 70s community colleges enrolled over 50 percent of all first time college entrants, doubling the percentage recorded in 1955. However, in the last

decade the numbers of first time students entering two-year institutions have begun to taper off (National Center for Educational Statistics 1990, cited by Lee, Mackie-Lewis, and Marks 1993).

Since the beginning of the community colleges' expansions, their function has come under some scrutiny. Researchers suggest that community college counselors set unrealistic expectations for students, which ultimately leads to their dropping out of school (Clark 1960). Olivas (1979) proposed that community colleges promoted access to higher education with its open-door policies while tolerating low retention and transfer rates. More recently, Brint and Karabel (1990) speculate that the function of the community college may become increasingly isolated from the rest of the higher education system. The reasons for this isolation stem from the decreasing transfer function matched with the increased interest of private corporations using two-year institutions for central training. Brint and Karabel argue that this isolation will transform the two-year colleges into trade schools.

The current community college function is diverse to say the least. The number of students transferring from two-year to four-year colleges has been declining. However, how well are the students progressing once they transfer? Studies of students who attempt to make the transition from two-year to four-year institutions often find a low percentage of students earning bachelor's degrees (St. Clair 1993; Kissler 1982; Lavin and Crook 1990; Alba and Lavin 1981; Richardson and Bender 1985; Townsend, McNerny, and Arnold 1993; Velez 1985). Low rates of two-year transfer students earning bachelor's degrees appear to be

related to such variables as socio-economic status, low aspirations, race, grade point average, and gender (Lee, Mackie-Lewis, and Marks 1993; Townsend, McNerny, and Arnold 1993; Velez 1985). Tinto (1975) created a model to explain drop out rates of transfer students. The model is longitudinal and very complex. It regards persistence largely as an outcome of the students' interaction with social and academic systems. Tinto suggests that students come to a particular institution with a wide range of background traits (e.g., gender, family background, past school performance, personality traits). The model demonstrates that these background traits influence the type of institution one seeks out and also influences how well they will perform at the institution. Tinto goes on to suggest that the greater the individual's level of past social and academic integration and the greater the institutional goal commitment (i.e., how well the institution promotes and assists with degree completion) the more likely the student is to stay at a particular institution.

Alba and Lavin (1981) focused on students who started at community colleges verses students who started at four-year colleges. They controlled for differences in academic backgrounds and concluded that students who began in the community colleges did not stay in school as long nor did they earn as many credit hours as the students who initially entered the four-year institutions. In fact, they revealed that students who initially entered four-year institutions doubled their chances of earning a bachelor's degree.

Research has shown significant differences in degree completion by community college transfer students depending on their race or ethnicity. Lavin and Crook

(1990) using longitudinal data from an earlier study that spanned 14 years (1970-84), found that ethnic membership made a significant difference for baccalaureate chances for community college transfer students. Their findings indicated that three-quarters of white students earned bachelor's degrees, but only 56 percent of the black students and less than half of hispanic students achieved the same goal.

Velez (1985) using data from the National Longitudinal Survey of the High School Class of 1972 found that white community college transfer students had a substantially higher rate of degree completion than did minority students. Sixty two percent of white students verses 49 percent of non-whites earned bachelor's degrees. Rendon and Mathews (1989) reported that minority students exhibit certain characteristics that include lack of motivation and academic preparation, difficulties meeting time lines, unfamiliarity with what it takes to be a college student, tendencies to start with small goals, and tendencies to select majors that are directly related to employment. Study after study seem to suggest that minority transfer students have a difficult time earning bachelor's degrees. Therefore, community colleges would seem to leave minority transfer students at a disadvantage when it comes to successfully transferring to four-year colleges and earning bachelor's degrees (Richardson and Bender 1985).

