

Attrition Survey

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	iii
 CHAPTER 1: INTRODUCTION	
Background to the Study	1
Organization	3
 CHAPTER 2: ATTRITION AT RUTGERS: COMPARATIVE AND HISTORICAL CONSIDERATIONS	
Introduction	5
Attrition Rates in Comparative and Historical Context	6
Discussion	8
Results to be Presented	9
 CHAPTER 3: DEFINING AND PROFILING DROPOUTS	
Introduction	11
Defining Attrition	11
Survey Methodology	12
Comparison with the 1992 Graduating Class	14
Profiling Former Students	14
 CHAPTER 4: REASONS FOR LEAVING RUTGERS	
Introduction	21
Background to the Decision to Attend Rutgers	21
Reasons for Leaving Rutgers	22
Conclusion	26
A Note on Transferring to Another College as a Reason for Leaving Rutgers	27

CHAPTER 5: THE SETTING AND ACHIEVING OF GOALS

Introduction	29
Academic Goals	29
Career Preparation and Career Improvement Goals	31
Social and Cultural Participation Goals	31
Personal Development and Enrichment Goals	32
Conclusion	33

CHAPTER 6: ASSESSMENT OF RUTGERS EXPERIENCES

Introduction	35
Overall Rating of Academic Experience	35
Faculty Interaction	36
Overview of Perceptions of Rutgers	37
Extracurricular Activities	39
Rutgers Services and Student Life	41
Conclusion	44

CHAPTER 7: REVIEW OF FINDINGS

Introduction	47
The Survey	47
Major Findings of the Survey	47
Conclusion	50

BIBLIOGRAPHY 51

APPENDICES

A. ATTRITION RATES	A 1
B. FORMER STUDENT OPINION SURVEY	B 1
C. ATTRITION AT RUTGERS AS AN EVENT IN TIME	C 1
D. SELECTED CAMPUS TABLES	D 1

EXECUTIVE SUMMARY

INTRODUCTION

This report presents the findings of the *Former Student Opinion Survey*, which was administered in summer/fall 1995 to students who discontinued their studies at Rutgers. The survey was designed to learn about former students' reasons for discontinuing their studies at Rutgers, their activities since leaving the university, their opinions about their experiences while at Rutgers, and their past and present academic and career goals. The results of the *1992 Graduating Student Opinion Survey*, which consisted of many of the same questions found in the present attrition survey, were used to provide a comparative context for discussion of the results.

PURPOSE

Approaching undergraduate attrition at Rutgers from a comparative and historical perspective reveals that the university performs well in its ongoing effort to reduce attrition. Rutgers compares favorably to other public AAU institutions with regard to its rate of undergraduate attrition and has experienced a substantial decline in its rate of attrition over the past two decades. Yet continued success in dealing with attrition entails the gathering of information that will enhance our understanding of undergraduate attrition at Rutgers and will inform institutional efforts to further reduce its occurrence. Toward this end, the university recently conducted a survey of former Rutgers undergraduates and this report presents the results of this effort.

THE SURVEY

A population of 1,295 students who had discontinued their studies at Rutgers for three consecutive semesters was identified and surveyed. The survey instrument is divided into five main sections: reasons for leaving Rutgers, status since leaving Rutgers, reasons for originally attending the university, experiences while at Rutgers, and personal background information. A total of 356 students (27% response rate) returned usable surveys. A comparison of various demographic and academic characteristics indicated that the survey sample was broadly representative of the study's target population with slight over-representation of females and non-EOF respondents.

FINDINGS

Respondent Characteristics

Forty-four percent of the respondents indicated that their mother and 37 percent indicated that their father did not have a degree beyond high school. About one-third of the respondents who reported their parental income stated that their parents' income was less than \$30,000, and 13 percent had parents whose income exceeded \$100,000. Slightly over 97 percent of the survey respondents indicated that they were

not married when they attended Rutgers, while just under 88 percent are presently not married. At present, approximately one-third of the respondents are employed part-time and 43 percent are employed full-time. Seventy-seven percent of respondents indicated that they have attended at least one other institution of higher education since leaving Rutgers, although only 32 percent have attained at least one postsecondary degree.

Reasons for Leaving Rutgers

Survey respondents were asked to indicate the reasons that contributed to their decision to leave Rutgers. Overall, students who left Rutgers dropped out more frequently for academic reasons than for financial, personal, employment, or Rutgers environmental reasons. The five most prevalent reasons for leaving Rutgers were: transferring to another college/university (56%); dissatisfaction with academic performance (28%); dissatisfaction with class size (26%); dissatisfaction with the learning environment (22%); and lack of enough money to continue (18%). The reasons least cited were achievement of academic goals, achievement of personal goals, and lack of student diversity (each cited by 1% of the respondents).

Separate rankings of the reasons for leaving Rutgers were conducted by gender, race/ethnicity, campus, and the number of years enrolled at Rutgers before dropping out (i.e., year of attrition). A few differences across these sub-groups were discovered. In addition, the number of reasons students gave for leaving Rutgers was of interest, and also revealed some sub-group differences. These findings suggest the importance of student academic integration and success in college in preventing student withdrawal, and also indicate the importance of student finances in the decision to withdraw from college.

The Setting and Achieving of Goals

Comparisons between students who withdrew from Rutgers and students who graduated from Rutgers were made on two dimensions of goal commitment: identification of the specific goals that students classified as important to them when they attended Rutgers, and reporting of those goals that students achieved or were in the process of achieving because of attending Rutgers. The goals were organized under four headings: academic goals, career preparation and career improvement goals, social and cultural participation goals, and personal development and enrichment goals.

In all four categories, graduating students consistently indicated that they achieved or were achieving stated goals at higher rates than former students. However, for most goals listed, a higher percentage of former students indicated that a particular goal was more important to them than it was to graduating students. The discrepancy in former students' rates between the setting of goals and the actual achievement of these goals may have been a contributing factor to their decision to leave Rutgers. Nevertheless, although former students consistently had lower rates of goal achievement compared to graduating students, a substantial percentage of former students did indicate that they were in the process of achieving or have achieved many goals because of their attendance at Rutgers.

Assessment of Rutgers Experiences

Survey respondents were asked to rate their academic experiences and perceptions of Rutgers, including faculty contact, student services, and participation in extracurricular activities. Comparisons of former student responses were made with the responses of graduating students. While the majority of graduates rated their academic experiences at Rutgers positively (i.e., either "excellent" [19%] or "good"

[64%]), just over half (52%) of former students gave a similar positive assessment. Overall, graduates compared to former students had more “frequent” (16% vs. 6%) and more “occasional” contact (42% vs. 27%) with faculty.

Former students (as well as graduating students) were asked to indicate their extent of agreement or disagreement to 30 statements about their Rutgers experiences in four areas: general, academic, campus climate, and social activities. At least 72 percent of the students from both surveys agreed or strongly agreed that Rutgers had comfortable residence halls, good computer facilities, and that the cost of attending Rutgers was reasonable. Both graduating students (92%) and former students (88%) also agreed that Rutgers has high quality academic programs. Items concerning equity across racial/ethnic and gender groups were assessed positively by a majority of students on both surveys. The overwhelming majority of respondents to both surveys felt that Rutgers had many activities and organizations for their participation. The overall rate of participation in extracurricular activities was slightly higher for graduating students than for former students (69% vs. 64%).

Rutgers Services and Student Life

When presented with a list of 30 different services offered at Rutgers, all but six were known to at least 80 percent of both former students and graduating students. Former students were least aware of the disabled student concerns service. There was wide variation in students’ use of services. Generally, the services that were most known to students were also the most used. Former students were more likely than graduating students to use: reading, writing, math, and study skills improvement; tutoring; and financial aid. Graduating students were more likely to use career planning/career services than former students. Respondents of both surveys were generally satisfied with Rutgers’ services. The only service that received a distinctly low approval rating was parking services.

CONCLUSION

While attrition rates at Rutgers indicate that the university’s effort to meet the challenge of undergraduate attrition has been successful, continued success in this area is contingent upon enhancing our understanding of the process of attrition at the university. In an effort to meet this need, the *Former Student Opinion Survey* was undertaken by the Office of Institutional Research and Academic Planning. This report presents many of the findings of the survey to the university community.

CHAPTER ONE: *INTRODUCTION*

BACKGROUND TO THE STUDY

A persistent and seemingly intractable problem of postsecondary education in the United States is the attrition of undergraduates. In 1995, the average persistence rate of all undergraduates from the first year of undergraduate study to the second year was 66.9 percent among all institutions of higher education. Thus almost 33 percent of undergraduates who were enrolled in institutions of higher education in fall 1994 were not enrolled in fall 1995. This rate of persistence varied by institutional level and type, with private and public Ph.D. institutions having the highest rates of persistence (83% and 76%, respectively) and private and public two-year institutions having the lowest rates of persistence (52% and 70%, respectively) between the first and second years of undergraduate study (Mortenson, 1996a).

Developments in society and higher education over the last few decades have contributed to the effort at institutions of higher education to confront the problem of attrition. These developments include: the changing structure of the economy, in which there has been a decrease in the availability of jobs that do not require skills associated with a college education; the increasing accessibility of higher education as indicated by the recent college attendance rates of women and minorities (U.S. Department of Education, 1995; Carter and Wilson, 1995; U.S. Department of Education, 1994); and the emergence of many and varied retention programs designed to aid the undergraduate in obtaining his or her degree.¹ Developments such as these have had the cumulative effect of assessing attrition as something that is unacceptable and costly for the individual student, colleges and universities,² and society at large.

The attrition process is perceived to hurt the individual who withdraws from school primarily as it relates to his or her lifetime earning power. This perception is verified by national numbers about the earning power of men and women with different levels of education. For example, in 1992, men over twenty-five years of age who attained a baccalaureate degree had a median income of \$46,890, while men of a similar age who attended college but did not receive a degree had a median income of \$32,187. Women of the same age also experienced a similar discrepancy in median income between those who attained a baccalaureate degree and those who left college without receiving a degree (\$32,357 and \$23,201, respectively) (U.S. Office of Education, 1991, Table 369; see also Mortenson, 1995). Although attaining a postsecondary degree does not ensure the individual a higher level of earning power, it does give that person an advantage over those individuals who never attended college or withdrew from college before receiving a degree. As Tinto has observed, "it is commonly recognized that a college degree, especially a four-year degree, is an important certificate of occupational entry without which access to prestigious positions in society becomes measurably more difficult" (Tinto, 1993: pp. 1-2).³

Postsecondary attrition has strong economic and societal consequences as well. If society benefits economically and socially from having a more educated and skilled workforce because of greater productivity and a heightened standard of living, then society stands to suffer when its citizens do not achieve educationally.

