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AUTHOR Heiser, Linda M.; Abbed, Nejla
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ABSTRACT

In 1989, a two-year study was completed comparing the academic progress of community college transfers, senior college transfers, and continuing juniors (natives) at the University of Illinois at Urbana-Champaign (UIUC). The study samples were comprised of 673 former community college students and 393 senior college transfers who entered UIUC in fall 1989, and the comparison group of 4,850 natives who were continuing juniors in fall 1986. Student records for fall and spring terms from 1986 to 1988 provided data on academic achievement, as measured by mean UIUC grade point average (GPA), academic status, and continuing enrollment and graduation through four terms after transfer. Highlights of the findings include: (1) community college students entered UIUC with a pre-transfer GPA of 4.28, which is slightly higher than the 4.20 of four-year college transfer group and the previous GPA of 3.99 of native students; (2) neither community college or four-year transfers exceeded or equaled their pre-transfer GPA's during the four terms included in this study, while the natives exceeded their prior GPA's for three of the four terms; (3) 80% of the community college transfers and 83% of the four-year college transfers had graduated or remained enrolled after two years, while the comparable figure for the natives was 93%; (4) 41% of the community college transfers and 42% of the four-year transfers graduated during the two years of the study, as did 71% of the 1986 group of natives; (5) 10% of the community college transfers and 7% of the four-year transfers left UIUC for academic reasons, and 7% of the community college group and 5% of the four-year group were dropped; and (6) community college transfers achieved a lower GPA than four-year transfers or natives in a majority of the 12 subject areas studied. Interpretations of the findings, policy considerations and, data tables are included.

(WJT)

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TWO-YEAR COMPARISON
OF
TRANSFER AND NATIVE STUDENT ACADEMIC PERFORMANCE
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
FALL 1986 GROUP

by
Linda M. Heiser
Assistant Director

and
Nejla Abbed
Research Assistant

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University Office of School and College Relations

Research Memorandum 89-4

July 1989

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RESEARCH SUMMARY

University Office of School and College Relations

Two-Year Comparison of Transfer and Native Student Academic Performance¹
University of Illinois at Urbana-Champaign
Fall 1986-Group

Purpose

The purpose of this study is to compare the academic progress of two-year college transfers, four-year college transfers, and continuing juniors (natives) at the University of Illinois at Urbana-Champaign as measured by mean grade point average (GPA), academic status, and continued enrollment through two years after transfer. A secondary purpose is to compare performance after transfer with performance before transfer on the basis of mean GPA. These three groups are also compared in twelve subject matter areas on the basis of mean grade point average during the 1986-87 and 1987-88 academic years.

Summary of Results

1. Two years after transfer, 41 percent of the community college transfer group and 42 percent of the four-year transfer group had graduated. Over two-thirds (71%) of the native juniors had graduated within the same period.
2. A slightly higher percentage of the four-year transfer group (83%) than the community college group (80%) had graduated or continued on clear or probationary status two years after transfer. The retention ratio is higher (93%) for native juniors.
3. Two-year and four-year college transfer students had similar transfer GPA's (4.28 and 4.20). Continuing students accumulated a lower division GPA of 3.99. Both two-year and four-year transfer students experienced a first term drop in mean GPA. The community college group experienced the greater "transfer shock," with a .57 drop in GPA, accompanied by a decrease of .26 for the four-year group.
4. In the fourth semester of the study, the community college transfer students still enrolled achieved a mean grade point average of 3.97, which is .33 less than that group achieved before transfer, while the four-year transfer and native students enrolled achieved GPA's of 4.08 and 4.13, respectively.
5. By the end of the second year following transfer, 7 percent of the community college transfers and 5 percent of the four-year college transfers had been dropped and had not re-enrolled. An additional 3 percent of the community college transfers and 2 percent of the four-year college transfers had been placed on probation and did not continue.
6. The native juniors, four-year college transfers, and community college transfers ranked in descending order, respectively, on mean GPA in almost all of the twelve subject areas studied during the four semesters.

Policy Considerations

The findings of this study support the continuation of the existing admission policy for transfer students. Retention ratios of .80 and .83 for community college and four-year college transfers, respectively, demonstrate that students who have performed successfully at the pre-transfer institution continue to achieve at a reasonable level in comparison with native students.

¹This summary, prepared by Linda M. Heiser, presents the findings of Research Memorandum 89-4, which is available through the University Office of School and College Relations, 409 E. Chalmers, Room 311, Champaign, IL, 61820; phone: 217-333-2032.

CONTENTS

List of Tables	ii
I. Introduction	1
Background.....	1
Purpose	1
Method	1
Limitations	2
II. Findings	4
First Term Achievement	4
Academic Progress and Status Two Years After Transfer	9
Comparison by Subject Area	11
Institutional Differences	14
Trends in Achievement and Retention	14
III. Summary, Discussion, and Interpretation of Findings	20
Summary of Findings	20
Discussion and Interpretation of Findings	21
IV. Policy Considerations	23
V. Appendix	24
VI. Notes	29
VII. References	30

LIST OF TABLES

1.	Summary of Transfer and Native Student Progress	5
2.	Comparison of Transfer and Native Student Academic Achievement by Subject Area	12
3.	Summary of Community College Transfer Student Progress by Institution of Last Attendance	15
4.	Trends in Community College Transfer Student Performance: 1976 through 1986	17
5.	Trends in Four-Year College Transfer Student Performance: 1976 through 1986	19

I. INTRODUCTION

Background

Over the past ten years, the number of transfer students enrolled at Urbana-Champaign has ranged from 4,398 (17% of the undergraduate students) in the 1978 fall term to 3,388 (13% of the undergraduate students) in the 1987 fall term.¹ In 1988 approximately 12 percent of the total fall term undergraduate enrollment had transferred to UIUC,² and approximately 63 percent of the transfer student enrollment had last attended a community or junior college.

These data document the relative importance of transfer students to the total student enrollment and intellectual life at UIUC. During the ten-year period from fall 1978 through fall 1988, approximately 15 percent of the new undergraduates at UIUC entered as transfer students, while 85 percent entered as beginning freshmen. Despite declining transfer enrollments over the past decade, the number and academic achievements of transfer students contribute in a substantial way to the number and quality of graduates from UIUC.

Purpose

The purpose of this study is to describe and analyze the academic progress of community college transfers, senior college transfers, and continuing juniors (natives) at the University of Illinois at Urbana-Champaign, as measured by mean UIUC grade point average (GPA), academic status, and continuing enrollment and graduation (collectively termed "retention") through four terms, or two academic years, after transfer. A secondary purpose is to compare the academic achievement of each group after transfer with that group's performance before transfer on the basis of mean grade point average.

The three groups are compared in twelve subject matter areas on the basis of mean grade point average during the four terms surveyed by this study. Differences in academic achievement and graduation rate of transfers from individual community colleges with five or more new transfer students in the 1986 fall term are also reported and analyzed. The study also analyzes the relationship between the mean change in grade point average from pre-transfer GPA, or lower division GPA, to first term UIUC GPA for each community college and the retention rates for the transfers from that institution.

Method

This study provides a description and analysis of data among two groups of transfer students and a comparison group of UIUC students who entered as beginning freshmen and earned all of their college credit at UIUC. Community college transfers in the study include all the new and readmitted students to UIUC for the 1986 fall term who completed twelve or more semester hours prior to transferring and whose institution of last attendance was a community or junior college. This group is comprised predominately of students who transferred from public community and junior colleges in Illinois. The population of 673 community college transfers entered UIUC with a mean pre-transfer grade point average of 4.28 (A=5.00).

Transfers from four-year colleges and universities include all new and readmitted undergraduate students to UIUC for the 1986 fall term who completed twelve or more semester hours before transferring and whose institution of last attendance offers at least a baccalaureate degree. This population of 393 students entered with a mean pre-transfer grade point average of 4.20 (A=5.00).

The native students (comparison group) include 4,850 fall 1986 continuing juniors who entered UIUC as beginning freshmen and who successfully completed at least 60 and less than 90 semester hours at UIUC and earned less than twelve hours of transfer credit. Continuing juniors were selected for the control group because the majority of the transfers to UIUC have completed transfer credit which places them at or near the junior class level and would therefore be enrolled in classes with the continuing juniors. The University of Illinois mean GPA earned by these students before selection to this group was 3.99 (B=4.00). Even though this group is utilized as a basic control, it should not be assumed that the three populations are matched with respect to the academic variables known to make a significant contribution to college performance; i.e., ACT score and high school percentile rank in class.

Data for this study are based on the final Student Record Master tapes for fall and spring terms for the 1986 fall term through the 1988 spring term as reported in the Community College Transfer Student Summary of Progress Reports. Graduation during the 1986 and 1987 summer sessions are included in the retention rates.

Each community college transfer and each four-year college transfer was tracked from term to term for four terms as a basis for verifying the academic status of each student at the end of the 1987-88 academic year. Students on clear or probationary status at the end of a term who failed to re-enroll are reported as "left on clear" or "left on probation" in the final summary so that each individual is accounted for in the two transfer groups. Continuing term-to-term academic status data were not available for individual native students; therefore, some error (less than one percent) in the net count of native students listed as "dropped" or "withdraw" is possible, since some students could have been readmitted and counted in another status category or continued as undergraduates after graduation.