Several studies have focused on gender and graduation rates among community college transfer students, but few studies have reported significant differences in degree attainment for males and females. Holahan, Green, and Kelley (1983) however, in a 6 year longitudinal study found that male and female students entering

a four-year institution directly from high school showed no significant differences in obtaining bachelor's degrees, while transfer students did reflect a statistically significant difference in degree completion, with over 60 percent of the male students graduating versus 54 percent of the female students. Similarly, Velez (1985) found transferring males having a 6 percent higher graduation rate than transferring females.

Past research has shown that grade point average is strongly correlated with earning a bachelor's degree. The higher the grade point average of the student at the time of entry into a four-year college, whether a high school grade point average or community college grade point average, the better their chances of acquiring a bachelor's degree (Pascarella and Chapman 1983; Best and Gehring 1993; Townsend, McNerny, and Arnold 1993; Anderson 1981). Studies have shown that transfer students' grade point averages usually decrease when entering a four-year institution, however, after a brief period their grade point averages increase at least to the level they experienced at the two-year college (Cohen and Brawer 1987; House 1989; Nolan and Hall 1978).

Best and Gehring (1993) found no significant difference when the mean grade point average of community college transfer students with more than 60 transfer credit hours was compared with the mean grade point average of first time college students who had reached junior status at the university. House (1989) adds that community college students who earned enough credits to transfer into a four-year institution as juniors, showed significantly lower dismissal rates than for community college students who transferred earlier in their college career. This suggests that the more

credit hours a community college student transfers, the better the chances are of that student graduating, assuming grade point average and increased number of transfer hours are good predictors of graduation.

Most of the past research has focused on community college students who have transferred to the main campus of large universities (e.g., Best and Gehring 1993; Holahan, Green, and Kelley 1983; Lee and Frank 1990; Velez 1985; Alba and Lavin 1981; Cohen and Brawer 1987). In addition Velez (1985) found that residential factors such as campus living, belonging to a fraternity/sorority, athletic team and so forth are important factors when looking at degree completion.

The population for this study comes from an urban, regional university located on the east coast of Virginia where the average total enrollment is about 15,000 students per semester excluding summer terms with over three-quarter of the students being in-state residents. In addition, a large portion of the student population is made up of commuters.

Building on Best and Gehring's (1993) study, this study investigates whether past research findings pertaining to community college transfer students are confirmed when being applied to an urban, regional university setting where there are higher proportions of commuters and in-state students. Graduation rates of community college students transferring 60 or more credit hours are compared to students who entered the urban, regional university as freshman and have completed at least 60 credit hours. It is hypothesized that there will be no significant difference between the graduation rates of community college transfer students and non-transfer students

(i.e., students entering a college or university for the first time) who earned 60 hours at the university.

Other variables that are considered are race, grade point average (GPA), gender, and major area of study. Many studies have indicated that race is highly correlated with degree completion, suggesting that minority transfer students will have lower graduation rates than non-minority transfer students (Velez 1985; Lavin and Crook 1990; Rendon and Mathews 1989; Richardson and Bender 1985). However, this study will focus on minority students transferring from community colleges compared to minority non-transfer students.

Studies have suggested that many community college students have a hard time setting long term goals and have low college aspirations (Townsend, McNerny, and Arnold 1993; Tinto 1975). Taking this into consideration for the present study, it is believed that transfer students who claim general studies as a major area of study will have lower graduation rates than transfer students who declare distinct major areas (i.e., business, science, etc.).

Gender is an area in which there is not an abundance of research on community college transfers and graduation rates. However, some studies have implied that male transfer students have a higher degree completion rate than female transfer students (Holahan, Green, and Kelley 1983; Velez 1985). It is believed that this trend will hold true for the current study for both community college transfer and non-transfer students.

Studies have indicated that academically disadvantaged students attend community colleges (Olivas 1979; Lee, Mackie-Lewis, and Marks 1993), and suggested that community college transfer students have lower grade point averages than do their four year counterparts (Pascarella and Chapman 1983; Anderson 1981; House 1989). It is hypothesized that upper-level transfer students in this study will not reflect lower GPAs, and will produce similar results to those suggested by Best and Gehring's (1993) study.