Moreover, as social policy, the funding of higher education is generally regarded as an investment in the future. Unfortunately, both federal and state governments must also expend substantial portions of their finite resources in areas that can be described as social damage control such as crime and corrections, health, and social welfare. Although we do not fully understand the complexities of the relationship between the costs of limited educational achievement and expenditures in social welfare budgetary areas, it is not unreasonable to assume that the lower the educational advancement of a populace the more likely that populace will experience criminal justice, health, and social welfare problems requiring substantial amounts of funds to be expended in these areas at the expense of social investment funding such as higher education.⁴

In addition, the withdrawal of students from the pursuit of a postsecondary education lessens the degree to which there is a well-informed and thoughtful citizenry. The extent to which citizens in a democratic society participate and make informed decisions is directly related to their educational achievement.⁵ Not only are more highly educated citizens more actively engaged in the processes of democracy, but they participate in ways that foster tolerance and understanding.⁶

Institutions of higher education are also hurt by the attrition process because it represents a misallocation of resources that are becoming scarcer in this era of public economic retrenchment and financial uncertainty. In addition, as the public, accrediting bodies, and government agencies increasingly call for greater accountability of postsecondary institutions and rely on indices such as graduation rates to make these judgments of accountability, the existence of attrition in colleges and universities can only be seen as hurting these institutions in their attempt to respond to this growing trend of institutional accountability.⁷

Not surprisingly, then, these individual, institutional, and societal costs of attrition have led to many efforts to study and understand the attrition process in higher education, which in turn have resulted in a large empirical repository of data and analyses of postsecondary attrition. These research efforts have occurred on national, state and institutional levels, across and within institutional types, and have included the collection of both longitudinal and cross-sectional data.⁸ Many different factors have been cited in the literature as possible reasons for students to withdraw from their undergraduate studies and include background characteristics such as race/ethnicity, gender, and age; academic performance variables on both high school and college levels, which include grade point averages and standardized test scores; educational aspirations and goals; academic integration into the college environment as measured by indices such as faculty interaction and student satisfaction with college services and campus life; employment activity; and financial aid availability.⁹

In addition, many theoretical models have been offered that attempt to explain the attrition process; these models include the social and academic integration of students (Spady, 1970, 1971; Pascarella, 1980; and Tinto, 1993), the interaction of students with their institution (Bean, 1982), and the influence of past behavior on the intention of students to withdraw from college (Fishbein and Ajzen, 1975).¹⁰

Although these efforts have contributed greatly to our understanding of the attrition process, basic descriptive inquiry into the phenomenon of attrition at a single institution remains the cornerstone of the study of postsecondary attrition; such study provides a context for understanding attrition and informs institutional action in preventing its occurrence. This report describes the results of such a study recently conducted at Rutgers, The State University of New Jersey.

ORGANIZATION

Chapter 2 places attrition at Rutgers in comparative and historical context. Chapter 3 presents how dropouts are defined in this study, briefly introduces the survey methodology used in the study, and profiles both the population and survey respondents including the academic and employment status of students who left Rutgers without attaining a degree. Reasons for withdrawing from Rutgers are some of the questions asked of our target population and their responses are presented in Chapter 4. Chapter 5 investigates the goals former students set while attending Rutgers and which of these were accomplished or were being accomplished as a result of attending Rutgers. These responses are also compared to the responses of Rutgers students who attended Rutgers - and eventually graduated - during a similar period of time. Chapter 6 includes comparisons of these two groups of students in terms of their Rutgers experience and evaluations of university services. A summary of the results of the study comprise Chapter 7. Appendix A presents tables detailing rates of attrition for recent cohorts of entering first-time students classified by selected student characteristics. Appendix B includes a copy of the *Former Student Opinion Survey* sent to former students. Appendix C presents preliminary results of an effort to model the attrition process at Rutgers using event history analysis. Many of the tables found in this report are presented for each of the three major campuses of the university in Appendix D.

ENDNOTES

¹ See Chaney and Farris (1991) for data on retention programs in institutions of higher education. Richard Nurse et al. (1994) listed over 50 retention and advancement programs at Rutgers alone.

² Yet as Tinto (1993, chap. 6) has noted, individual institutions face the paradox that as they devise policies and programs to retain and educate their students, they must do so in a manner that is consistent with their educational mission and the needs of all their students.

³ Whether one adheres to the position that this effect of higher education is the result of its role as an agent of social reproduction of the class and status systems of society (Bowles and Gintis, 1976; Collins, 1979) or as an agent of social mobility through meritocratic processes (Duncan, Featherman, and Duncan, 1972; Featherman and Hauser, 1978), the essential fact remains that higher education (or the lack thereof) plays an important role in the success of individuals gaining economic and societal rewards.

⁴ Mortenson (1996b) provides data on a state by state basis that show the ratio of public expenditures for social investment to public expenditures in policy areas categorized as social damage control.

⁵ Data from Jennings (1993) and reported by Mortenson (1996c) show a strong positive relationship between level of education and voting rates over the past thirty years.

⁶ One of the earliest empirical studies to document this relationship between education and tolerance is Stouffer (1955). This is not to say that education, and especially higher education, has been completely successful in this endeavor to foster tolerance and understanding. For a recent discussion of some of these shortcomings and the prospects for the future, see Bellah et al. (1992, chap. 5).

⁷ The Student Right-To-Know and Campus Crime Act and the new mandatory Graduation Rate Survey of the Integrated Postsecondary Education Data System (IPEDS) are examples of how graduation rates are being used to measure institutional accountability. Astin (1993) cautions against the possible misuses of graduation rates as measures of accountability; Astin (1996), Astin, Tsui and Avalos (1996), and Kroc et al. (1995) provide models that transcend some of these problems.

⁸ These data include results of surveys conducted by the National Center for Education Statistics (e.g., the National Longitudinal Survey of 1972, the High School and Beyond Survey of 1980, and the 1989 Beginning Postsecondary Students Longitudinal Study); follow-ups of students participating in the Cooperative Institutional Research Program conducted by the Laboratory for Research on Higher Education at the University of California, Los Angeles, and the American Council on Education; and reports from the American Council of Education as found in their National Dropout Rate tables.

⁹ Astin (1975), Bean (1982), and Lenning et al. (1980, pp. 15-23) provide discussions of how these factors are seen to affect a student's decision to withdraw from an institution.

¹⁰ Bean (1982) shows how these models can be synthesized into a single model of attrition and Chapman (1982) provides a listing of many of the studies using these conceptual approaches in explaining the attrition process.

CHAPTER TWO:
ATTRITION AT RUTGERS:
COMPARATIVE AND HISTORICAL CONSIDERATIONS

INTRODUCTION

The purpose of this report is to present the results of a survey of students who withdrew from Rutgers before attaining their baccalaureate degree. Responses by these former students to questions about their academic and employment activities since leaving Rutgers, their academic goals, their opinions about the university and student life activities, and their evaluation of various Rutgers programs and services are presented and discussed. However, before proceeding with the presentation of these results, a brief discussion will follow on the comparative and historical context of undergraduate attrition at Rutgers.

Table 2.1
Attrition Rates at Public AAU Universities*
Ranked by Third Year Attrition Rate

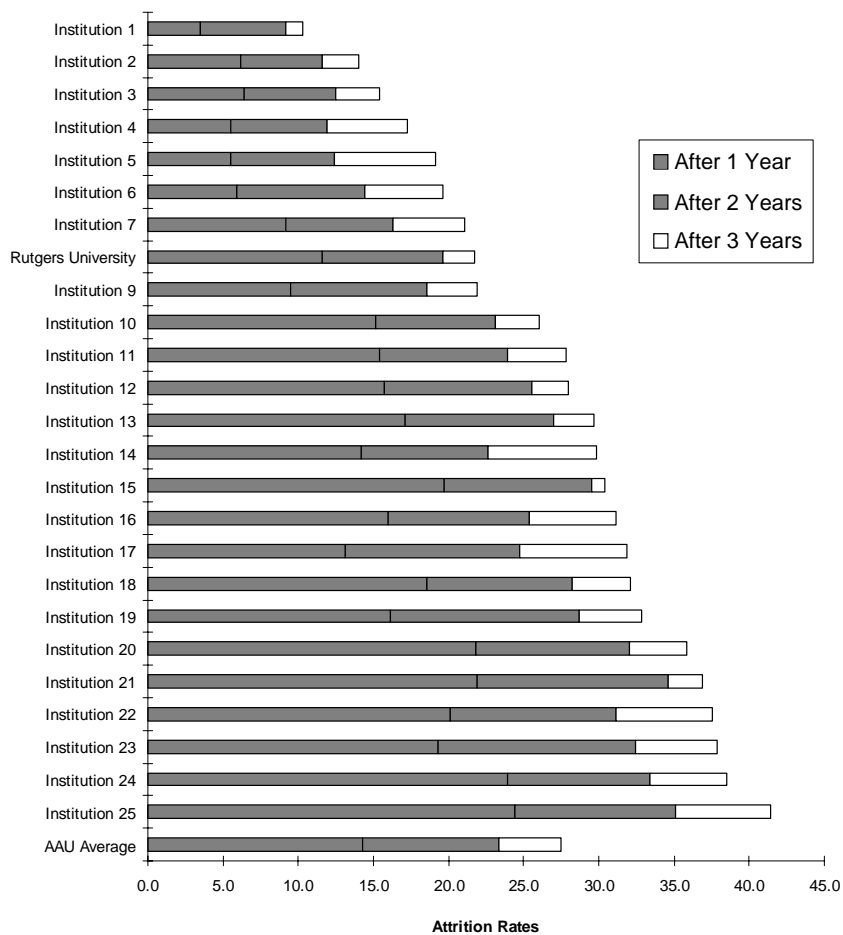
Public AAU Institution**	Average 5 Year N***	Average After One Year	Average After Two Years	Average After Three Years
Institution 1	2,632	3.5	9.2	10.3
Institution 2	3,225	6.2	11.6	14.0
Institution 3	4,905	6.4	12.5	15.4
Institution 4	3,607	5.5	11.9	17.3
Institution 5	3,244	5.5	12.4	19.1
Institution 6	2,551	5.9	14.4	19.6
Institution 7	3,379	9.2	16.3	21.1
Rutgers University	5,154	11.6	19.6	21.7
Institution 9	4,620	9.5	18.6	21.9
Institution 10	6,095	15.2	23.1	26.0
Institution 11	6,167	15.4	23.9	27.8
Institution 12	3,097	15.7	25.5	28.0
Institution 13	2,565	17.1	27.0	29.7
Institution 14	5,563	14.2	22.6	29.8
Institution 15	3,510	19.7	29.5	30.4
Institution 16	3,218	16.0	25.4	31.1
Institution 17	2,378	13.1	24.7	31.9
Institution 18	3,408	18.6	28.2	32.1
Institution 19	8,683	16.1	28.7	32.8
Institution 20	3,513	21.8	32.0	35.8
Institution 21	2,110	21.9	34.6	36.9
Institution 22	3,486	20.1	31.1	37.5
Institution 23	3,391	19.3	32.4	37.9
Institution 24	4,286	23.9	33.4	38.5
Institution 25	3,601	24.4	35.1	41.4
AAU Average	3,936	14.2	23.3	27.5

* Data not available for 7 institutions.
 ** Institutions are not identified for confidentiality purposes.
 *** Average of the 1989 through 1993 cohorts.