Three academic status categories were utilized in the calculation of a retention ratio for each group. The retention ratio represents the proportion of each original 1986 fall group which had graduated or was still enrolled at the conclusion of each term. This ratio is the total number of students in a given group which has graduated or continued on clear or probationary status divided by the total number of transfers comprising the fall 1986 group.

Limitations

This study describes, analyzes, compares, and evaluates the success and performance of two groups of transfer students and a selected group of continuing native students similar in class level to the transfer groups. These three groups are not assumed to be "matched" in statistical terms, but are relatively equal on pre-transfer GPA for the transfer groups, while the mean GPA for the UIUC native students (the control group) is slightly lower than the two transfer groups.

Even though comparisons are made among transfers from various institutions and types of institutions of previous attendance, this study is not intended to serve as a basis for inference about the independent effect(s) of a specific institution or type of institution. The students who transferred from the various community colleges and four-year colleges are not matched on such significant variables as American College Test (ACT) composite score or high school percentile rank (HSPR).

Native student data are reported as group data only. This study does, however, provide insight into individual and group performance by these various sub-populations of students at UIUC.

II. FINDINGS

First Term Achievement

Table 1 presents a summary of transfer and native student progress for the four-term period from fall 1986 through spring 1988, excluding summer sessions (except graduation). A detailed presentation and analysis of the fall 1986 term is presented in the Appendix for each community college from which five or more students transferred. Individual institutions are identified by confidential code.

The community college group of 673 transfers entered in the fall of 1986 with a pre-transfer grade point average of 4.28 (A=5.00). This group achieved a 3.71 mean first term GPA at UIUC, which is .57 lower than this group's mean pre-transfer GPA.

A total of 393 four-year college transfers entered UIUC in the fall of 1986 with a mean pre-transfer grade point average of 4.20. This group achieved a mean first term GPA of 3.94, a decrease of .26 from the group's mean pre-transfer GPA.

The 4,850 continuing juniors (natives) had accumulated a mean GPA of 3.99 prior to the initiation of this study; this group achieved a mean fall 1986 grade point average of 3.98.

The mean pre-transfer GPA's and the mean UIUC GPA's for the three study groups are illustrated in Figure 1 for each of the four terms. Comparison of the three groups in Figure 1 shows that community college transfers entered with a mean pre-transfer GPA higher than the continuing juniors, and slightly higher than the four-year college transfers; their first term UIUC performance, however, was .57 lower than their previous achievement, .23 lower than the four-year college transfers' first term UIUC GPA and .27 lower than the natives' fall 1986 UIUC grade point average.

Further analysis of group performance variation for the fall 1986 term shows that there was a greater proportion of community college transfers who were placed on probation or dropped at the conclusion of the term than with the other two groups. Table 1 reports that approximately 13 percent of the community college group were either on probation (12%) or dropped (1%), while comparable figures for four-year college transfers were 7 percent on probation and less than one percent dropped. The proportions were even lower for natives, at 5 percent and 1 percent, respectively.

Another way of comparing the three groups of students is through the retention ratio. This ratio is calculated by summing the number of community college transfers who have graduated and those who remain enrolled, either on clear or probation, at the end of a term, then dividing that sum by the total number of community college transfers in the original fall 1986 group. For example, the retention ration (RR) for the community college group at the end of the spring 1988 term is calculated as shown on the following page:

TABLE 1
 Summary of Transfer and Native Student Progress
 University of Illinois at Urbana-Champaign
 Fall, 1986 Group

Term (1)	Two-Year Colleges (2)		Four-Year Colleges (3)		Continuing Juniors (4)	
Fall, 1986						
No. of Transfers	673	100%	393	100%	4850	100%
Mean Transfer GPA	4.28		4.20		3.99	
Mean 1st Term GPA	3.71		3.94		3.98	
Change in Mean GPA	-0.57		-0.26		-0.01	
Status:						
Graduated	0	0%	0	0%	0	0%
Clear	564	84%	354	90%	4518	93%
Probation	83	12%	26	7%	265	5%
Dropped	7	1%	1	*	26	1%
Withdrew	19	3%	12	3%	41	1%
Retention Ratio**	647	0.96	380	0.97	4783	0.99
Spring, 1987						
No. Re-enrolled	635	94%	371	94%	4760	98%
Mean Transfer GPA	4.28		4.21		4.01	
Mean 2nd Term GPA	3.80		3.99		4.05	
Change in Mean GPA	-0.48		-0.22		0.04	
Increase Over 1st Term	0.09		0.05		0.07	
Status:						
Graduated	1	*	7	2%	267	6%
Clear	510	80%	316	85%	4178	88%
Probation	77	12%	28	8%	232	5%
Dropped	35	6%	12	3%	63	1%
Withdrew	12	2%	8	2%	20	*
Retention Ratio**	583	0.87	351	0.89	4677	0.96

*Less than one percent.

**Retention Ratio: The proportion of Fall, 1986 transfers which has graduated or completed the term on clear or probationary status.

TABLE 1 (Cont.)
 Summary of Transfer and Native Student Progress
 University of Illinois at Urbana-Champaign
 Fall, 1986 Group

Term (1)	Two-Year Colleges (2)		Four-Year Colleges (3)		Continuing Juniors (4)	
Fall, 1987						
No. of Transfers	576	86%	336	85%	4327	89%
Mean Transfer GPA	4.30		4.22		4.05	
Mean 3rd Term GPA	3.91		4.03		4.10	
Change in Mean GPA	-0.39		-0.19		0.05	
Increase Over 2nd Term	0.11		0.04		0.05	
Status:						
Graduated	9	2%	10	3%	320	7%
Clear	507	88%	299	89%	3767	87%
Probation	25	4%	14	4%	137	3%
Dropped	27	5%	9	3%	80	2%
Withdrew	8	1%	4	1%	23	1%
Retention Ratio**	542	0.80	330	0.84	4491	0.93
Spring, 1988						
No. Re-enrolled	546	81%	318	81%	3974	82%
Mean Transfer GPA	4.30		4.21		4.07	
Mean 4th Term GPA	3.97		4.08		4.13	
Change in Mean GPA	-0.33		-0.13		0.06	
Increase Over 3rd Term	0.06		0.05		0.03	
Status:						
Graduated	264	48%	149	47%	2877	72%
Clear	241	44%	151	47%	915	23%
Probation	25	5%	9	3%	124	3%
Dropped	12	2%	6	2%	40	1%
Withdrew	4	1%	3	1%	18	*
Retention Ratio**	540	0.80	326	0.83	4503	0.93

*Less than one percent.

**Retention Ratio: The proportion of Fall, 1986 transfers which has graduated or completed the term on clear or probationary status.

TABLE 1 (Cont.)
 Summary of Transfer and Native Student Progress
 University of Illinois at Urbana-Champaign
 Fall, 1986 Group

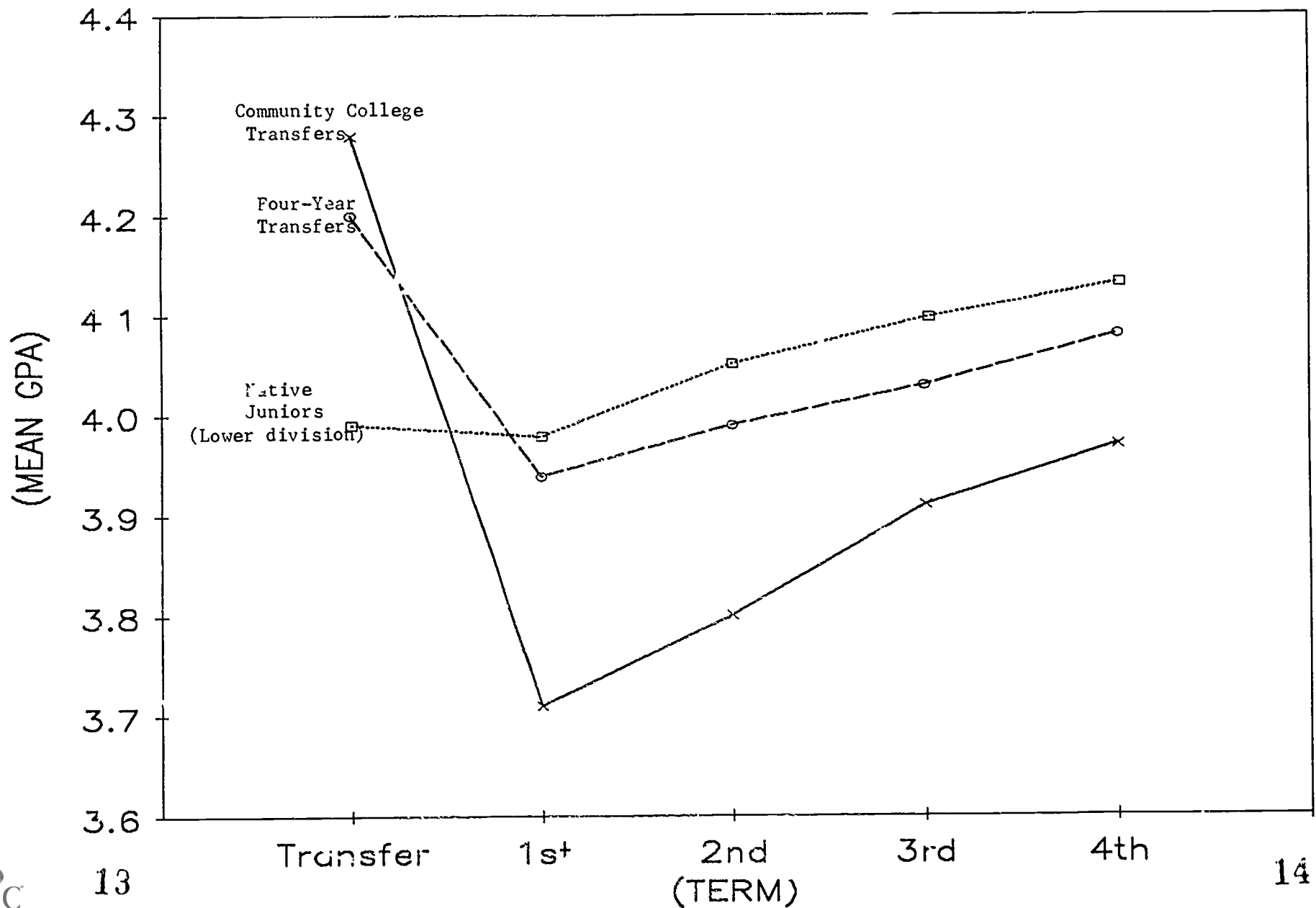
Term (1)	Two-Year Colleges (2)		Four-Year Colleges (3)		Continuing Juniors (4)	
Summary After Four Semesters						
Graduated	274	41%	165	42%	3464	71%
Clear (Continuing)	241	36%	151	38%	915 ***	19%
Probation (Continuing)	25	4%	9	2%	124 ***	3%
Dropped	44	7%	19	5%	NA	
Withdrew	26	4%	18	5%	NA	
Left on Clear	45	7%	23	6%	NA	
Left on Probation	18	3%	8	2%	NA	
Total	673	100%	393	100%	4850	100%
Retention Ratio**	540	0.80	325	0.83	4503	0.93