In summary, the following hypotheses are tested in this study:

1. Community college transfer students who transfer in a minimum of 60 credit hours will not have lower graduation rates compared to non-transfer students who have earned a minimum of 60 credit hours from the four-year college.
2. Among minority students, those transferring from a community college will have significantly lower graduation rates than non-transfer students.
3. Students who claim general studies as a major will have significantly lower graduation rates than students who claim distinct majors among both community college transfer and non-transfer students.
4. Males will have a significantly higher graduation rate than females among both community college and non-transfer students.
5. Community college transfer students will have significantly lower grade point averages than non-transfer students.



## CHAPTER III

### Method

The population considered for this study includes all students entering an urban, regional university on the east coast of Virginia for the first time in the 1986 fall term. That term was chosen because data on these students were available for an additional 8 years, sufficient time to track graduation rates for the 1986 cohort. Specifically two groups of students who entered the university in 1986 were included in this study: 1) All Virginia residents transferring at least 60 community college credit hours; 2) first time college freshman who are Virginia residents and have since acquired 60 credit hours at the urban university. Only Virginia residents were chosen due to the lack of data pertaining to students who were non-Virginia residents.

The grounds for separating the students into these groups are as follows. First, the project compares graduation rates for students who transfer with enough credit hours to waive their general requirements versus first time college students who obtain their general requirements from the urban university. This does not guarantee the general requirements are fulfilled for either group, only that they have established enough credits to fulfill such requirements. Second, selecting only freshmen who have gone on to complete 60 credit hours it is assumed that the freshmen cohort had

the same chance for withdrawal from college as did the community college transfer students. Third, current state legislation is proposing a bill that could become law in the near future, whereby students who remain at a community college level until they earn an associate's degree will have their general education requirements waived upon entering a four-year university.

The research variables are as follows. *Student status*: For this study students are designated as either community college transfer students or non-transfer students (i.e., students who enter the regional university with no other college experience). *Academic achievement*: Community college students who have earned their degree by the 1992 spring semester and non-transfer students who have earned their degree by the 1994 spring semester are coded as graduates. Students who do not receive their degrees within the designated time frames are coded as non-graduates. The rationale for staggering the years set for graduation, that is 1992 spring semester for community college transfer students and 1994 for non-transfer students, is to give each group the same amount of academic time for degree completion, i.e., six years after attaining 60 credit hours. *Gender and Race*: Student's race is coded black, asian, white, or other. These categories were recoded as minority and white. *Major school of study*: Student's academic field of study is coded according to college (i.e., arts and letters, business, education, engineering, sciences, health sciences) or general studies (for those not choosing a specific major). For community college transfer students the major declared upon transfer to the four-year university was coded. For non-transfer students the major declared as of 1988 was coded. The rationale for the

time span adjustment was to allow non-transfer students two academic years before declaring a major. Major school of study is further broken down into two categories, "distinct major" for students indicating any major other than general studies and "general studies" for those not choosing a specific major. *Grade point average (GPA)*: Students' GPA is calculated for only their last two academic years for community college transfers and a cumulative academic GPA for non-transfer students. This is due to the policy of not including grades for transferred classes when calculating GPA at the university.

The independent variable is student status with two categories, community college transfer students and non-transfer students. The dependent variable is academic achievement which is measured as graduation or non-graduation. There are four control variables race, gender, major school of study, and grade point average (GPA).

This section describes the procedures used to analyze the data. The statistical package SAS was used to analyze the data. Utilizing frequency tables, crosstabulations, chi-square, and regression statistical procedures.

To test the hypotheses, crosstabulations were run on the independent and dependent variables. Then crosstabulations were run on the independent and dependent variables while controlling for race, gender, and major school of study. Chi-square was then applied to test for significant differences for each crosstabulation table.