ATTRITION RATES IN COMPARATIVE AND HISTORICAL CONTEXT

To obtain a sense of where Rutgers stands with regard to undergraduate attrition, it is useful to look at attrition rates of Rutgers undergraduates from both comparative and historical perspectives. Undergraduate attrition rates at Rutgers can be compared to undergraduate attrition rates at similar types of institutions. One grouping of institutions with similar institutional characteristics that is regularly used at Rutgers for peer group evaluations of educational phenomena such as undergraduate attrition is the thirty-two public institutions that are members of the Association for American Universities (AAU). Public institutions that are members of the AAU share similar characteristics in that they are large, public research universities and have the same tripartite mission of teaching, research, and service to their respective communities. Attrition rates for Rutgers and many of the public AAU institutions are presented in Table 2.1.¹ (Graph 2.1 provides a graphical representation of these same data.) This table includes average one-year, two-year, and three-year attrition rates for cohorts of first-time, full-time undergraduates at public AAU institutions between fall 1989 and fall 1993.² As can be seen from these data, Rutgers attrition rates are lower than the average public AAU rates of attrition. This is true for

Graph 2.1
Attrition Rates at Public AAU Universities



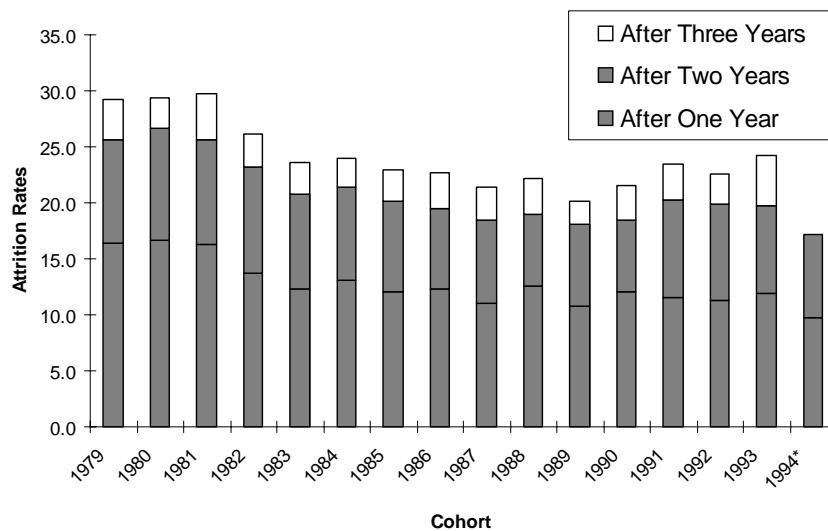
one-year, two-year, and three-year rates (i.e., 2.6 percentage points for one-year attrition rates, 3.7 percentage points for two-year attrition rates, and 5.8 percentage points for three-year attrition rates). Among the 25 public AAU institutions listed in Table 2.1, Rutgers performs well in all three rate categories of attrition. Although not quite placing in the top echelon of public AAU institutions, Rutgers nevertheless places among the top ten of these schools in containing undergraduate attrition.

Attrition rates at Rutgers can also be looked at from a historical perspective. Table 2.2 and Graph 2.2 present attrition rates for first-time, full-time cohorts of Rutgers undergraduates who entered the university

Table 2.2
Attrition Rates at Rutgers University

COHORT	N	After One Year %	After Two Years %	After Three Years %
1979	6,858	16.4	25.6	29.2
1980	5,812	16.7	26.7	29.4
1981	6,446	16.3	25.6	29.8
1982	5,947	13.7	23.2	26.1
1983	5,687	12.3	20.8	23.6
1984	5,606	13.1	21.4	24.0
1985	6,062	12.1	20.1	22.9
1986	6,207	12.3	19.5	22.7
1987	5,426	11.0	18.4	21.4
1988	5,358	12.6	19.0	22.2
1989	5,351	10.8	18.1	20.1
1990	5,110	12.0	18.5	21.5
1991	5,100	11.5	20.3	23.5
1992	4,954	11.3	19.9	22.6
1993	5,253	11.9	19.7	24.2
1994	4,827	9.8	17.2	*

Graph 2.2
Attrition Rates at Rutgers University



*3 year attrition rate for 1994 is unavailable.

between the years 1979 through 1994. These data presentations reveal that the trend of attrition over the past two decades at Rutgers is downward. This is true for attrition after one year, two years, and three years of attendance. However, this reduction in the rate of attrition is not smoothly linear, but instead is represented by a series of forward and backward steps, with longer distances being covered when going forward - in the direction of lower attrition rates - than when moving backward. For example, although there has been an overall reduction in the one-year attrition rate by over six (6.6) percentage points between 1979 and 1994, a number of years have experienced an increase in the rate of attrition from the previous year. This is true not only for one-year attrition rates but for two-year and three-year rates as well.

DISCUSSION

The tables and graphs presented in this chapter indicate that Rutgers performs well, both in relative and absolute terms, in retaining its undergraduates. Rutgers consistently places among the top ten public AAU institutions that have the lowest undergraduate attrition rates. In addition, when looked at over time, there has been a substantial decline in undergraduate attrition rates at Rutgers. These findings suggest that the many and varied retention and academic support programs that exist at Rutgers have been successful in the university's ongoing effort to meet the challenge of undergraduate attrition. Because of the diversity that exists at an institution such as Rutgers, a large state university charged with the mission of providing a quality education to its undergraduates, the existence of many different programs that are geared to retaining students and helping them succeed academically is not only unsurprising but understandable. Unfortunately, the data presented here cannot identify which of these programs have been the most effective in this effort. Nevertheless, these data do support the notion that the whole range of retention and academic support programs at Rutgers has proved successful in the ongoing effort at the university to deal with the pernicious problem of undergraduate attrition.

When looking at the attrition rates at Rutgers over time, it is apparent that there is a substantial decline in these rates over the last two decades. However, a closer look at this decline also shows that more of it occurred during the first half of the annual series during the second half. For example, between 1979 and 1986 the one-year rate of attrition declined by slightly over four percentage points (from 16.4% to 12.3%), while from 1986 to 1994 this rate declined by two and a half percentage points (from 12.3% to 9.8%).

There are many possible reasons that can account for this discrepancy in the rate of decline between these two periods, but perhaps the most interesting is the possibility that an attenuating effect is operating with regard to the results of retention and academic support programs as the rate of attrition declines. It is not unreasonable to assume that as the rate of attrition declines, it becomes harder to devise methods and programs that will contribute to the further reduction in attrition rates. It is highly unlikely that attrition will be totally eradicated from undergraduate education; and there is likely to always be a base rate of attrition regardless of what programs are in place to counteract it.³ Of course, what this baseline attrition rate is for an institution is a matter that is probably

indeterminable. This is no less true at Rutgers than it is at any other institution of higher education. Thus it becomes critical to obtain information about students who permanently withdraw from Rutgers in order to better inform our understanding of attrition and our attempts at Rutgers to reduce it beyond the existing low attrition rates. The following chapters describe the results of one such effort: a survey of former Rutgers undergraduates who withdrew from school before they completed their baccalaureate studies.

RESULTS TO BE PRESENTED

The reporting of the results of the survey of former Rutgers undergraduates will answer the following questions:

- What are the characteristics of these former students who left Rutgers without graduating?
- Do these former students differ in their characteristics from the general undergraduate population and from students who did graduate from Rutgers?
- Since leaving Rutgers, what has happened to these former students? Did they continue their studies at another college/university? Are they presently employed?
- What were the reasons these former students left Rutgers?
- What were the goals of former students while attending Rutgers? Did attending Rutgers help them achieve their goals? Are their goals and achievement of them different from students who graduated from Rutgers?
- How do former students feel about the university? What were their experiences while attending Rutgers? Do these students differ in their feelings about and experiences at Rutgers than students who graduated from the university?

ENDNOTES

¹ The attrition rates presented in this chapter are determined by looking at whether students who entered Rutgers during a particular fall semester continue to be enrolled at the university the following fall semesters. If a student is not registered during the first fall semester after entering Rutgers, then that student is counted among students who left the university after the first year. The same procedure is followed for calculating the second-year and third-year attrition rates. Comparative and historical attrition data as presented in this chapter are easily obtained and regularly used in attrition research. However, this is not the only way to determine rates of attrition. It is often useful to distinguish between

students who temporarily withdrew from their studies at an institution (these students are often referred to as 'stopouts') from students who permanently withdrew (these latter students are often referred to as 'dropouts'). Indeed, as will be seen in Chapter Three, in defining our survey population, it was the latter, and more stringent, definition of attrition that was employed in surveying former Rutgers students.

² The following cohorts are used in the calculation of the average attrition rates presented in Table 2.1 and Graph 2.1: one-year averages are calculated from the 1991, 1992 and 1993 cohort attrition rates; two-year averages are calculated from the 1990, 1991 and 1992 cohort attrition rates; and three-year averages are calculated from the 1989, 1990 and 1991 cohort attrition rates.

³ Stating this, however, should not be taken to imply that the effort to further reduce attrition should be curtailed. In fact, the realization that the effort to reduce attrition becomes progressively more difficult to accomplish as attrition rates become ever smaller should be used as a call for redoubling the effort to reduce undergraduate attrition through continuing support of existing programs, the further development of innovative attrition reducing strategies, and the perseverance of the will to succeed.