**Retention Ratio: The proportion of Fall, 1986 transfers which has graduated or completed the term on clear or probationary status.

***Estimated figures.

NA-Cumulative figures not available. Dropped, withdrew, left on clear, and left on probation figures total 10% of Fall, 1986 natives.

FIGURE 1: TRANSFER AND NATIVE GPA'S
by Group and Term - UIUC - Fall, '86 Gr.



$$\text{Retention Ratio: (RR) = } \frac{\text{Graduates + Clear + Probation}}{\text{Fall 1986 Population}}$$

$$\text{RR} = \frac{274 + 241 + 25}{673}$$

$$\text{RR} = \frac{540}{673}$$

$$\text{RR} = .80$$

Retention ratios for fall term, 1986 were .96 for the community college group, .97 for the four-year college group, and .99 for the continuing juniors (natives). A comparison of fall 1986 retention ratios with spring 1987 re-enrollment percentages reveals that even though 96 percent of the community college group were eligible to return for the spring term, only 94 percent actually re-enrolled, which was an additional loss of 2 percent of the original community college population. The four-year college group lost 3 percent (97% versus 94%) of the group between the fall and spring terms due to failure to re-enroll. Only 1 percent of the natives who were eligible to re-enroll failed to do so.

As demonstrated by previous studies, and substantiated by data for the 1986 fall term, a substantial drop in first term GPA has occurred consistently for community college transfers at UIUC. An analysis of factors influencing this drop is not readily available, although the phenomenon (which has been termed "transfer shock") may have been the result of difficulties with environmental adjustment. There was a greater difference in the achievement of community college transfers and the other two groups during the first term than during any of the other terms reported in this study.

Academic Progress and Status Two Years After Transfer

Four terms after transfer, the 546 community college transfers who re-enrolled achieved a mean GPA of 3.97, which was an increase of .06 when compared with that group's third term GPA and was .33 less than their pre-transfer GPA. A detailed analysis of these students and their performances is presented in the Appendix for each community college which enrolled five or more students in the original group. Forty-eight percent of the original community college group had graduated; 44 percent and 5 percent, respectively, were continuing on clear or probationary status. Of the students in the original fall 1986 group, 7 percent had been dropped, 4 percent officially withdrew and never returned (during the term), 7 percent left on clear status, and 3 percent left on probationary status. A total of 540 community college transfers had graduated or had completed the spring 1988 term on clear or probationary status, which resulted in a retention ratio of .80 for the group.

The four-year college group consisted of 318 students enrolled for the fourth term. This group achieved a mean term GPA of 4.21, an increase of .05 over that group's mean third term GPA and .13 less than their pre-transfer GPA.

Of the original four-year college group (393 students), 47 percent had graduated, 47 percent were on clear status, and 3 percent were on probationary status. Two percent of the total four-year college group was dropped, 3 percent withdrew, 5 percent left on clear, and 2 percent left on probation. The four-year college retention ratio was .83.

The native juniors who re-enrolled for the fourth term (3,974 students) achieved a mean term GPA of 4.07, which is .03 greater than their mean third term GPA, and was .06 above the group's lower division GPA. At the end of four terms, 72 percent of the native juniors had graduated, 26 percent were on continuing status (clear or probation), and the remaining 1 percent had been dropped, withdrew, or left on clear or probationary status. The retention ratio of the continuing juniors was .93.

This study demonstrates that community college transfers experience a substantial drop in GPA during their first term after transfer, then partially recover over the next three terms (-.57 after one term to -.33 after four terms), and achieve at a level more closely approximating their pre-transfer GPA.

Summary data presented in Table 1 for the three groups show the proportion of each group in seven academic status or retention categories. After four terms, 41 percent of the community college transfers, 42 percent of the four-year transfers, and 71 percent of the native juniors had been granted degrees. Thirty-six percent of the community college transfers, 38 percent of the four-year transfers, and 19 percent of the native juniors were eligible to continue on clear status. The percentage of students on probation after four terms was low for all three groups; the community college group and four-year group had 4 and 2 percent, respectively, of their totals on probation, compared with 3 percent for the natives. Seven percent of the community college transfers were formally dropped and never re-entered UIUC, along with 5 percent of the four-year transfers. During the course of four terms, 4 percent of the community college transfers and 5 percent of the four-year transfers withdrew and did not return. Seven percent of the community college transfer group and 6 percent of the four-year transfer group left on clear. Three percent of the two-year transfers left on probationary status while 2 percent of four-year transfers left on probationary status. This study did not attempt to obtain data on the reasons why these students left the University.

The retention ratio was highest for the native juniors (.93), followed by the four-year transfer group (.83) and community college transfer group (.80). It can be assumed that by the junior year, a student who enrolled at the University of Illinois at Urbana-Champaign as a beginning freshman and continued for two years would be more likely to continue for two more years and graduate than a transfer student who is new to the environment and may have completed fewer hours of credit than a native junior. The transfer group from four-year institutions achieved at a GPA level similar to that of the continuing juniors, but their retention ratio was 10 percent lower than the retention ratio for natives. The community college group GPA levels were well below those of the four-year group and the natives each term, and the community college group had a retention ratio 13 percent below the natives and 3 percent below the four-year group.

Figure 1 illustrates the mean GPA by term for the three cohorts. The mean transfer GPA is provided for the two transfer cohorts compared to the mean lower division GPA for the native student. Mean UIUC GPA's for each cohort are tracked for the succeeding four terms. The community college group entered with the highest transfer GPA and achieved the lowest UIUC GPA during the period studied. The four-year transfer group achieved at a level below their mean transfer GPA but recovered to a level similar to the native cohort. The mean GPA for native students who were enrolled improved each semester.

Comparison by Subject Area

Data on transfer and native student grade point averages at UIUC in each of twelve subject areas for the four terms included in this study are presented in Table 2. The community college group, the four-year group, and the natives were each assigned a performance rank in each of the twelve subject areas based on the mean UIUC GPA for each term.

This rank-ordering procedure revealed that community college transfers ranked third, or lowest, in eleven of the subject areas reported after the fall 1986 term. The four-year group achieved the highest GPA in four of the twelve subject areas, while the native group ranked highest in six subject areas: foreign language, math and computer science, physical sciences, social sciences, agriculture, and human resources and family studies. (Continuing Juniors tied with four-year transfers in English and humanities and education.) The performance of the four-year group more closely resembled that of the natives than that of the community college group; major differences (.20) between the four-year transfers and the natives for first term GPA occurred only in the subject areas of physical sciences, agriculture, human resources and family studies, with the natives having the highest achievement.

Community college transfers encountered more difficulty in the subject areas of engineering (GPA = 3.59) and human resources and family studies (GPA = 3.79) than the other groups. Performance in these two subject areas was at least .33 less than the performances of the four-year transfers and the natives. Even though the community college transfers were well above (.20 or greater) their overall average for all courses in the subject areas of English and humanities (GPA = 4.01), foreign languages (GPA = 3.97), agriculture (GPA = 4.06), fine and applied arts (GPA = 4.31), and education (GPA = 4.05), the community college transfers achieved a GPA at least .20 below the other two groups in the areas of math and computer science, physical sciences, social sciences and education.