## CHAPTER IV

### Results

As stated previously the population for this study included all students entering an urban, regional university in Virginia for the first time in the 1986 fall term. The purpose of this study was to examine how community college transfer students who entered the university progressed academically compared to their non-transfer counterparts. This study was also conducted to help assess future ramifications of current state legislation pertaining to community college transfer students who remain at the community college level until acquiring an associate's degree prior to transferring to an four-year university.

Table 1 examines graduation rates for community college transfer students versus non-transfer students. After eliminating from the data set students who did not meet the sample requirements (transfer and non-transfer students who did not have 60 transfer credit hours or 60 earned credit hours and were not Virginia residents) there remained 887 non-transfer students and 134 community college transfer students. Of the community college transfer students, 79 percent graduated within six years compared to 77 percent of non-transfer students. These differences were not significant at the .05 level.

**TABLE 1.** Graduation Rates by Student Type (percentages)

	Community College Transfer Students %	Non-Transfer Students %
Non-Graduates	20.90	23.07
Graduates	79.10	76.93
Total (N)	100.00 (134)	100.00 (887)

Chi-square (df=1) = 0.264  
p. > .05

Table 2 compares graduation rates by student type while controlling for race. Of the white students, 80 percent of community college transfer students graduated compared to 78 percent of the non-transfer students. Of the minority students, 73 percent of community college transfer students graduated compared to 74 percent of non-transfer students. There were no significant differences, indicating that minority students did not have significantly lower graduation rates when being compared by student type (i.e., community college transfer or non-transfer).

Table 3 illustrates graduation rates for community college transfer students by students' race. Eighty percent of the white students and 73 percent of the non-minority students graduated. Once again these differences in graduation rates were not significant at the .05 level and had a chi-square value of 0.648.

Table 4 illustrates community college transfer students who claimed a distinct major upon entering the urban university (1986) versus non-transfer students after completing two academic years (1988). At the time of entry 77 percent community college transfer students declared distinct majors compared to only 61 percent of non-transfer students after two years. These results were significantly different at the .05 level.

Table 5 shows graduation rates by student type while controlling for major. Of the students that declared distinct majors, 84 percent of community college transfer students and 83 percent of the non-transfers graduated. Of those who declared general studies, a greater proportion of non-transfer students (67.25%) than transfer

**TABLE 2.** Graduation Rates by Student Type, Controlling for Race (percentages)

	<b>*White</b>		<b>**Minority</b>	
	Community College Transfer Student %	Non-Transfer Student %	Community College Transfer Student %	Non-Transfer Student %
Non- Graduates	19.64	21.67	27.27	26.43
Graduates	80.36	78.33	72.73	73.57
Total (N)	100.00 (112)	100.00 (660)	100.00 (22)	100.00 (227)

\*Chi-Square (df=1) = 0.233  
p. > .05

\*\*Chi-Square (df=1) = 0.007  
p. > .05

**TABLE 3.** Graduation Rates for Community College Transfer Students,  
by Race (percentages)

	Minority %	White %
Non-Graduates	27.27	19.64
Graduates	72.73	80.36
Total (N)	100.00 (22)	100.00 (112)

Chi-square (df=1) = 0.648  
p. > .05



**TABLE 4.** Students' Majors by Student Type (percentages)

	Community College Transfer Students %	Non-Transfer Students %
General Studies	23.13	38.90
Distinct Majors	76.87	61.10
Total (N)	100.00 (134)	100.00 (887)

Chi-square (df=1) =12.430  
p. < .05

**TABLE 5.** Graduation Rates by Student Type, Controlling for Major (percentages)

	<b>*Distinct Majors</b>		<b>**General Studies</b>	
	Community College Transfer Student %	Non-Transfer Student %	Community College Transfer Student %	Non-Transfer Student %
Non- Graduates	15.53	16.61	38.71	32.75
Graduates	84.47	83.39	61.29	67.25
Total (N)	100.00 (103)	100.00 (542)	100.00 (31)	100.00 (345)

\*Chi-square (df=1) = 0.072  
p. > .05

\*\*Chi-square (df=1) = 0.455  
p. > .05

students (61.29%) graduated. However, these differences in graduation rates were not significant.