CHAPTER THREE: ***DEFINING AND PROFILING DROPOUTS***

INTRODUCTION

Before a survey of students who withdrew from college can be conducted, definitional and methodological issues need to be addressed. This chapter discusses some of these issues and the manner in which they have been approached in the present study. Demographic and academic characteristics of respondents are also presented.

DEFINING ATTRITION

The definition of attrition varies according to the context within which it is being studied. Attrition means different things to different parties (Tinto, 1982). To the individual who withdraws from college before attaining his or her degree, the meaning of attrition is understood within the context of the student's academic and career goals. The degree of engagement by undergraduates in their studies will vary according to their educational goals. One student may view the accumulation of a limited number of credits to be enough for the attainment of his or her academic goals, while another student may have more extensive educational goals which influences that student to attain, at the very least, a baccalaureate degree.

On an institutional level, attrition for the most part is taken to mean that a student leaves and does not come back. However, when the institution seeks to develop a response to the attrition process through such vehicles as the development and implementation of retention programs, there is a need to identify the reasons for students withdrawing from college. For example, if many former students cite the lack of evening classes as their reason for withdrawing, the institution could respond by offering more classes in the evening. However, if former students state that their reason for leaving college was that they met their academic goals, there is very little that the institution could do to help those students continue their studies.

Attrition also has implications for the state and national levels of higher education that are different from individual and institutional levels. The main distinction here refers to whether students who leave an institution before receiving a postsecondary degree transfer to other postsecondary institutions or simply discontinue their educational training. Whereas students who transfer out from an institution represent a group of students that institution would want to prevent from leaving, such action when considered on the national level would not be categorized as dropping out because it is an action that does not lead to the permanent disengagement of students from higher education. A decision regarding the context within which attrition occurs is thus required before analysis can proceed. For the purposes of the present study, attrition is approached from the perspective of the institution. No distinction is made between those students who permanently withdrew from their pursuit of a

baccalaureate degree and those students who withdrew from Rutgers only to transfer to another institution of higher education.¹

In taking this approach there is the additional need to distinguish between those students who left Rutgers temporarily and those students who did not return to the university. Students in the former group are often referred to as stopouts, while the term dropout is usually reserved for students who do not return at all (Ewell, 1984). For the purposes of the present study, students who left Rutgers for three consecutive semesters are considered dropouts. Such a definitional distinction is especially important at a large public university such as Rutgers, where students are quite diverse and have many responsibilities that may cause a small but nevertheless significant group of students to leave school for one or two semesters.² This definition is much more stringent than what is generally used in the presentation of attrition/retention rate data where students who are not registered for courses in a following fall semester are counted as having withdrawn and are not included among students counted as returning. This latter method of calculating the attrition rate is often referred to as the event rate method. Attrition rates calculated by this method tell us the number of students that leave an institution each year, thus allowing for comparisons from year to year. Yet an essential problem with the employment of the event rate method is the lack of distinction among the different years that students withdraw (e.g., after their first, second or third year at school). As a National Center For Education Statistics report (1977) indicates, the separation of students by year of withdrawal can be an important factor in the effort to understand the reasons and causes of attrition.

To be able to distinguish the year of withdrawal among students who withdrew from Rutgers, the present study employed the technique of cohort analysis. Cohorts in this context are simply a group of students who entered the university at the same time (in this instance, the fall semester).³ These students can then be followed semester by semester through their studies at Rutgers, enabling the calculation of attrition rates for various entering classes and groups of students and the designation of the year these students withdrew.⁴

These cohorts also enable the identification of students for contact and further study. This latter point is critical in the attempt to obtain information from former students about their reasons for discontinuing their studies at Rutgers, their activities since leaving the university, their opinions about their experiences while at Rutgers, and their past and present academic and career goals.

SURVEY METHODOLOGY

In order to inquire about these topics, a population of students that discontinued their studies at Rutgers for three consecutive semesters was identified and surveyed through the administration of the *Former Student Opinion Survey*. This survey instrument is divided into five main sections. These sections include reasons for leaving Rutgers, status since leaving Rutgers, reasons for originally attending the university, experiences while at Rutgers, and personal background information. A copy of this survey instrument is presented in Appendix B.

The use of survey methodology to study the phenomenon of attrition has had wide application in higher education.⁵ Many benefits are associated with the use of the survey in the study of student attrition, including low cost, high reliability,⁶ allowance for the inquiry of attitudes and opinions, and the linking of data obtained from the questionnaire to secondary types of data.

The survey design used in the present study has been referred to as an autopsy survey wherein only students who have been identified as dropouts are surveyed (Terenzini, 1982). The survey was administered to 1,295 former students from all three campuses and all undergraduate colleges of the university. Selected combinations of students who withdrew from Rutgers after one, two or three years of study and were members of the 1987 through 1992 entering class of first-time undergraduates were included in the survey. Table 3.1 presents the distribution of these former students by cohort year, year of withdrawal, campus, and school.

There were three mailings via United States mail to this population of former students. The first mailing of the survey took place on August 17, 1995 and included the questionnaire, a cover letter from President Lawrence explaining the purpose of the survey and ensuring complete confidentiality, and a self-addressed stamped return envelope. The second mailing occurred two weeks later. This mailing consisted of a postcard which carried a message of gratitude if the respondent had completed and returned the questionnaire, while reminding others to do so in a timely fashion. A third mailing occurred on September 20, 1995, three weeks after the postcard mailing, and included another copy of the questionnaire, a slightly revised version of the original cover letter from President Lawrence, and a self-addressed envelope. This mailing went only to those students who had not responded to the two previous mailings.

Of the former students surveyed, 356 returned usable questionnaires. Although this 27 percent is a rather low response rate for mail surveys generally, it falls within the middle range of an expected 15 to 40 percent for autopsy attrition surveys (Terenzini, 1982, Table 1). Various reasons exist for such low response

Table 3.1
Attrition Survey Population by School

	NEW BRUNSWICK								NEWARK			CAMDEN		TOTAL
	COOK	DOUGLASS	ENGINEERING	LIVINGSTON	MGSA	PHARM	RUTGERS	TOTAL	NCAS	NURSING	TOTAL	CCAS	TOTAL	
1 Year														
Cohort 92	15	46	20	33	7	1	49	171	35	0	35	24	24	230
Cohort 91	24	37	43	57	15	15	82	273	45	5	50	32	32	355
Total	39	83	63	90	22	16	131	444	80	5	85	56	56	585
2 Year														
Cohort 91	12	20	28	27	4	5	22	118	34	1	35	20	20	173
Cohort 90	8	27	19	27	7	5	29	122	29	4	33	17	17	172
Cohort 89	13	13	13	25	7	1	27	99	13	3	16	15	15	130
Total	33	60	60	79	18	11	78	339	76	8	84	52	52	475
3 Year														
Cohort 90	6	8	3	13	0	0	10	40	11	0	11	2	2	53
Cohort 89	9	6	12	9	2	0	17	55	11	2	13	6	6	74
Cohort 88	5	5	6	9	0	1	7	33	12	1	13	9	9	55
Cohort 87	4	6	0	10	1	2	12	35	12	0	12	6	6	53
Total	24	25	21	41	3	3	46	163	46	3	49	23	23	235
TOTAL	96	168	144	210	43	30	255	946	202	16	218	131	131	1,295

rates when conducting an attrition survey, including the difficulty of contacting former students, especially students who last attended Rutgers a number of years ago.⁷ The likelihood that former students who left the university without completing their studies would be less inclined to respond to a survey from their former school is another probable factor contributing to the low response rate.

Because of the low response rate, it becomes critical to determine if respondents to the survey are representative of the population of former students who withdrew from the university before receiving their baccalaureate degree. Moreover, a description of the characteristics of the respondents is also useful in interpreting the results of the survey. However, before we proceed to describe these characteristics, a brief overview of the comparative context for discussing the results of the attrition survey is presented.

COMPARISON WITH THE 1992 GRADUATING CLASS

A major problem with using the present survey is that it lacks a context for comparing the answers given by respondents. As Terenzini (1982, p. 57) writes, “In the absence of a comparison group, we can only describe dropouts’ characteristics, attitudes, or behaviors - traits that may or may not be different from those of nondropouts.” Thus the availability of a group of nonwithdrawing students for comparison would enhance the validity of the survey responses for drawing conclusions about former students. Ideally, the best method for such comparison would be to randomly assign subjects to the two groups of students: students who withdraw from college before attaining a degree and students who persist and graduate from the same college. However, because this is impossible to arrange, the next best thing would be to survey students who did not withdraw from college and ask these students similar questions as asked in the attrition survey. Such an effort did occur when a survey of graduating seniors in 1992 asked many of the same questions found in the present attrition survey.⁸ Although the administration of these two surveys occurred at different times, they did include students who attended the university at approximately the same time. Consequently, responses of the attrition survey participants will be compared to responses of the 1992 graduating student survey participants in this report.

PROFILING FORMER STUDENTS

Representativeness of the Respondents

Table 3.2 presents a comparison of survey respondents and the population of students who left Rutgers without obtaining their baccalaureate degree for various demographic and academic variables. Percentage distributions and means of these characteristics for the entire population of first-time students to Rutgers are also presented in Table 3.2. These descriptive measures for the total university population are for first-time, full-time students and are averages of the 1990, 1991, and 1992 cohorts of entering students. For many of these factors the percentage distribution for both respondents and the dropout population were quite similar. However, among survey respondents there were a higher percentage of females (61%) and a lower percentage of

males (39%) than in the dropout population (53% and 47%, respectively). In addition, there were fewer EOF students among survey respondents (8%) than among the dropout population (14%). Thus the survey responses may be slightly biased in reflecting the opinions of females and non-EOF students over the opinions of males and EOF students.