These data show that the overall academic achievements of four-year transfers and natives are generally higher than community college transfers in most subject areas. The native juniors ranked first in foreign languages, physical sciences, and agriculture all four terms of this study. They ranked first for three of the four semesters in math and computer science and education. The community college group ranked third in subject areas for each of the four terms in foreign languages, math and computer sciences, engineering, and fine and applied arts.

It can be observed from data presented in Table 2 that mean GPA's for community college transfers are appreciably lower than the four-year transfers and native junior GPA's in the areas of foreign language, math and computer science, physical sciences, social sciences, engineering, education, and fine and applied arts. All three groups were consistently lower in math and computer science and physical sciences than in other subject areas.

TABLE 2

Comparison of Transfer and Native Student Academic Achievement by Subject Area
University of Illinois at Urbana-Champaign
Fall, 1986 Group

Subject Area (1)	Two-Year Transfers		Four-Year Transfers		Continuing Juniors	
	Mean GPA (2)	Rank (3)	Mean GPA (4)	Rank (5)	Mean GPA (6)	Rank (7)
Fall, 1986 (Term 1)						
Biological Sciences	3.70	3	3.94	1	3.82	2
Business & Commerce	3.87	3	4.17	1	3.98	2
English & Humanities	4.01	3	4.10	1 (tie)	4.10	1 (tie)
Foreign Language	3.97	3	4.15	2	4.18	1
Math & Computer Science	3.42	3	3.65	2	3.72	1
Physical Sciences	3.43	3	3.63	2	3.84	1
Social Sciences	3.76	3	3.97	2	3.99	1
Agriculture	4.06	2	3.93	3	4.15	1
Engineering	3.59	3	3.97	1	3.95	2
Fine & Applied Arts	4.31	3	4.60	1	4.40	2
Education	4.05	3	4.38	1 (tie)	4.38	1 (tie)
Human Res. & Family Studies	3.79	2	3.67	3	4.30	1
All Courses	3.71	3	3.94	2	3.98	1
Spring, 1987 (Term 2)						
Biological Sciences	3.70	3	3.84	2	4.02	1
Business & Commerce	3.83	3	4.06	1	3.99	2
English & Humanities	4.03	3	4.20	1	4.13	2
Foreign Language	4.00	3	4.18	2	4.25	1
Math & Computer Science	3.21	3	3.78	1	3.63	2
Physical Sciences	3.47	3	3.73	2	3.90	1
Social Sciences	3.81	3	3.95	2	4.01	1
Agriculture	4.16	3	4.18	1 (tie)	4.18	1 (tie)
Engineering	3.93	3	4.10	2	4.14	1
Fine & Applied Arts	4.28	3	4.33	2	4.42	1
Education	4.24	3	4.44	1	4.43	2
Human Res. & Family Studies	4.16	2	3.60	3	4.33	1
All Courses	3.80	3	3.99	2	4.05	1

TABLE 2 (Cont.)

Comparison of Transfer and Native Student Academic Achievement by Subject Area
University of Illinois at Urbana-Champaign
Fall, 1986 Group

Subject Area (1)	Two-Year Transfers		Four-Year Transfers		Continuing Juniors	
	Mean GPA (2)	Rank (3)	Mean GPA (4)	Rank (5)	Mean GPA (6)	Rank (7)
Fall, 1987 (Term 3)						
Biological Sciences	3.62	3	3.73	2	3.95	1
Business & Commerce	3.88	3	4.15	1	4.04	2
English & Humanities	4.03	3	4.21	2	4.22	1
Foreign Language	3.97	3	4.10	2	4.29	1
Math & Computer Science	3.61	3	3.66	2	3.70	1
Physical Sciences	3.73	3	3.78	2	4.00	1
Social Sciences	3.85	3	4.14	1	4.04	2
Agriculture	4.22	2	3.85	3	4.25	1
Engineering	3.99	3	4.03	2	4.15	1
Fine & Applied Arts	4.24	3	4.49	1	4.47	2
Education	4.32	3	4.46	2	4.49	1
Human Res. & Family Studies	3.79	3	4.08	2	4.29	1
All Courses	3.91	3	4.03	2	4.10	1
Spring, 1988 (Term 4)						
Biological Sciences	3.83	2	3.62	3	3.98	1
Business & Commerce	3.94	2 (tie)	3.94	2 (tie)	4.07	1
English & Humanities	3.96	3	4.22	1	4.19	2
Foreign Language	3.86	3	4.02	2	4.18	1
Math & Computer Science	3.47	3	3.63	2	3.72	1
Physical Sciences	3.80	3	3.92	1 (tie)	3.92	1 (tie)
Social Sciences	3.94	3	4.02	1	4.01	2
Agriculture	4.23	2	3.93	3	4.36	1
Engineering	4.09	3	4.19	1	4.18	2
Fine & Applied Arts	4.29	3	4.54	1	4.42	2
Education	4.19	3	4.39	2	4.46	1
Human Res. & Family Studies	4.31	2	4.64	1	4.30	3
All Courses	3.97	3	4.08	2	4.13	1

Institutional Differences

A summary of community college transfer student progress by institution of last attendance is presented in Table 3 for those Illinois community or junior colleges sending five or more transfer students to the University of Illinois at Urbana-Champaign for the 1986 fall term. These data are accompanied by comparable group data for four-year college transfers and continuing juniors. Community colleges which sent five or more transfers were assigned a confidential code number, which is shown in Column 1; these code numbers do not correspond to code numbers assigned to institutions by the University Office of School and College Relations.³ The number of students who initially entered the 1986 fall term and each group's mean pre-transfer GPA are shown in Columns 2 and 3, respectively. Column 4 shows the mean UIUC first term grade point average for the students from each community college which has been coded; Columns 5 through 10 report the number of students re-enrolled and the mean UIUC GPA for each of the three remaining terms being studied. Columns 11 through 24 report academic status after four terms, while Column 25 reports retention ratios for the coded community colleges, four-year transfer group, and the continuing junior group.

Comparison of pre-transfer and first term GPA shows that thirty-five of the thirty-six coded institutional groups experienced a drop of at least .20 in GPA, with three institutional groups (Codes 22, 31, 33) having a decrease which exceeded one letter grade.

It is clear from these data that even though some recovery in grade point average is noted in the second, third, and fourth terms, considerable variance still exists in the achievement after transfer among groups from different community colleges. There is no evidence presented in this study which explains the source of observed institutional differences or differences which may exist between students who enter the various curricula. However, previous studies of transfer students from community colleges demonstrate the variance in the academic abilities of the students transferring from individual community colleges and this may account for some of the differences among group achievement.

After the fourth term, eleven of thirty-six community college groups had graduated 50 percent or more of their students. Column 12 shows that only two community college groups had a disproportionately high percentage (greater than 20%) of students dropped.

The retention rates for each of the community colleges with five or more transfers are presented in Column 25 of Table 3. Twenty-five of thirty-six community college institutions show retention rates of .80 or above after four terms. Eleven community college groups have retention rates between .60 and .79. One community college group had a retention rate of less than .60.

Trends in Achievement and Retention

A review of the trend in retention and academic achievement at UIUC since 1976 reveals some gradual changes in relation to transfer students at UIUC. Table 4 reports trends in community college transfer student performance at UIUC. The numbers of community college transfers to UIUC have ranged from a high of 835 transfers in 1984 to 598 in 1981, with 673 enrolled for fall 1986.

TABLE 3

Summary of Community College Transfer Student Progress by Institution of Last Attendance
University of Illinois at Urbana-Champaign
Fall, 1986 Group