Table 6 breaks down graduation rates by type of student (i.e., community college transfer and non-transfer) while controlling for gender. Eighty one percent of community college males graduated compared to only 77 percent of non-transfer males. These differences were not significant at the .05 level and had a chi-square value of 0.701.

Similar results were discovered for female students with 76 percent of the community college transfers graduating compared to 78 percent of non-transfer females. Again these rates were not significant at the .05 level and had a chi-square value of 0.039.

An effort was made to compare grade point averages for community college transfer and non-transfer students. Although the GPAs for both groups of students were measured at specific semesters (1992 spring semester for community college transfer students and 1994 spring semester for non-transfer students) the data set kept a running tally of all students' GPAs up to that particular semester regardless of whether the students graduated, dropped out, or were still enrolled at that point. The final mean GPA for the community college transfer students was 2.45 and the mean GPA for non-transfer students was 2.77. However, at the university in question, GPAs for non-transfer students are based on all academic course work while for community college transfer students GPAs are calculated only for course work completed after transferring to the university. Consequently, an attempt was made to

**TABLE 6.** Graduation Rates by Student Type, Controlling for Gender  
(percentages)

	*Male		**Female	
	Community College Transfer Student %	Non-Transfer Student %	Community College Transfer Student %	Non-Transfer Student %
Non- Graduates	19.28	23.49	23.53	22.32
Graduates	80.72	76.51	76.47	77.68
Total (N)	100.00 (83)	100.00 (430)	100.00 (51)	100.00 (457)

\*Chi-square (df=1) = 0.701  
p. > .05

\*\*Chi-square (df=1) = 0.039  
p. > .05

remove the first two academic years of course work from the overall GPA of non-transfer students. Unfortunately, the data set did not contain an accurate set of "completed hours" to distinguish these courses.

Regression analysis was then used in an attempt to predict the accuracy of the linear relationship of non-transfer students' final GPA by their first 60 credit hour GPA. This would allow the adjustment in the final GPA for the first 60 earned credit hours. However, the regression equation had a r-squared value of .53. So the regression equation was not accurate enough to allow the researcher to use non-transfer student's final GPA, due to the effects of the students first 60 credit hour GPA. Thus, the final GPA for non-transfer students could not be compared to the final GPA of transfer students. The regression equation does suggest that there is enough influence on the final GPA to make it an important variable, but unfortunately, one that cannot be used with this particular data.

## CHAPTER V

### Discussion

The primary goal of this study was to determine if there are significant differences in graduation rates for community college transfer students transferring 60 or more credit hours compared to non-transfer students who earned at least 60 credit hours from an urban, regional university. It was hypothesized that there would be no significant difference, based on Best and Gehrings (1993) findings. As stated in the previous chapter there were no significant differences in graduation rates for the community college transfer students and non-transfer students, thus, producing results similar to Best and Gehring's research.

The second hypothesis suggested that minority community college transfer students would have lower graduation rates than their non-minority counterparts. This hypothesis was based on several studies suggesting that this is the case when comparing graduation rates for minority community college transfer students (Velez 1985; Lavin and Crook 1990; Rendon and Mathews 1989; Richardson and Bender 1985). However, the current study did not support the hypothesis, with minority transfer students not having significantly lower graduation rates than white transfer students.

In addition, community college transfer students did not have significantly lower graduation rates compared to their non-transfer counterparts regardless of race.

The sample population of minority transfer students at first may seem unrepresentative due to the limited number of minority students transferring from community colleges. Even so, this research did not find results similar to past research that indicated minority students have difficulty achieving bachelor's degrees.

The third hypothesis suggested that students who claim general studies as a major area of study would have lower graduation rates than students who claimed distinct majors. Although transfer students were significantly less likely to indicate general studies as a major, there were no significant difference in graduation rates for community college transfer students and non-transfer students when controlling for major.