It should also be noted that the number of responses for some of the categories listed in Table 3.2 were not as high as desired. This is especially true for the racial/ethnic and campus classifications. For example, only 41 African American, 44 Asian, and 27 Latino former students participated in the survey. In addition, the

Table 3.2
Comparison of Respondents, Dropout Population
and Total First-Year Population

	Respondents (N=356)	Target Population (N=1,295)	Total Population* (N=5,187)
GENDER			
Female	61.2%	53.1%	52.8%
Male	38.8%	47.0%	47.2%
RACE			
African American	11.5%	14.9%	11.5%
Asian	12.4%	13.8%	14.3%
Latino	7.6%	9.8%	10.0%
White	66.0%	57.6%	61.0%
Other	2.5%	3.9%	3.2%
AGE			
< = 22	98.0%	98.3%	98.9%
> 22	2.0%	1.7%	1.1%
RESIDENCY			
N.J. Resident	82.9%	84.2%	88.9%
Non-N.J. Resident	17.1%	15.8%	11.1%
CITIZEN			
U.S. Citizen	90.2%	89.0%	88.2%
Non-U.S. Citizen	9.8%	11.0%	11.6%
CAMPUS			
Camden	9.6%	10.1%	6.0%
Newark	15.2%	16.8%	10.6%
New Brunswick	75.3%	73.1%	83.4%
EOF STATUS			
Non-EOF	91.6%	86.0%	88.9%
EOF	8.4%	14.0%	11.1%
YEAR OF ATTRITION			
After first	49.3%	49.7%	-
After second	35.2%	33.7%	-
After third	12.6%	14.7%	-
Mean GPA	2.39	2.20	2.71
Mean SAT-VERBAL (non-recentered scores)	480	460	480
Mean SAT-MATH (non-recentered scores)	540	530	550

*Total Population numbers are averages for the 1989, 1990, and 1991 cohorts.

number of respondents from the Camden and Newark campuses (34 and 54, respectively) was also rather low. Reliability that the survey responses are reflective of the population being studied is partially dependent on the actual number of individuals responding to the survey. Consequently, the low number of responses for some student classifications necessitates caution when considering the survey responses by student characteristics such as race/ethnicity and campus affiliation.

Table 3.3a
Additional Background Characteristics of Respondents

PARENTS' EDUCATION	N	%
<i>Mother</i>		
Eighth grade or less	22	6.3
High school	132	37.7
Some college	65	18.6
College graduate	75	21.4
Graduate or professional school	56	16.0
Total	350	100
<i>Father</i>		
Eighth grade or less	20	5.8
High school	107	31.3
Some college	61	17.8
College graduate	85	24.9
Graduate or professional school	69	20.2
Total	342	100
TOTAL FAMILY INCOME		
	N	%
< \$10,000	58	16.3
\$10,000 - \$19,999	25	7.0
\$20,000 - \$29,999	34	9.6
\$30,000 - \$39,999	43	12.1
\$40,000 - \$49,999	38	10.7
\$50,000 - \$59,999	39	11.0
\$60,000 - \$74,999	0	0.0
\$75,000 - \$99,999	39	11.0
\$100,000 - \$149,999	32	9.0
\$150,000 - \$199,999	11	3.1
\$200,000 or more	4	1.1
Unknown	33	9.3
Total	356	100

Table 3.3b
Marital Status of Respondents

	OVERALL	GENDER		RACE/ETHNICITY				
		Female	Male	Afric. Am.	Asian	Latino	White	Other
	%	%	%	%	%	%	%	%
While at Rutgers								
Never Married	97.2	96.3	98.5	95.1	95.3	96.3	98.3	88.9
Married	2.3	2.8	1.5	2.4	4.6	3.7	1.7	0
Separated	0	0	0	0	0	0	0	0
Divorced	0.6	0.9	0	2.4	0	0	0	11.1
Total	100%	100%	100%	100%	100%	100%	100%	100%
		(217)	(137)	(41)	(43)	(27)	(234)	(9)
Presently								
Never Married	87.9	84.8	93.0	82.0	90.0	88.0	88.5	88.9
Married	10.6	13.3	6.2	12.8	9.8	12.0	10.6	0
Separated	0.6	1.0	0	2.6	0	0	0.4	0
Divorced	0.9	1.0	0.8	2.6	0	0	0.4	11.1
Total	100%	100%	100%	100%	100%	100%	100%	100%
		(211)	(129)	(39)	(41)	(25)	(226)	(9)

Other Respondent Characteristics

Additional characteristics of the respondents collected through the survey instrument are presented in Tables 3.3a and 3.3b. With regard to parents' education, 44 percent of students indicated that their mother and 37 percent indicated their father did not have a degree beyond high school (Table 3.3a). Thirty-seven percent of the respondents stated that their mother had a college degree or higher and 45 percent stated that their father was at least a college graduate. Approximately one-third of all respondents indicated that their parent's income was less than \$30,000 and only 13 percent of all respondents who reported parental income had parents whose income exceeded \$100,000 (Table 3.3a).

Slightly over 97 percent of the respondents indicated that they were not married when they attended Rutgers and just under 88 percent of the respondents indicated they are presently single (Table 3.3b). Females had a higher rate of marriage presently (13%) than males (6%).

Status Since Leaving Rutgers

Approximately 40 percent of respondents worked part-time and six percent worked full-time while at Rutgers. Fifty-two percent of the respondents reported that they were employed while attending Rutgers but did not indicate hours worked per week. Approximately one-third of respondents are presently employed part-time (34%) and 43 percent of the respondents are working full-time (Tables 3.4a and 3.4b). Sixty-one percent of those not currently enrolled in college are working full-time, while 51 percent of those currently attending college are also working part-time. A relatively large percentage of respondents (18%) are currently unemployed. However, many of those students who are unemployed are also presently attending college at another

Table 3.4a
Employment Status While Attending Rutgers

	%
EMPLOYMENT	
Full-time (> = 35 hrs/wk)	6.3
Part-time (< 35 hrs/wk)	39.9
Employed, hrs/week unknown	52.4
Not employed	1.4
Total	100% (351)

Table 3.4b
Present Employment Status by Current Attendance at Another Institution

	TOTAL	Attending Another Institution	Not Attending Another Institution
	%	%	%
EMPLOYMENT			
Full-time (> = 35 hrs/wk)	43.0	18.8	60.8
Part-time (< 35 hrs/wk)	33.7	51.0	21.1
Combination of full- and part-time	5.1	5.4	4.9
Not employed	18.1	24.8	13.2
Total	100% (353)	100% (149)	100% (204)

institution. Twenty-five percent of students presently attending another college or university stated that they are currently unemployed.⁹

Of the 356 respondents to the survey, 273 (77%) of them indicated that they have attended at least one other institution of higher education since leaving Rutgers (Table 3.5). Forty-four percent of respondents who have attended another institution since leaving Rutgers (34% of the total number of respondents) enrolled in at

Table 3.5
Percentage Distribution of Type of School Attended
After Leaving Rutgers

	First College %	Second College %
New Jersey		
4 year public	17.2	28.6
4 year private	5.1	0
2 year	21.2	8.2
Other	0.7	0
Total	44.2	36.8
Out of State		
4 year public	20.1	28.6
4 year private	22.7	12.2
2 year	2.6	8.2
Other	10.3	14.3
Total	55.7	63.3
Total	100% (273)	100% (49)

Table 3.6
Percentage Distribution of Type of Degree
After Leaving Rutgers

	First Degree %	Second Degree %
Certificate/License/Diploma	14.3	25.0
Associate Degree	16.1	12.5
Baccalaureate Degree	69.7	62.5
Total	100% (112)	100% (8)

least one college or university within the state of New Jersey and 56 percent (43% of all survey respondents) went to a college or university out of state. A substantially higher percentage of respondents attended a private college or university for the first time outside of the state (23%; 17% of all survey respondents) when compared to the percentage of respondents who attended a private college or university within New Jersey (5%; 4% of all survey respondents). On the other hand, 21 percent of respondents who attended at least one college or university after leaving Rutgers (16% percent of all survey respondents) attended a New Jersey two-year institution while only three percent of respondents who attended at least one college or university after leaving Rutgers (one percent of all survey respondents) went outside of the state to attend a two year school of higher education. Although 77 percent of all respondents attended at least one college or university after leaving Rutgers, only 32 percent of the survey respondents attained at least one postsecondary degree or certificate by the time that the survey was administered (Table 3.6). Seventy percent of former students who attained a postsecondary degree or certificate received a baccalaureate degree (22% of all survey respondents).

ENDNOTES

¹ However, this study does seek to identify those students who left Rutgers to enroll in another college or university as well as the institution they transferred to.

² The use of three consecutive semesters as the demarcation point between stopouts and dropouts is, of course, arbitrary. Students who left the university for three consecutive semesters or more but later returned are included in our group of dropouts according to our accepted definition. It is felt that there is a qualitative difference between students who left for a semester or two and those students who continued their absence from the university for longer periods of time. However, a real danger of only including former students who left for three or more consecutive semesters is the limiting of the target population to students who have not been enrolled at Rutgers for a number of years. Indeed, this becomes problematic in securing a representative sample of former students who left Rutgers without attaining a degree (see Section C: Survey Methodology).

³ A third method of calculating attrition rates is measuring an entire population who have not achieved a certain level of education. These rates are often referred to as status rates and are dependent on the administration of a surveying method that will allow the counting of all individuals in a population. See Burch (1992, p. 7-11) and the U.S. Department of Education (1991) for a discussion of the pros and cons of using the event rate, status rate, and cohort rate methods for estimating attrition rates.

⁴ Appendix A contains tables that show rates of attrition for students who did not return to Rutgers for three consecutive semesters for the 1989 through 1993 cohorts of entering students. These attrition rates are different from the rates presented in Chapter Two in that the latter rates did not differentiate among students according to the number of semesters they did not attend. Although it would have been useful to work with attrition rates calculated by the method used in defining our survey population in the analysis undertaken in the preceding chapter, comparative and historical data calculated by this method were not readily available.

⁵ For an overview of basic survey designs in the study of student attrition, see Terenzini (1982).

⁶ A rich repository of questionnaires in the study of college attrition has emerged over the years which has contributed to the reliability of survey questions about student attrition. Some of the more widely used survey instruments in the study of attrition are the Student Outcome Questionnaire developed by the National Center for Higher Education, the American College Testing Withdrawing/Nonreturning Student Survey, and the Student Turnover Questionnaire. See Chapman (1982) for a more complete listing of survey instruments employed in studying college attrition.

⁷ As mentioned above, it was anticipated that by defining attrition as the withdrawal from study at Rutgers for three consecutive semesters, thereby lengthening the period of time between attendance at the university and administration of the survey, would reduce the response rate. Yet such a restrictive definition of attrition was required in order to ensure that dropouts, and not stopouts, were surveyed.

⁸ *1992 Graduating Student Opinion Survey.*

⁹ Another way of stating this is that of the 64 students not currently employed, 37 are presently attending another college or university.