Conf. Inst. Code	No. Fall 1986 Trans. (1)	Pre-Trans. GPA (2)	Mean 1st Term GPA (3)	No. Re-enrolled & Mean GPA						Academic Status After Four Terms												Retention** Ratio (25)				
				2nd Term		3rd Term		4th Term		Dropped		With-drawn		Pro.		Clear		Grad.		Left on Clear			Left on Pro.			
				No.	Mean GPA	No.	Mean GPA	No.	Mean GPA	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		No.	%	No.	%
				(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)		(23)	(24)		
01*	26	4.08	3.37	22	3.82	21	3.75	21	3.65	3	12%	0	0%	1	4%	11	42%	8	31%	1	4%	2	8%	0.77		
02	13	4.24	4.01	13	4.24	12	4.09	12	3.97	0	0%	0	0%	0	0%	9	69%	3	23%	1	8%	0	0%	0.92		
03	7	4.40	3.96	7	3.82	6	3.65	6	3.90	0	0%	1	14%	1	14%	2	29%	3	43%	0	0%	0	0%	0.86		
04	13	4.32	3.85	13	3.70	11	3.82	9	4.09	1	8%	0	0%	0	0%	6	46%	3	23%	2	15%	1	8%	0.69		
05	7	4.64	3.87	7	4.14	7	3.98	7	3.95	1	14%	0	0%	0	0%	1	14%	5	71%	0	0%	0	0%	0.86		
06	27	4.25	3.61	25	3.71	19	4.22	19	4.22	2	7%	0	0%	1	4%	5	19%	13	48%	5	19%	1	4%	0.70		
07	5	4.44	3.49	5	3.28	5	3.39	5	4.00	0	0%	0	0%	0	0%	5	100%	0	0%	0	0%	0	0%	1.00		
08	28	4.30	3.77	28	3.95	26	4.21	25	4.22	1	4%	2	7%	0	0%	17	61%	8	29%	0	0%	0	0%	0.89		
09	36	4.26	3.57	34	3.47	28	3.83	28	3.79	2	6%	3	8%	2	6%	11	31%	14	39%	3	8%	1	3%	0.75		
10	6	4.61	4.12	6	4.19	6	4.01	6	4.06	0	0%	0	0%	0	0%	4	67%	2	33%	0	0%	0	0%	1.00		
11	6	3.84	3.80	6	3.84	5	3.62	4	4.09	1	17%	0	0%	0	0%	3	50%	1	17%	0	0%	1	17%	0.67		
12	11	4.06	3.71	11	3.88	10	3.78	10	3.91	0	0%	0	0%	1	9%	3	27%	6	55%	1	9%	0	0%	0.91		
13	19	4.22	3.71	19	3.86	19	4.02	19	4.08	0	0%	0	0%	0	0%	8	42%	11	58%	0	0%	0	0%	1.00		
14	7	4.46	4.01	7	3.55	7	3.07	6	3.66	0	0%	0	0%	1	14%	3	43%	2	29%	1	14%	0	0%	0.86		
15	29	4.43	4.04	28	3.97	27	4.10	23	3.95	2	7%	2	7%	1	3%	7	24%	16	55%	1	3%	0	0%	0.83		
16	115	4.23	3.79	101	3.82	91	3.89	81	3.95	9	8%	6	5%	4	3%	42	37%	36	31%	15	13%	3	3%	0.71		
17	44	4.29	3.66	41	3.76	36	3.87	36	4.05	5	11%	0	0%	1	2%	16	36%	18	41%	3	7%	1	2%	0.80		
18	12	4.39	3.73	12	3.87	11	3.95	10	4.07	1	8%	0	0%	1	8%	1	8%	9	75%	0	0%	0	0%	0.92		
19	7	4.42	3.59	7	3.71	7	3.77	6	3.84	0	0%	0	0%	0	0%	4	57%	2	29%	1	14%	0	0%	0.86		
20	13	4.26	3.86	12	3.89	11	3.97	11	4.16	1	8%	1	8%	0	0%	6	46%	5	38%	0	0%	0	0%	0.85		
21	10	4.92	4.41	10	4.24	10	4.37	10	4.50	0	0%	0	0%	0	0%	2	20%	8	80%	0	0%	0	0%	1.00		
22	6	4.83	3.38	6	4.18	6	4.13	6	4.16	0	0%	0	0%	0	0%	4	67%	2	33%	0	0%	0	0%	1.00		
23	11	4.19	3.62	11	3.58	9	3.65	10	3.53	3	27%	0	0%	1	9%	3	27%	4	36%	0	0%	0	0%	0.73		
24	7	4.03	3.25	7	3.19	5	3.82	6	3.61	1	14%	1	14%	0	0%	1	14%	4	57%	0	0%	0	0%	0.71		
25	60	4.27	3.63	57	3.79	50	3.95	49	4.05	3	5%	1	2%	2	3%	18	30%	28	47%	5	8%	3	5%	0.80		

TABLE 3 (Cont.)

Summary of Community College Transfer Student Progress by Institution of Last Attendance
University of Illinois at Urbana-Champaign
Fall, 1986 Group

Conf. Inst. Code (1)	No. Re-enrolled & Mean GPA			Academic Status After Four Terms												Retention** Ratio (25)								
	No. Fall 1984 Trans. (2)	Pre- Trans. GPA (3)	Mean 1st Term GPA (4)	2nd Term		3rd Term		4th Term		Dropped		With- drawn		Pro.			Clear		Grad.		Left on Clear		Left on Pro.	
				No.	Mean	No.	Mean	No.	Mean	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%	No.	%
				(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)		(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
26	28	4.04	3.79	28	3.78	27	3.92	24	3.92	1	4%	2	7%	0	0%	7	25%	17	61%	1	4%	0	0%	0.86
27	30	4.27	3.81	28	4.08	27	4.14	26	3.94	0	0%	2	7%	1	3%	10	33%	15	50%	1	3%	1	3%	0.87
28	8	4.23	3.62	8	3.84	7	3.83	7	3.86	0	0%	1	13%	0	0%	4	50%	3	38%	0	0%	0	0%	0.88
29	8	4.04	3.61	8	3.34	7	3.67	7	4.15	1	13%	0	0%	0	0%	4	50%	3	38%	0	0%	0	0%	0.83
30	17	4.31	3.97	16	3.94	16	3.94	13	3.77	0	0%	1	6%	2	12%	8	47%	4	24%	2	12%	0	0%	0.82
31	8	4.35	3.03	7	3.16	5	3.11	5	3.94	1	13%	0	0%	2	25%	3	38%	0	0%	1	13%	1	13%	0.63
32	7	4.26	3.32	5	3.33	4	3.43	3	3.96	1	14%	1	14%	0	0%	2	29%	1	14%	0	0%	2	29%	0.43
33	10	4.23	3.16	10	3.54	9	3.88	8	3.90	2	20%	0	0%	0	0%	1	10%	7	70%	0	0%	0	0%	0.80
34	7	4.42	3.47	7	3.61	7	3.36	6	3.99	1	14%	0	0%	0	0%	3	43%	3	43%	0	0%	0	0%	0.86
35	9	4.11	3.41	8	3.50	8	3.58	7	3.47	0	0%	1	11%	2	22%	4	44%	1	11%	0	0%	1	11%	0.78
36	16	4.34	3.61	15	3.92	14	3.76	15	4.03	1	6%	1	6%	1	6%	3	19%	9	56%	1	6%	0	0%	0.81
2-Yr. Trans.	673	4.28	3.71	635	3.80	576	3.91	546	3.97	44	7%	26	4%	25	4%	241	36%	274	41%	45	7%	18	3%	0.80
4-Yr. Trans.	393	4.20	3.94	372	3.99	336	4.03	318	4.08	19	5%	18	5%	9	2%	151	38%	165	42%	23	6%	8	2%	0.83
All Cont. Jrs.	4850	3.99	3.98	4760	4.05	4327	4.10	3974	4.13	NA	--	NA	--	124	3%	915	30%	3464	71%	NA	--	NA	--	0.93

*A combined cohort of transfers from community colleges with fewer than five transfers.

**Retention Ratio: The proportion of Fall, 1986 transfers which has graduated or completed the term on clear or probationary status.

NA-Cumulative figures not available. Dropped, withdrawn, left on clear, and left on probation figures total 10% of Fall, 1986 transfers.

TABLE 4

Trends in Community College Transfer Student Performance
 University of Illinois at Urbana-Champaign
 1976 through 1986

Variable (1)	1976 (2)	1977 (3)	1978 (5)	1979 (6)	1980 (7)	1981 (8)	1982 (9)	1984 (10)	1986 (12)
Number of Transfers	678	768	702	766	610	598	762	835	673
Pre-Transfer GPA	4.22	4.22	4.26	4.26	4.29	4.30	4.28	4.28	4.28
Mean 1st Term GPA	3.63	3.60	3.68	3.66	3.67	3.73	3.70	3.67	3.71
Drop in 1st Term GPA	0.59	0.62	0.58	0.60	0.62	0.57	0.58	0.61	0.57
Mean 2nd Term GPA	3.78	3.77	3.80	3.83	3.80	3.83	3.78	3.75	3.80
Mean 3rd Term GPA	3.88	3.85	3.92	3.86	3.95	3.95	3.89	3.85	3.91
Mean 4th Term GPA	3.98	3.96	4.02	4.00	4.03	3.96	3.99	3.93	3.97
Retention Ratio One Year After Transfer	0.80	0.80	0.82	0.84	0.81	0.83	0.83	0.86	0.87
Retention Ratio Two Years After Transfer	0.70	0.70	0.73	0.76	0.79	0.75	0.75	0.82	0.80
Graduation Ratio Two Years After Transfer	0.40	0.36	0.35	0.35	0.43	0.41	0.38	0.38	0.41

Generally, there have been slight increases in mean pre-transfer GPA for community college transfers to UIUC up to 1982, leveling off during 1982 through 1986. These increases have been accompanied by very modest increases in mean first term GPA. Retention rates one year and two years after transfer have remained in the 80th and 70th percent range, respectively, since 1976, while the graduation rate for the community college group which has decreased from 43 percent in 1980 to 38 percent in 1982 and 1984 and back up to 41 percent in 1986. It seems that the quality of community college transfer students, as measured by pre-transfer GPA and retention rate, stabilized at UIUC about 1976, while graduation rates two years after transfer have ranged from a high of 42 percent in 1980 to 35 percent in 1978 and 1979.

Table 5 reports trends in four-year college transfer student progress at UIUC. The enrollment trends of four-year college transfers resemble those of community college transfers, with the exception that beginning in 1976 the decrease in numbers of four-year transfers has been pronounced. The numbers have dropped to approximately 450, but increased to 574 in 1982 and then dropped again to 540 in 1984 and then to 393 in 1986. Pre-transfer GPA's for four-year transfers have increased steadily since 1972 to 4.22 in 1980, declined in 1981 (4.20) and 1982 (4.17) then increased back to 4.20 in 1984 and 1986, while mean first term GPA's have not fluctuated a great deal. Retention ratios one year after transfer are in the high 80 percent area, compared to the low 80 percent range for community college transfers. Retention two years after transfer varies between .77 and .83, and is slightly greater than the community college figure.