Past research had suggested that community college students have low college aspirations and a hard time setting long term goals (Townsend, McNerny, and Arnold 1993; Tinto 1975). However, close to 77 percent of the community college students in this sample had declared a distinct major at the time of their arrival at the urban, regional university. This suggests that, unlike the students in previous studies, transfer students in this study had set long term academic goals.

The fourth hypothesis suggested that females would have lower graduation rates than their male counterparts. Past research in this area, although scarce, had suggested that this would be the case (Holahan, Green, and Kelley 1983; Velez 1985). This study did not produce such results, instead there was no significant difference in

graduation rates for community college transfer or non-transfer students when controlling for gender.

There were, however, some interesting findings that did agree with previous research. There were 1376 non-transfer students and 308 community college transfer students who were Virginia residents. Of the non-transfer students 50.07 percent were female and 49.93 percent were males. However, of the 308 community college transfer students 38.96 percent were female and 61.04 percent were male. This suggests that females are underrepresented at the community college level, as past research has indicated (Holahan, Green, and Kelley 1983; and Velez 1985).

The major goal of this study was to compare graduation rates of community college transfer students who transfer a minimum of 60 credit hours versus non-transfer students who had earned a minimum of 60 credit hours at the urban, regional university. The rationale for conducting this project was influenced by current state legislation which is proposing that students who remain at the community college until they earn an associate's degree will have their general requirements waived upon entering a four-year college or university. Due to incomplete data pertaining to students who transfer in with a minimum of 60 credit hours it was impossible to know if such students held associate's degrees. However, based on the findings it appears safe to infer that students who transfer to the four-year university with a minimum of 60 credit hours have a graduation success rate equivalent to those who acquire their first 60 credit hours at the four-year institution. Thus, the passing of the current state legislation would be beneficial for future graduation rates of students transferring into



the urban, regional university with an associate's degree or a minimum of 60 community college transfer credits.

If students who completed at least 60 hours at a community college do no worse than students whose entire college careers are spent at a university, than accepting an associate's degree in lieu of general education requirements could be beneficial to both students and universities. Students gain by knowing their courses will transfer, thus encouraging them to continue towards a bachelor's degree. Universities benefit by the possibility of increasing enrollments, and the knowledge that after 60 hours community college transfer students graduate at the same rates as non-transfer students.

This study had some methodological problems. The first being that all students were trapped in the data set beginning in the 1986 fall semester. The major concern is that students transferring into the university in 1986 started amassing (community) college credits prior to 1986, while entering freshman (non-transfer) did not. Thus, dates pertaining to graduation rates, and grade point averages had to be staggered by two years. This also limited the number of groups that could be compared limiting it to students who had acquired 60 transfer credit hours versus non-transfer students who earned 60 credit hours at the four-year university.

Another problem occurred while comparing GPAs for the two groups. The data set did not differentiate for failing grades and/or withdrawals. This being the case the GPAs for the students could not be accurately compared.

The methodological problems could not have been rectified in the time constraints allowed for this study. Although this thesis had some methodological problems, it did accomplish most of the previously described goals. However, one of the major flaws to this research project was how the data set was prepared. Future research in this area could benefit greatly by allowing all transfer students into the data set, and trapping a freshman cohort at a specific year. This would allow the researchers to compare and contrast more groups in each cohort (i.e., transfer and non-transfer students). By doing so it would allow the researcher the ability to test within groups as well as between groups. This would be imperative in order to make generalizations pertaining to graduation rates.

This study was a good pilot study for future research, however, future studies may want to focus more on intervening variables that may effect graduation rates of transfer students. For example, one could look at financial aid records, survey incoming students (freshman and transfers), and retrieve more pertinent admissions information from the incoming students (e.g., marital status, number of children, employment status, etc.). In doing so the researcher would be able to focus less on comparing graduation rates and focus instead on why some students succeed why others do not.

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