CHAPTER FOUR: *REASONS FOR LEAVING RUTGERS*

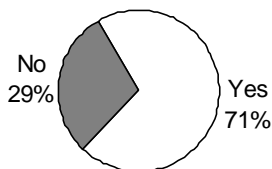
INTRODUCTION

This chapter addresses an essential concern of the attrition survey: why did students leave the university before attaining a degree? Many different reasons exist for a student to withdraw from college and include academic, financial, personal, and employment factors. The present chapter reports on what respondents cited as their reasons for leaving Rutgers and investigates whether the reasons given are different for various classifications of respondents. Before these reasons are described, however, a brief overview of the circumstances surrounding respondents' decision to enroll at Rutgers is presented.

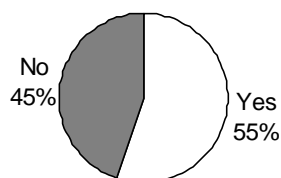
BACKGROUND TO THE DECISION TO ATTEND RUTGERS

Graphs 4.1a - 4.1d present information regarding respondents' decision to enroll at Rutgers. Seventy-one percent of all respondents indicated that Rutgers was their first college choice (Graph 4.1a). Of those students that did not indicate that Rutgers was their first choice, a majority (58%) cited that a private, four-year college was their first choice and 39 percent indicated that a public, four-year college other than Rutgers was their initial college preference (Graph 4.1b).

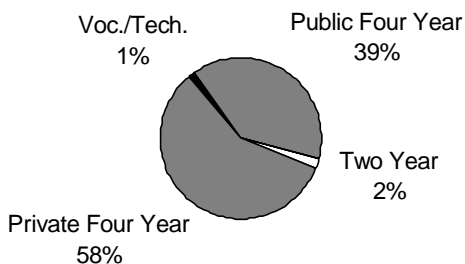
Graph 4.1a
Was Rutgers Your First Choice
(N=353)



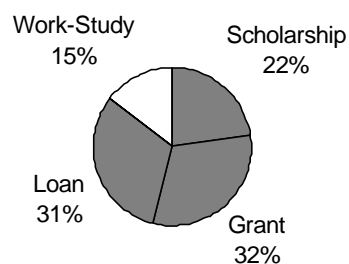
Graph 4.1c
Received Financial Aid Assistance While at Rutgers
(N=356)



Graph 4.1b
Type of College if Rutgers Was Not First Choice
(N=102)



Graph 4.1d
Type of Financial Aid Received
(N=356)



Just over 55 percent of respondents indicated that they received some type of financial aid while attending Rutgers (Graph 4.1c). The number and type of financial aid awarded to respondents included: 74 scholarships, 104 grants, 103 loans and 49 work-study positions (Graph 4.1d).

REASONS FOR LEAVING RUTGERS

Survey respondents were asked to indicate the reasons that contributed to their decision to leave Rutgers. The response options were categorized into three broad areas: academic reasons, financial reasons, and “other” reasons. Academic and financial reasons were each further subdivided into student-related (i.e., attributable to the student) and Rutgers-related (i.e., attributable to Rutgers) reasons. The “other” category was further subdivided into students’ personal reasons, reasons related to the Rutgers environment, and job-related reasons. Table 4.1 displays these categories and the specific reasons for leaving Rutgers.

Table 4.2 shows the number of responses given for each reason for leaving Rutgers, along with the percentage of responses and ranks within each category and across all seven categories. The data in Table 4.2 indicate that, overall, students who left Rutgers dropped out more frequently for academic reasons than for financial, personal, employment, or Rutgers environmental reasons. Among the seven main categories, students who left Rutgers before receiving a degree, on average, cited a student-related academic factor (58 selections) more often than a Rutgers-related academic factor (50 selections).

Table 4.1
Reasons for Withdrawing

Academic Reasons	
<i>Student-Related</i>	<i>Rutgers-Related</i>
<ul style="list-style-type: none"> • Achieved academic goals • Transferred to another college • Needed a break from college • Dissatisfied with academic performance • Unsure of academic goals • Language/communication problem • Felt overwhelmed by demands of college • Could not connect classroom to outside 	<ul style="list-style-type: none"> • Courses/programs wanted not available • Dissatisfied with quality of teaching • Dissatisfied with learning environment • Course work not what was wanted • Dissatisfied with class size • Lack of evening classes • Inadequate academic support
Financial Reasons	
<i>Student-Related</i>	<i>Rutgers-Related</i>
<ul style="list-style-type: none"> • Did not have enough money to continue • Could not earn enough money while enrolled 	<ul style="list-style-type: none"> • Could not obtain sufficient financial aid • Delayed notification of financial aid award
Other Reasons	
<i>Personal</i>	<i>Rutgers Environment</i>
<ul style="list-style-type: none"> • Achieved personal goals • Moved out of area • Change in personal circumstances 	<ul style="list-style-type: none"> • College experience wasn't what was expected • Few people to identify with • Lack of student diversity • Dissatisfied with student life • Dissatisfied with residential life
<i>Job-Related</i>	
<ul style="list-style-type: none"> • Accepted a job or entered the military • Could not work and go to school at the same time 	

Furthermore, a student-related financial reason (49 selections) was cited more often than a Rutgers-related financial reason (32 selections). Within the “other” category, personal reasons and reasons related to the Rutgers environment were equally cited (27 selections), followed by job-related reasons (25 selections).

With regard to the specific reasons given by respondents for their decision to leave Rutgers, the most prevalent of these factors cited by respondents were: transferring to another college/university (56%); dissatisfaction with their academic performance (28%); dissatisfaction with class size (26%); dissatisfaction with the learning environment (22%); and lack of enough money to continue (18%). The reasons cited least by respon-

Table 4.2
Rank and Percentage Distribution of
Reasons for Leaving Rutgers University

	N	Overall %	Category Rank	Overall Rank
ACADEMIC REASONS				
<i>Student-related:</i>				
Transferred to another college	198	55.6	1	1
Dissatisfied with academic performance	101	28.4	2	2
Unsure of academic goals	54	15.2	3	9
Needed a break from college	46	12.9	4	11
Language/communication problems	22	6.2	5	18
Felt overwhelmed by demands of college	21	5.9	6	19
Could not connect classroom to outside world	15	4.2	7	23
Achieved academic goals	4	1.1	8	27
Weight of Student-Related Academic Reasons	57.6			1st
<i>Rutgers-related:</i>				
Dissatisfied with class size	93	26.1	1	3
Dissatisfied with the learning environment	80	22.5	2	4
Dissatisfied with the quality of teaching	59	16.6	3	7
Courses/programs I wanted were not available	50	14.0	4	10
Inadequate academic support	46	12.9	5	11
Course work not what I wanted	18	5.1	6	21
Lack of evening classes	5	1.4	7	25
Weight of Rutgers-Related Academic Reasons	50.1			2nd
FINANCIAL REASONS				
<i>Student-related:</i>				
Did not have enough money to continue	66	18.5	1	5
Could not earn enough money while enrolled	32	9.0	2	16
Weight of Student-Related Financial Reasons	49.0			3rd
<i>Rutgers-related:</i>				
Could not obtain sufficient financial aid	59	16.6	1	7
Delayed notification of financial aid award	5	1.4	2	25
Weight of Rutgers-Related Financial Reasons	32.0			4th
OTHER REASONS				
<i>Personal:</i>				
Change in personal circumstances	60	16.9	1	6
Moved out of the area	18	5.1	2	21
Achieved personal goals	3	0.8	3	28
Weight of Personal Reasons	27.0			6th
<i>Job-related:</i>				
Could not work and go to school at same time	35	9.8	1	15
Accepted a job or entered the military	15	4.2	2	23
Weight of Job-Related Reasons	25.0			7th
<i>Rutgers environment:</i>				
Dissatisfied with student life	45	12.6	1.5	13
Dissatisfied with residential life	45	12.6	1.5	13
Few people I could identify with	23	6.5	3	17
College experience wasn't what I expected	21	5.9	4	19
Lack of student diversity	2	0.6	5	29
Weight of Rutgers Environmental Reasons	27.2			5th

dents were achievement of academic goals (1%), achievement of personal goals (1%), and lack of student diversity (1%).

Among the student-related academic reasons, the most popular responses were transferring to another college/university (56%), followed by dissatisfaction with academic performance (28%) and uncertainty about academic goals (15%). The least cited student-related academic reason was achievement of academic goals (1%). Within the set of Rutgers-related academic reasons, dissatisfaction with class size was most often cited by respondents (26%), followed by dissatisfaction with the learning environment (22%). The lack of evening classes was the Rutgers-related academic reason selected the least by respondents (1%). Not having enough money to continue was the primary student-related financial reason given for leaving Rutgers (18%), and not being able to obtain sufficient financial aid was the most frequent Rutgers-related financial reason cited (17%).

For those students indicating “other” reasons for leaving Rutgers, a change in personal circumstances was the predominant reason (17%), followed by dissatisfaction with student life and residential life (for both, 13%), and the inability to work and go to school at the same time (10%).

Table 4.3
Top Four Reasons for Leaving Rutgers, by Subgroup

Group	Reason 1		Reason 2		Reason 3		Reason 4	
		%		%		%		%
GENDER								
Females (N=218)	Transferred	57.3	Dissatisfied with class size	25.2	Dissatisfied with academic performance	24.8	Not enough money to continue	21.1
Males (N=138)	Transferred	52.9	Dissatisfied with academic performance	34.1	Dissatisfied with class size	27.5	Dissatisfied with learning environment	26.1
RACE								
African American (N=41)	Dissatisfied with academic performance	39	Not enough money to continue	34.1	Transferred	26.8	Could not obtain sufficient financial aid	24.4
Asian (N=44)	Transferred	65.9	Dissatisfied with academic performance	36.4	Dissatisfied with learning environment	15.9	Change in personal circumstances	15.9
Latino (N=27)	Could not obtain sufficient financial aid	33.3	Transferred*	29.6	Dissatisfied with academic performance*	29.6	Unsured of academic goals*	29.6
White (N=235)	Transferred	61.7	Dissatisfied with class size	31.9	Dissatisfied with learning environment	26	Dissatisfied with academic performance	24.3
Other (N=9)	Transferred	55.6	Dissatisfied with academic performance	44.4	-		-	
CAMPUS								
Camden (N=34)	Transferred	41.2	Dissatisfied with academic performance	32.4	Needed a break from college	23.5	-	
Newark (N=54)	Transferred	44.4	Needed a break from college	27.8	Dissatisfied with academic performance	25.9	Not enough money to continue	18.5
New Brunswick (N=268)	Transferred	59.7	Dissatisfied with class size	31.7	Dissatisfied with academic performance	28.4	Dissatisfied with learning environment	27.2
YEAR OF ATTRITION								
After One Year (N=151)	Transferred	56.3	Dissatisfied with academic performance	25.8	Dissatisfied with class size	24.5	Not enough money to continue	23.8
After Two Years (N=151)	Transferred	60.9	Dissatisfied with academic performance	33.1	Dissatisfied with class size	31.1	Dissatisfied with learning environment	28.5
After Three Years (N=54)	Transferred	38.9	Change in personal circumstances	25.9	Dissatisfied with academic performance	22.2	Dissatisfied with class size	16.7

*Tied with previous reason.