Graduation rates for the four-year college transfers two years after transfer range from 32 percent to 46 percent, stabilized above 40 percent for the years 1980 through 1982, dropped to 38 percent in 1984, and increased to 42 percent in 1986. In general, graduation rates for four-year college transfers do not differ greatly from the graduation rates for community college transfers, even though the GPA's are somewhat higher. Graduation rates for the native group four semesters after entering UIUC remained constant at approximately 70 percent.

TABLE 5

Trends in Four-Year College Transfer Student Performance
University of Illinois at Urbana-Champaign
1976 through 1986

Variable (1)	1976 (2)	1977 (3)	1978 (4)	1979 (5)	1980 (6)	1981 (7)	1982 (8)	1984 (9)	1986 (11)
Number of Transfers	505	676	587	626	473	463	574	540	393
Pre-Transfer GPA	4.16	4.17	4.18	4.18	4.22	4.20	4.17	4.20	4.20
Mean 1st Term GPA	3.93	3.89	3.93	3.85	3.96	3.92	3.89	3.88	3.94
Drop in 1st Term GPA	0.23	0.28	0.25	0.33	0.26	0.28	0.28	0.32	0.26
Mean 2nd Term GPA	4.00	3.97	4.00	3.95	4.03	4.00	3.91	3.97	3.99
Mean 3rd Term GPA	4.09	3.99	4.06	4.01	4.06	4.04	3.99	3.99	4.03
Mean 4th Term GPA	4.09	4.07	4.06	4.06	4.12	4.09	4.05	4.04	4.08
Retention Ratio One Year After Transfer	0.85	0.85	0.89	0.87	0.88	0.88	0.86	0.89	0.89
Retention Ratio Two Years After Transfer	0.79	0.77	0.80	0.77	0.84	0.78	0.80	0.83	0.83
Graduation Ratio Two Years After Transfer	0.45	0.36	0.40	0.32	0.46	0.41	0.45	0.38	0.42

III. SUMMARY, DISCUSSION, AND INTERPRETATION OF FINDINGS

Summary of Findings

1. The community college transfer group entered UIUC with a pre-transfer GPA of 4.28, which is slightly higher than the pre-transfer GPA (4.20) of the four-year college transfer group and the previous GPA for the UIUC native group (3.99).

2. Community college transfers achieved first term UIUC grade point averages .57 below their pre-transfer GPA, while four-year transfers dropped .26; the natives achieved an average GPA (3.98) only .01 below their previous achievement.

3. Neither community college transfers nor four-year transfers to UIUC equalled or exceeded their mean pre-transfer grade point average during the four terms included in this study. The native juniors, however, achieved UIUC grade point averages which, for three of the four terms, did exceed that group's GPA at the point of implementation of this study.

4. Eighty-six percent of the community college and 85 percent of the four-year college groups completed the first year after transfer and re-enrolled for the second year of the study, while 89 percent of the native group re-enrolled for the next year. These percentages do not include those students graduating during the first year.

5. Eighty percent of the community college transfers and 83 percent of the four-year college transfers had graduated or remained enrolled after two years, while the comparable figure for the native students was 93 percent. Forty-one percent of the community college transfers and 42 percent of the four-year college transfers graduated during the two years of the study; over two-thirds (71%) of the natives in the fall 1986 group graduated during the same period.

7. Approximately 10 percent of the community college transfer group and 7 percent of the four-year transfer group left UIUC for academic reasons.

8. Seven percent of the community college transfers and 5 percent of the four-year college transfers were dropped and did not re-enter UIUC.

9. Seven percent of the community college transfers and 6 percent of the four-year college transfers left on clear status and did not re-enroll at UIUC.

10. Three percent of the four-year transfers and 2 percent of the community college transfers left on probation and did not re-enroll.

11. Community college transfers achieved a lower mean UIUC GPA in a majority of the twelve subject areas studied than did the four-year transfers or the native group. The performance of the four-year transfer group more closely resembled that of the continuing natives than that of the community college group in the various subject areas.

12. Community college transfers consistently achieved below four-year transfers and natives in all the subject areas except agriculture and human resources and family studies.

13. There has been a steady increase in pre-transfer GPA from 4.22 in 1976 to 4.28 in 1982 for community college transfers. There has also been an increase in first term UIUC GPA for this same group from 3.63 in 1976 to 3.71 in 1986.

14. Retention ratios two years after transfer for the community college group have ranged from a low of .70 in 1976 and 1977 to a high of .82 in 1984. The comparable figures for four-year college transfers have varied from .77 in 1977 to .84 in 1980, but have consistently been higher than for the two-year college group.

15. The graduation rates of 41 percent for community college and 42 percent for the four-year college transfers are slightly higher than the graduation rates for the previous year. Graduation rates for the natives included in this study remain higher at approximately .71 two years after achieving 60-90 semester hours.

Discussion and Interpretation of Findings

The findings presented in this study indicate that community college transfers and four-year college transfers do not achieve as well after transfer to UIUC as they did before transfer, while continuing juniors achieved higher GPA's than they had achieved prior to selection for this study. This is not a new finding; previous studies at both UIUC and UIC, along with national studies, have duplicated this finding.

Retention, including graduation and continuing on clear or probation was lower for community college transfers (.80) and for four-year college transfers (.83) than for continuing juniors (.93). Graduation rates for community college transfers (41%) were slightly lower than four-year college transfers (42%), while 71 percent of the continuing juniors graduated. These data support the assumption that transfer students do not achieve as well after transfer to UIUC as continuing juniors who entered as beginning freshmen and had completed 60-90 hours before being selected for this study.

The findings and implications presented in this study need to be interpreted in the context of the environment in which the research was conducted and evaluated and in relation to the differential purposes of the types of institutions represented by students in the study. One purpose of community colleges is to prepare baccalaureate-oriented students for transfer to four-year colleges and universities for successful completion of bachelor's degrees. Community colleges are "open access" institutions mandated to admit all students who are minimally qualified to complete one of their programs. This means that community colleges enroll students in baccalaureate-oriented courses and programs who are high academic achievers, as well as students with average and below average academic achievement with lower probability of achieving success in a transfer program. It is from this population that community college transfers apply and are selected for admission to UIUC in competition with transfers from four-year colleges and universities.

The major purposes of the undergraduate colleges at the University of Illinois are to provide the general education, technical and professional knowledge, and skills to educate individuals to fill leadership roles in

society at the bachelor's degree level and to prepare students for admission to and successful completion of graduate and professional programs. The University of Illinois at Urbana-Champaign generally admits the "best qualified" beginning freshmen and transfers in each of its colleges and curricula for each admission period. Data for the present and recent beginning freshman classes show that the average beginning freshman student graduated at approximately the 89th percentile of his or her high school graduating class and achieved an ACT composite score of approximately 26.71,⁴ which makes the native student population a very highly qualified group when compared with the population of community college students enrolled in baccalaureate-oriented programs. The four-year colleges and universities from which the University of Illinois receives transfer students have divergent purposes, but it is known that the transfers from those institutions to UIUC have high school ranks and college entrance scores very similar to the scores of native students.⁵

The community colleges provide an opportunity for many students to enter UIUC's undergraduate programs as transfer students who would not have been admitted under the more competitive beginning freshman requirements. The community colleges provide access or opportunity for many students to obtain admission and complete bachelor's degree programs which would not have been open to them when they graduated from high school. More than 80 percent of these students are successful at UIUC as measured by retention for four terms after transfer. The "success rate" is about 3 percent more for transfers from four-year colleges and approximately 13 percent more for native juniors who have already successfully completed two years at UIUC and, in general, were higher achievers in high school as measured by ACT composite and high school percentile rank.

IV. POLICY CONSIDERATIONS

The findings of this study show an improvement in the quality of both community college transfers and four-year college transfers in 1986 compared to recent years, as measured by pre-transfer GPA, first term GPA, retention, and graduation rates. In general, these data support the conclusion that the current transfer admission policies and admission criteria and standards at UIUC are effective in the selection and admission of transfer students who are relatively successful in achieving their educational goals in comparison with the native juniors.

Even though the above conclusion is supported, there remain some problems which warrant further study and analysis regarding future policy considerations. For example, community college transfers continue to experience a drop of approximately .57 (1984 drop was .61) in grade point average when they transfer to UIUC; they recover only about one-third (.26) of this drop by the end of the second year after transfer. The four-year college transfers experience less than one-half as much transfer shock (-.26), and they recover and achieve only about .12 below their pre-transfer GPA level. This is, therefore, of much less concern. However, both groups achieve approximately at the "B" level during the fourth term after transfer, which is indicative of their improved level of performance at UIUC.

It is clear from this study and others that community college transfers have more problems with scholarship and achievement after transfer than four-year college transfers. Seven percent, or one out of every fourteen community college transfers, were ultimately dropped for academic reasons and never re-enrolled at UIUC. An additional 3 percent of students left on probation, which implies academic problems. In total, one in ten community college transfers left the University and did not return because of academic difficulty. The comparable figure for four-year college transfers is 7 percent (or one in fourteen). The major policy consideration is how the University might attempt to reduce the relatively high number of community college transfers who are dropped after entering UIUC with "good" community college records but are achieving below 3.0 GPA's at UIUC.