Note: Cells with "-" indicate three or more tied reasons, or subgroups with very small number of cases.

Separate rankings of the reasons for leaving Rutgers were conducted by gender, race/ethnicity (African American, Asian, Latino, white, and “other”), campus (Camden, Newark, and New Brunswick), and the number of years enrolled at Rutgers before dropping out (i.e., year of attrition). As shown in Table 4.3, transferring to another college/university was the most often cited reason for leaving Rutgers for both males and females, for all three campuses, and for all three years of attrition. In the race/ethnicity category, Asian students and white students were most likely to indicate transferring as a reason for leaving Rutgers (66% and 62% respectively). However, among African American respondents, dissatisfaction with their academic performance was the most common reason, indicated by 39 percent of African American respondents; and among Latino respondents, the inability to obtain sufficient financial aid was the most common reason for leaving Rutgers (one-third of Latino respondents cited this as a reason for leaving).

While financial reasons for dropping out were not among the top four reasons for males, whites, and Asians, a financial reason was the second and fourth most common reason among African Americans, and the fourth most common reason among females. Although transferring to another college/university was the top reason for students leaving after each of the three years of attrition, this reason was given much less frequently by students leaving after three years (39%) than by students leaving after one or two years (56% and 61%, respectively). In addition, a change in personal circumstances was ranked as the second most common reason for students leaving after three years (26%); this reason was not among the top four for any other sub-group.

The number of reasons students gave for leaving Rutgers may be indicative of the difficulties they experienced while at the university. While some students may have left for one or two clearly defined reasons, others may have experienced a greater number of problems which led to their dropping out. Thus, it was of interest to determine the number of reasons in each category students gave for leaving Rutgers. Table 4.4 shows that out of 32 possible reasons, the majority of respondents (48%) gave between two and four reasons; 32 percent gave five or more reasons; and 20% gave only one reason. (Two respondents did not give any reason.) Looking at the number of reasons indicated by each sub-group, a higher percentage of males than females gave five or more reasons for leaving (33% of males versus 30% of females). Males were also more likely to indicate only one reason for leaving Rutgers (22%) as compared to females (18%), while a majority of females selected between two and four reasons for leaving the university (51%).

More than half of the responding Latino students (nearly 52%) gave five or more reasons for leaving, while Asian (57%), African American (54%), and whites (48%) students were more likely to select between two and four reasons.

New Brunswick students gave the most reasons for leaving among the three campuses (34% gave five or more reasons, compared to 28% of Newark students and 18% of Camden students). Finally, students dropping out after two years at Rutgers gave the most reasons for leaving (36% gave five or more reasons), compared to 30% of students leaving after one year and 20% of students leaving after three years.

CONCLUSION

The findings of the preceding section underscore the common sense notion that students leave Rutgers for many and varied reasons. Many students cited multiple reasons for withdrawing from Rutgers.

The responses to why students withdrew from Rutgers also reveal that academic reasons are the most prevalent factors in students' decision to leave Rutgers. The reason cited most often by respondents overall, and by many of the sub-groups of respondents, was transferring to another college/university. Moreover, beyond this widely cited reason, other academic factors were also selected by respondents at relatively high rates, and included both Rutgers-related and student-related reasons. Indeed, of the ten most often cited reasons, seven were of the academic type. Consequently, these results show the importance of student academic integration and success in college in preventing student withdrawal.

Conversely, the survey results only minimally support the lack of social integration as a reason for student withdrawal from Rutgers. Reasons denoting the lack of social support and integration such as dissatisfaction with student life and dissatisfaction with residential life were selected by respondents at lower rates compared to the other reasons. However, these reasons can not be discounted as factors in students' decision to withdraw from Rutgers. Although these social factors may not be the primary reasons for students withdrawing from the university, perhaps a more reasonable approach to their role would be to consider them as playing a contributing factor, albeit with a lesser effect than academic factors, in the decision of whether to withdraw from school.

Table 4.4
Number of Reasons for Leaving Rutgers

	Number of Reasons							
	None		1		2 to 4		5 or more	
	N	%	N	%	N	%	N	%
TOTAL	2	0.6	71	20.0	171	48.0	112	31.5
GENDER								
Males	1	0.7	31	22.5	60	43.5	46	33.3
Females	1	0.5	40	18.4	111	51.0	66	30.1
ETHNICITY								
African American	0		10	24.4	22	53.7	9	21.9
Asian	1	2.3	11	25.0	25	56.8	7	15.9
Latino	0		4	14.8	9	33.3	14	51.9
White	1	0.4	43	18.3	112	47.7	79	33.6
CAMPUS								
Camden	0		5	14.7	23	67.6	6	17.6
Newark	0		17	31.5	22	40.7	15	27.8
New Brunswick	2	0.8	49	18.3	123	47.0	91	34.0
YEAR OF ATTRITION								
1 year	1	0.6	23	13.7	93	55.4	51	30.4
2 years	1	0.8	22	18.3	51	42.5	46	38.3
3 years	0		15	34.9	19	44.2	9	20.9

In addition, the survey results indicate the importance of student finances in the decision to withdraw from college. Respondents selected both a student-related financial (i.e., lack of enough money to continue studies) and a Rutgers-related financial (i.e., lack of enough financial aid) reason for withdrawing from Rutgers at higher rates than several other factors.¹

A NOTE ON TRANSFERRING TO ANOTHER COLLEGE AS A REASON FOR LEAVING RUTGERS

Because more than half of the respondents (56%) selected transferring to another college/university as a reason for leaving Rutgers, it was of interest to determine whether these students cited other factors for leaving Rutgers besides their desire to transfer, and whether these students differed in their selection of other factors for withdrawing from Rutgers compared to those former students who did not select transferring to another college/university as a reason for leaving Rutgers. A large percentage of students who selected this as a reason for withdrawing from Rutgers came from the New Brunswick campus (81%), while 12 percent came from Newark and seven percent came from Camden. The percentage of females selecting transferring to another college/university (63%) was slightly larger than the percentage of females in the survey sample overall (61%). In addition, a larger percentage of white students and a smaller percentage of African American and Latino students withdrew from Rutgers to transfer to another school compared to the distribution of race/ethnicity in the survey sample as a whole (73% vs. 66% among white students, 6% vs. 12% among African American students, and 4% vs. 8% among Latino students).

Students who left Rutgers to transfer to another college/university cited more Rutgers-related academic reasons and Rutgers environmental reasons, while former students who did not transfer cited more student-related academic reasons, financial reasons (both student-related and Rutgers-related), personal, and job-related reasons. For example, students who transferred also indicated that they left Rutgers due to dissatisfaction with class size (34%), dissatisfaction with the learning environment (29%), unavailability of courses or programs they wanted (20%), and/or dissatisfaction with the quality of teaching (19%). Transfer students also indicated dissatisfaction with student life and residential life more often than students who did not cite transferring to another college/university as a reason for leaving Rutgers.

Students who did not transfer to another college/university were more apt to leave Rutgers because they were dissatisfied with their academic performance (37%), unsure of their academic goals (20%), or needed a break from college (24%). These students also indicated each of the four financial reasons more often than transfer students. Not surprisingly, students who left Rutgers but who did not transfer were also likely to indicate a change in personal circumstances (23%) or the inability to work and go to school at the same time (17%) as reasons for their withdrawal.

These findings suggest that the students who chose to withdraw from Rutgers to enroll in another college or university were generally dissatisfied with the academic environment at Rutgers as indicated by their high rates

of selecting factors such as class size, course selection and availability, and the learning environment as reasons for withdrawing from Rutgers. In general, a student's decision to transfer to another school did not coincide with personal or financial factors.

ENDNOTES

¹Of course this relationship between financial resources and the decision to withdraw is much more complex than the present discussion indicates. As Tinto (1993, pp. 65-69) clarifies, the exact way financial resources such as financial aid may influence the decision to withdraw is involved, with most of its effect probably happening at the time of entry into college and not as much after the student has enrolled. In fact, suggests Tinto, the selection of financial reasons by respondents in studies such as the present effort may be a rationalization for the decision to withdraw from college rather than the actual cause for withdrawing from college.

CHAPTER FIVE: ***THE SETTING AND ACHIEVING OF GOALS***

INTRODUCTION

Another critical component of student attrition that researchers have identified is the degree to which students are committed to goals that are compatible with the attainment of a college degree. The more a student is committed to these goals the greater the likelihood that he or she will not withdraw from college but instead will remain to graduate. Although commitment to academic goals is perhaps the most conducive to the pursuit of a degree, other types of goals such as career and personal goals also play a role in the decision to remain in college and attain a degree. Conversely, the lack of commitment to such goals is often viewed as contributing to the decision to withdraw from college (Bean, 1982; Tinto, 1993: pp. 41-45).

The present chapter seeks to understand the role that these goals have in the decision of students to leave Rutgers before attaining a degree. It compares the types and extent to which various stated goals were selected by respondents on the attrition questionnaire to those goals selected by the 1992 graduating class as found in the *1992 Graduating Student Opinion Survey*.

These comparisons between students who withdrew from Rutgers and students who attained a baccalaureate degree from Rutgers are made on two dimensions of goal commitment. The first dimension was identification of the specific goals that students classified as important to them when they attended Rutgers, and the second dimension was reporting those goals that students achieved or were in the process of achieving because of attending Rutgers. The 24 goal statements were organized under four headings: academic goals, career preparation and career improvement goals, social and cultural participation goals, and personal development and enrichment goals. The percentages discussed in the following section are found in Table 5.1.