Another concern is the relatively low achievement of community college transfers in biological sciences, physical sciences, and social sciences at UIUC. It is possible that further study and analysis of the students who are dropped would reveal that lack of success in required biology, chemistry, and physics courses is the greatest source of academic difficulty for community college students, especially those in the physical and natural sciences. If this proves to be the case, it may be appropriate to ask students to present evidence of minimum competency on a placement examination after admission and before enrollment so that these advanced transfer students can select courses at the appropriate level.

In conclusion, it is clear that UIUC has a successful transfer admission program. The findings and conclusions of this study suggest only that the system may need further refining in order to improve its effectiveness in selecting the best qualified transfer students available and improving their retention.

APPENDIX
Grade Point Averages, Academic Status and Retention Ratio
for Community College Transfers by Institution of Last Attendance
University of Illinois at Urbana-Champaign
Fall, 1986 Group

Confidential Inst. Code (1)	Term (2)	No. of Transfers by Term (3)	Mean GPA (4)	Mean GPA (5)	Academic Status ¹										Retention Ratio (16) ²		
					Dropped		Withdrawn		Probation		Clear		Graduated				
					No. (6)	% (7)	No. (8)	% (9)	No. (10)	% (11)	No. (12)	% (13)	No. (14)	% (15)			
01*	F '86	26	4.08	3.37	1	4%			4	15%	21	81%					0.96
	S '87	22	4.25	3.82	1	5%			1	5%	20	91%					0.81
	F '87	21	4.37	3.75					1	5%	20	95%					0.81
	S '88	21	4.37	3.65	1	5%			1	5%	11	52%	8	38%			0.77
02	F '86	13	4.24	4.01							13	100%					1.00
	S '87	13	4.24	4.00			1	8%	1	8%	11	84%					0.92
	F '87	12	4.29	4.09	1	8%					11	92%					0.85
	S '88	12	4.29	3.97							9	75%	3	25%			0.92
03	F '86	7	4.40	3.96							7	100%					1.00
	S '87	7	4.40	3.82			1	14%			6	86%					0.85
	F '87	6	4.58	3.65					1	17%	5	83%					0.86
	S '88	6	4.58	3.90					1	17%	2	33%	3	50%			0.86
04	F '86	13	4.32	3.85					2	15%	11	85%					1.00
	S '87	13	4.32	3.70					3	23%	10	77%					1.00
	F '87	11	4.41	3.82	1	9%					10	91%					0.77
	S '88	9	4.34	4.09							6	67%	3	33%			0.69
05	F '86	7	4.64	3.87							7	100%					1.00
	S '87	7	4.64	4.14							7	100%					1.00
	F '87	7	4.64	3.98					1	14%	6	86%					1.00
	S '88	7	4.64	3.95	1	14%					1	14%	5	72%			0.86
06	F '86	27	4.25	3.61	2	7%			5	19%	20	74%					0.93
	S '87	25	4.24	3.71	3	12%			3	12%	19	76%					0.81
	F '87	19	4.26	4.22							19	100%					0.70
	S '88	19	4.26	4.22					1	5%	5	26%	13	68%			0.70
07	F '86	5	4.44	3.49					1	20%	4	80%					1.00
	S '87	5	4.44	3.28					1	20%	4	80%					1.00
	F '87	5	4.44	3.89							5	100%					1.00
	S '88	5	4.44	4.00							5	100%					1.00
08	F '86	28	4.30	3.77			1	4%	4	14%	23	82%					0.96
	S '87	28	4.30	3.95	2	7%	1	4%	2	7%	23	82%					0.89
	F '87	26	4.28	4.21			2	8%			24	92%					0.86
	S '88	25	4.31	4.22							17	68%	8	32%			0.89
09	F '86	36	4.26	3.57	1	3%			2	6%	33	92%					0.97
	S '87	34	4.25	3.47	3	9%	2	6%	5	15%	24	70%					0.81
	F '87	28	4.21	3.83	1	4%			3	11%	24	86%					0.75
	S '88	28	4.21	3.79			1	4%	2	7%	11	39%	14	50%			0.75

APPENDIX (cont.)
 Grade Point Averages, Academic Status and Retention Ratio
 for Community College Transfers by Institution of Last Attendance
 University of Illinois at Urbana-Champaign
 Fall, 1986 Group

Confidential Inst. Code	Term	No. of Transfers Enrolled by Term	Mean Trans. GPA	Mean Term GPA	Academic Status										Retention Ratio
					Dropped		Withdrawn		Probation		Clear		Graduated		
					No.	%	No.	%	No.	%	No.	%	No.	%	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
10	F '86	6	4.61	4.12							6	100%			1.00
	S '87	6	4.61	4.19							6	100%			1.00
	F '87	6	4.61	4.01							6	100%			1.00
	S '88	6	4.61	4.06							4	67%	2	33%	1.00
11	F '86	6	3.84	3.80							6	100%			1.00
	S '87	6	3.84	3.84	1	17%					5	83%			0.83
	F '87	5	3.98	3.62					2	40%	3	60%			0.83
	S '88	4	4.05	4.09							3	75%	1	25%	0.67
12	F '86	11	4.08	3.71					2	18%	9	82%			1.00
	S '87	11	4.08	3.88					2	18%	9	82%			1.00
	F '87	10	4.01	3.78	1	10%					9	90%			0.82
	S '88	10	4.01	3.91					1	10%	3	30%	6	60%	0.91
13	F '86	19	4.22	3.71			1	5%	1	5%	17	90%			0.95
	S '87	19	4.22	3.86					2	11%	17	89%			1.00
	F '87	19	4.22	4.02							19	100%			1.00
	S '88	19	4.22	4.08							8	42%	11	58%	1.00
14	F '86	7	4.46	4.01					1	14%	6	86%			1.00
	S '87	7	4.46	3.55					1	14%	6	86%			1.00
	F '87	7	4.46	3.07	1	14%					6	86%			0.86
	S '88	6	4.37	3.66					1	17%	3	50%	2	33%	0.86
15	F '86	29	4.43	4.04			1	3%	1	3%	27	94%			0.97
	S '87	23	4.44	3.97					3	11%	25	89%			0.97
	F '87	27	4.44	4.10	1	4%	1	4%	1	4%	22	81%	2	7%	0.86
	S '88	23	4.48	3.95	1	4%			1	4%	7	30%	14	61%	0.83
16	F '86	115	4.23	3.79			7	6%	15	13%	93	81%			0.94
	S '87	101	4.23	3.82	3	3%	3	3%	18	18%	76	75%	1	1%	0.83
	F '87	91	4.22	3.89	10	11%	2	2%	2	2%	73	80%	4	4%	0.70
	S '88	81	4.22	3.95	4	5%			4	5%	42	52%	31	38%	0.71
17	F '86	44	4.29	3.66	1	2%	1	2%	3	7%	39	89%			0.95
	S '87	41	4.28	3.76	3	7%	1	3%	2	5%	35	85%			0.84
	F '87	36	4.30	3.87	1	3%			1	3%	34	94%			0.80
	S '88	36	4.30	4.05	1	3%			1	3%	16	44%	18	50%	0.80
18	F '86	12	4.39	3.73	1	8%			4	33%	7	59%			0.92
	S '87	12	4.39	3.87	2	17%			2	17%	8	67%			0.83
	F '87	11	4.42	3.95	1	9%					9	82%	1	9%	0.83
	S '88	10	4.44	4.07					1	10%	1	10%	8	80%	0.92

APPENDIX (cont.)
 Grade Point Averages, Academic Status and Retention Ratio
 for Community College Transfers by Institution of Last Attendance
 University of Illinois at Urbana-Champaign
 Fall, 1986 Group

Confidential Inst. Code	Term	No. of Transfers Enrolled by Term (3)	Mean GPA (4)	Mean GPA (5)	Academic Status ¹										Retention Ratio (16) ²	
					Dropped		Withdrawn		Probation		Clear		Graduated			
					No. (6)	% (7)	No. (8)	% (9)	No. (10)	% (11)	No. (12)	% (13)	No. (14)	% (15)		
19	F '86	7	4.42	3.59								7	100%			1.00
	S '87	7	4.42	3.71					1	14%		6	86%			1.00
	F '87	7	4.42	3.77	1	14%						6	86%			0.86
	S '88	6	4.37	3.84								4	67%	2	33%	0.86
20	F '86	13	4.26	3.86			1	8%	3	23%		9	69%			0.92
	S '87	12	4.21	3.89	1	8%			1	8%		10	84%			0.85
	F '87	11	4.22	3.97					1	9%		10	91%			0.85
	S '88	11	4.22	4.16								6	55%	5	45%	0.85
21	F '86	10	4.92	4.41								10	100%			1.00
	S '87	10	4.92	4.24								10	100%			1.00
	F '87	10	4.92	4.37								10	100%			1.00
	S '88	10	4.92	4.50								2	20%	8	80%	1.00
22	F '86	6	4.83	3.38					2	33%		4	67%			1.00
	S '87	6	4.83	4.18								6	100%			1.00
	F '87	6	4.83	4.13								6	100%			1.00
	S '88	6	4.83	4.16								4	67%	2	33%	1.00
23	F '86	11	4.19	3.62	1	9%			3	27%		7	64%			0.91
	S '87	11	4.19	3.58	2	18%			4	36%		5	46%			0.82
	F '87	9	4.24	3.65	1	11%						8	89%			0.73
	S '88	10	4.19	3.53	2	20%			1	10%		3	30%	4	40%	0.73
24	F '86	7	4.03	3.25					1	14%		6	86%			1.00
	S '87	7	4.03	3.19	2	29%			1	14%		4	57%			0.71
	F '87	5	4.08	3.82								5	100%			0.71
	S '88	6	4.03	3.61			1	17%				1	17%	4	66%	0.71
25	F '86	60	4.27	3.63			1	2%	8	13%		51	85%			0.98
	S '87	57	4.27	3.79	5	9%			4	7%		48	84%			0.87
	F '87	50	4.30	3.95					2	4%		48	96%			0.83
	S '88	49	4.31	4.05			1	2%	2	4%		18	37%	28	57%	0.80
26	F '86	28	4.04	3.79					1	4%		26	92%			0.96
	S '87	28	4.03	3.78	1	4%			4	14%		23	82%			0.96
	F '87	27	4.04	3.92			2	7%	1	4%		23	85%	1	4%	0.89
	S '88	24	4.04	3.92	1	4%						7	29%	3	67%	0.86
27	F '86	30	4.27	3.81			2	6%	5	17%		23	77%			0.93
	S '87	28	4.27	4.08	2	7%			1	4%		25	89%			0.87
	F '87	27	4.30	4.14	1	4%						26	96%			0.87
	S '88	26	4.29	3.94					1	4%		10	38%	15	58%	0.87

APPENDIX (cont.)
 Grade Point Averages, Academic Status and Retention Ratio
 for Community College Transfers by Institution of Last Attendance
 University of Illinois at Urbana-Champaign
 Fall, 1986 Group

Confidential Inst. Code	Term	No. of Fall '86 Transfers Enrolled by Term	Mean Trans. GPA	Mean Term GPA	Academic Status										Retention Ratio
					Dropped		Withdrawn		Probation		Clear		Graduated		
					No.	%	No.	%	No.	%	No.	%	No.	%	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
28	F '86	8	4.23	3.62					2	25%	6	75%			1.00
	S '87	8	4.23	3.84			1	13%	1	13%	6	75%			0.88
	F '87	7	4.21	3.83	1	14%					6	86%			0.75
	S '88	7	4.21	3.86							4	57%	3	43%	0.88
29	F '86	8	4.04	3.61							8	100%			1.00
	S '87	8	4.04	3.34	1	13%			2	25%	5	53%			0.88
	F '87	7	4.11	3.67							7	100%			0.88
	S '88	7	4.11	4.15							4	57%	3	43%	0.88
30	F '86	17	4.31	3.97			1	6%	3	18%	13	76%			0.94
	S '87	16	4.30	3.94					1	6%	15	94%			0.94
	F '87	16	4.29	3.94	1	6%			2	13%	12	75%	1	6%	0.88
	S '88	13	4.26	3.77					2	15%	8	62%	3	23%	0.82
31	F '86	8	4.35	3.03					1	13%	7	87%			1.00
	S '87	7	4.33	3.16	1	14%	1	14%	2	29%	3	43%			0.63
	F '87	5	4.36	3.11					2	40%	3	60%			0.63
	S '88	5	4.36	3.94					2	40%	3	60%			0.63
32	F '86	7	4.26	3.32			1	14%	2	29%	4	57%			0.86
	S '87	5	4.24	3.33					2	40%	3	60%			0.71
	F '87	4	4.25	3.43	1	25%					3	75%			0.43
	S '88	3	4.17	3.96							2	67%	1	33%	0.43
33	F '86	10	4.23	3.16			1	10%	3	30%	6	60%			0.90
	S '87	10	4.23	3.54	2	20%			2	20%	6	60%			0.80
	F '87	9	4.26	3.88	1	11%			1	11%	7	78%			0.80
	S '88	8	4.28	3.90							1	13%	7	88%	0.80
34	F '86	7	4.42	3.47					1	14%	6	86%			1.00
	S '87	7	4.42	3.61					1	14%	6	86%			1.00
	F '87	7	4.41	3.36	1	14%					6	86%			0.86
	S '88	6	4.47	3.99							3	50%	3	50%	0.86
35	F '86	9	4.11	3.41					1	11%	8	89%			1.00
	S '87	8	4.16	3.50					2	25%	6	75%			0.89
	F '87	8	4.16	3.58			1	12%			7	88%			0.78
	S '88	7	4.16	3.47					2	29%	4	57%	1	14%	0.78
36	F '86	16	4.34	3.61					2	12%	14	88%			1.00
	S '87	15	4.37	3.92			1	7%	2	13%	12	80%			0.88
	F '87	14	4.29	3.76	1	7%			4	29%	9	64%			0.81
	S '88	15	4.30	4.03	1	7%	1	7%	1	7%	3	19%	9	60%	0.81

APPENDIX (cont.)
 Grade Point Averages, Academic Status and Retention Ratio
 for Community College Transfers by Institution of Last Attendance
 University of Illinois at Urbana-Champaign
 Fall, 1986 Group

Confidential Inst. Code	Term	No. of Transfers Enrolled by Term	Mean Trans. GPA	Mean Term GPA	1 Academic Status										2 Retention Ratio
					Dropped		Withdrawn		Probation		Clear		Graduated		
					No.	%	No.	%	No.	%	No.	%	No.	%	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2-Yr.															
Trans.F	'86	673	4.28	3.71	7	1%	19	3%	83	12%	564	84%			0.96
	S '87	635	4.28	3.80	35	6%	12	2%	77	12%	510	80%	1	**	0.87
	F '87	576	4.30	3.91	27	5%	8	1%	25	4%	507	88%	9	2%	0.80
	S '88	546	4.30	3.97	12	2%	4	1%	25	5%	241	44%	264	48%	0.80
4-Yr.															
Trans.F	'86	393	4.20	3.94	1	**	12	3%	26	7%	354	90%			0.97
	S '87	371	4.21	3.99	12	3%	8	2%	28	8%	316	85%	7	2%	0.89
	F '87	336	4.22	4.03	9	3%	4	1%	14	4%	299	89%	10	3%	0.84
	S '88	318	4.21	4.08	6	2%	3	1%	9	3%	151	47%	149	47%	0.83
Cont.															
Jrs. F	'86	4850	3.99	3.98	26	1%	41	1%	265	5%	4518	93%			0.99
	S '87	4760	4.01	4.05	63	1%	20	0%	232	5%	4178	88%	267	6%	0.96
	F '87	4327	4.05	4.10	80	2%	23	1%	137	3%	3767	87%	320	7%	0.93
	S '88	3974	4.07	4.13	40	1%	18	0%	124	3%	915	23%	2877	72%	0.93

1 Percents based on number of transfer students enrolled in 1986 Fall term (Col. 2).

2 Retention Ratio: The proportion of total Fall, 1986 transfers which has graduated or completed the term on clear or probationary status.

* Community colleges with fewer than five transfers in the group.

** Less than one percent.

VI. NOTES

¹Ernest F. Anderson, "Transfer Student Enrollment at Urbana-Champaign, Fall 1986 and 1987," Champaign: University Office of School and College Relations, University of Illinois, Memorandum dated 10-15-87, Table 2.

²Linda M. Heiser. "Transfer Student Enrollment at Urbana-Champaign, Fall 1986 and 1987," Champaign: University Office of School and College Relations, University of Illinois, Memorandum dated 10-15-87, Table 2.

³Ernest F. Anderson, "Institution Codes for Identification of Institutions of Last Attendance for Transfer Students, January 28, 1988." Champaign: University Office of School and College Relations, University of Illinois, 1988.

⁴Langston, Ira W. IV, "The University of Illinois at Urbana-Champaign Freshman Class Profile, Fall 1988." Champaign: University Office of School and College Relations, University of Illinois, Research Memorandum 89-2, January 1989, p. 1.

⁵Wermers, Research Memorandum 72-5, p. 21.

VII. REFERENCES

- Anderson, Ernest F. "Transfer Student Enrollment at Urbana-Champaign, Fall Semesters, 1986 and 1987." Champaign: University Office of School and College Relations, University of Illinois, Memorandum dated 10-15-87, Table 2.
- Anderson, Ernest F. "Institution Codes for Identification of Institutions of Last Attendance for Transfer Students, January 28, 1988." Champaign: University Office of School and College Relations, University of Illinois, 1988.
- Heiser, Linda M. "Transfer Student Enrollment at Urbana-Champaign, Fall Semesters, 1987 and 1988." Champaign: University Office of School and College Relations, University of Illinois, Memorandum dated 10-24-88, Table 2.
- Langston, Ira W. IV. "The University of Illinois at Urbana-Champaign Freshman Class Profile, Fall 1988." Champaign: University Office of School and College Relations, University of Illinois, Research Memorandum 89-2, January 1989.
- Wermers, Donald J. "Achievement by Junior College Transfer, Four-Year College Transfer, and Native Juniors as Measured by the CLEP General Examinations." Champaign: University Office of School and College Relations, University of Illinois, Research Memorandum 72-5, March 1972.