ACADEMIC GOALS

Importance

Academic goals were represented in the questionnaire by eleven statements. While at Rutgers, the most important academic goals of former students were to: obtain a degree or certification (80%), increase their knowledge in an academic field (78%), improve their ability for critical thinking (72%), and increase their communication skills (67%). As shown in Table 5.1, these four goals were also the top choices for graduating seniors in 1992; however, the percentages for these items were considerably less for graduating seniors than for former students. For example, while 80 percent of former students indicated that obtaining a degree or certification was an important goal, only 66 percent of graduating seniors did so. Former students also felt that learning as much as they could in many different areas (63%), and pursuing a particular interest or developing a

particular talent (54%) were important goals.¹ The least important goal of both former students and graduating seniors was a better understanding of Non-Western cultures and institutions (30% and 33%, respectively).

Achievement²

While the majority of former students indicated that many of the academic goals on the questionnaire were important when they attended Rutgers, only small percentages of these respondents whose academic goals were important to them stated that they had achieved or were achieving these goals because of Rutgers. For example, while 72 percent felt that improving their critical thinking was an important goal while at Rutgers, only

**Table 5.1
Importance and Achievement of Student Goals**

	Goals Important When I Attended Rutgers		Goals Achieving or Achieved	
	Attrition %	Senior %	Attrition %	Senior %
Academic Goals				
--To improve my ability for critical thinking	72	64	42	70
--To increase my communication skills	67	65	41	64
--To better understand Western cultures and institutions	31	29	37	54
--To better understand Non-Western cultures and institutions	30	33	32	39
--To appreciate literature and the arts	46	44	45	59
--To understand scientific concepts and methods of analysis	53	42	41	60
--To develop my ability to assess values and make moral decisions	49	48	39	69
--To increase my knowledge in an academic field	78	66	47	74
--To pursue a particular interest or develop a particular talent	54	*	35	*
--To obtain a degree or certification	80	66	27	82
--To learn as much as I could in many different areas	63	*	45	*
Career-Preparation/Career-Improvement Goals				
--To discover career interests	63	54	30	49
--To prepare for long-term career plans and/or goals	70	67	27	40
--To improve my knowledge and/or competence in work-related areas	56	69	26	48
--To improve my chances for a raise and/or promotion	37	53	16	27
--To improve chances of getting a good job	68	*	23	*
Social and Cultural Participation Goals				
--To become active in student life and campus activities	50	25	29	61
--To meet people and make friends	76	51	48	76
--To have an active social life	64	*	42	*
Personal Development and Enrichment Goals				
--To improve my self-confidence	58	58	36	61
--To improve my leadership skills	48	56	31	51
--To improve my ability to get along with others	53	41	46	71
--To enrich my daily life or make me a more complete person	55	57	43	61
--To become more independent, self-reliant, and adaptable	66	60	58	68
	(356)	(4,045)	**	**

* Question not asked on Senior Survey

** The Ns for each goal are equal to the number of respondents selecting that respective goal as important.

42 percent of these respondents felt that Rutgers enabled them to achieve this goal. Furthermore, the goal that was the most important to former students when they attended Rutgers - obtaining a degree or certification (80%) - was achieved by only 27 percent of these respondents.³

It is interesting to note that the graduating senior survey revealed results that are not consistent with the responses on the attrition survey. In all but one instance, a majority of responding graduating seniors felt they either achieved or were achieving the goals they listed as important to them. The contrasting results of former students and graduating seniors suggest a lack of academic goal achievement as a contributing factor to students' decision to leave Rutgers.

CAREER PREPARATION AND CAREER IMPROVEMENT GOALS

Importance

The majority of former students deemed four of the five career-preparation goals important (the exception was improving their chances for a raise and/or a promotion, which was important to 37%). A higher percentage of former students than graduating seniors indicated that discovering career interests (63% of former students vs. 54% of seniors) and preparing for long-term career plans (70% vs. 67%) were important goals to them while at Rutgers. Yet, more of the graduating seniors sought to improve their knowledge and/or competence in work-related areas (69% of seniors vs. 56% of former students) and improve their chances for a raise and/or promotion (53% vs. 37%).

Achievement

Among both former students and graduating seniors, less than a majority who stated that these goals were important to them also indicated that they achieved or were achieving career preparation and career improvement goals. As with academic goals, a smaller percentage of former students than graduating seniors indicated that they have achieved or are achieving career goals. Less than one-third of former students who cited them as important discovered their career interests (30%), and were prepared for long-term career plans (27%). Even fewer improved their knowledge and/or competence in work-related areas (26%), improved their chances of getting a good job (23%), and improved their chances for getting a raise or promotion (16%).

SOCIAL AND CULTURAL PARTICIPATION GOALS

Importance

Social and cultural participation goals were very important to former students: 76 percent wanted to meet people and make friends, and 50 percent hoped to become active in student life and campus activities. These goals were less important to graduating seniors, as only 51 percent and 25 percent, respectively, felt that these goals were important.

Achievement

The number of former students who achieved their social and cultural participation goals was dramatically reduced from the number who set these goals. Approximately 3 out of 10 former students felt that they became active in student life and campus activities among those respondents who felt that this goal was important. Similarly, only 48 percent of former students who stated that the goal of meeting people and making friends at Rutgers was important to them (76%) felt that they accomplished this goal. Also, while 64 percent sought to have an active social life at Rutgers, only 42 percent of these respondents felt that they did so. As was true with the academic and career preparation goals, graduating seniors were much more successful in accomplishing their social and cultural participation goals than were former students. The finding that a large number of former students set social goals that they subsequently did not achieve suggests that social life was an important factor in students' decision to leave Rutgers. Yet, only six percent of former students indicated that they left Rutgers because there were few people they could identify with, and 13 percent left due to a dissatisfaction with student and residential life (see Chapter 4, Table 4.2). It seems, therefore, that social factors were important, but not primary to former students' decision to leave Rutgers.

PERSONAL DEVELOPMENT AND ENRICHMENT GOALS

Importance

Overall, a similar percentage of former students and graduating seniors felt that each of the personal development and enrichment goals listed was important to them. Among these goals, becoming independent, self-reliant, and adaptable was the most important to both groups (66% and 60% respectively), followed by improving their self-confidence (58% of both groups), and enriching their daily life or making them a more complete person (55% and 57% respectively). It is interesting to note that, while a larger percentage of graduating seniors felt that improving their leadership skills was an important goal (56% versus 48% of former students), former students were more concerned with improving their ability to get along with others (53% versus 41% of graduating seniors).

Achievement

Of all of the goals listed on the survey, former students were most able to achieve their goal to become more independent, self-reliant, and adaptable because of Rutgers. However, only six in ten respondents who identified this item as important indicated that they were achieving or had achieved this goal (66% selected this item as important). Former students were less successful with regard to the other personal development and enrichment goals, with 46 percent or less indicating achievement of these goals. As in the other goal categories, graduating seniors were much more successful attaining personal development and enrichment goals. In fact,

the goal that was least important to graduating seniors, improving their ability to get along with others, was achieved by 71 percent of students who cited it as important, compared to only 37 percent of former students.

CONCLUSION

Some interesting results emerged from the analysis of goal selection by both former and graduating students that warrant further discussion. Graduating students consistently indicated that they had achieved or were achieving stated goals at higher rates than students who left the university without attaining a degree. The result that relatively more graduating students than former students would attribute their achieving or achievement of goals to their attendance at Rutgers is not unexpected given that graduating students successfully completed their pursuit of a degree from Rutgers.⁴

On the other hand, the observation that former students gave greater importance to goals at higher rates compared to graduating students is more perplexing and difficult to explain. Why would students who left the university without attaining a degree have higher percentages of respondents giving greater importance to goals compared to students who graduated from the university?

Although inconclusive without further study, certain potential reasons can be offered to explain this finding. One possible explanation may simply be the case that former students have shared qualities that cause them to give greater importance to goals when compared to graduating students. Moreover, the discrepancy in their rates between the importance of goals and the actual achievement of goals - the rates with which former students achieved or are achieving goals are uniformly lower than the rates for setting goals, combined with these shared qualities may be a contributing factor to former students' decision to withdraw from Rutgers.

A second possible explanation may be that the failure of former students to attain a degree from Rutgers only magnifies for them the difference of having goals while attending Rutgers but not achieving them. Hence, former students would be much more likely to emphasize the failure to achieve goals, as measured by the difference in their rates between setting and achieving goals.

Because former students were surveyed between two and five years from their last semester of attendance at Rutgers, there is the possibility that respondents were interpreting retrospectively their recall of goals when they attended Rutgers. The further an individual is removed in time from some place or action, the greater the likelihood for the occurrence of 'leakage' in the accurate representation of what is being asked. A timely example of such a situation is found with the polling of voters after they have cast their ballot. It is understood by researchers in the field of political polling that to obtain as accurate a representation of how and why a person voted the way he or she did, the questioning of a voter must occur immediately after the casting of one's vote. Thus it is quite possible that the intervening time between attending Rutgers and responding to the survey affected how respondents answered the questions about goal attainment. However, the extent to which these goals are as malleable to the passage of time as individual opinions and attitudes is a question that needs to be

answered before this reasoning about goal attainment discrepancies between attrition survey and graduating student survey respondents can be accepted.

One final observation regarding the stating of goals that have been achieved or are being achieved by former students also warrants mention. Although former students consistently had lower rates of goal achievement compared to graduating students, a substantial percentage of former students who stated that a particular goal was important to them nevertheless did indicate that they were in the process of achieving or have achieved that goal because of their attendance at Rutgers. Indeed, these percentages ranged from 16 percent (attending Rutgers improved chances for a new raise and/or promotion) to 58 percent (attending Rutgers enabled them to become more independent, self-reliant and adaptable). Thus, even though these students were not able to attain a degree from Rutgers, the university nevertheless had or is quite possibly continuing to have a positive effect on these respondents.

ENDNOTES

¹ These two items were not on the *1992 Graduating Student Opinion Survey*.

² Please note that the survey asked former students to indicate if they achieved each of the goals because of Rutgers. Therefore, where low percentages are found, it may be the case that the students have in fact achieved these goals, but not because of their attendance at Rutgers.

³ Eight students who indicated a degree obtained at a college after they left Rutgers (see Table 3.6) did not select the goal of obtaining a degree or certification; this accounts for the discrepancy in percentages found in Table 3.1 (32%) and Table 5.1 (27%).

⁴ The indication by graduating students that they are achieving or have achieved stated goals at higher rates than former students reinforces the work of many researchers that attribute a positive impact to college in its effect on students (see Baird, 1987; Pascarella and Terenzini, 1991; and Feldman and Newcomb, 1994 for overviews of this research on the impact of college on students). A fundamental point of this research is that the longer a student remains in college, and perhaps more importantly, succeeds in attaining his or her degree, the more likely that student will declare having achieved or being in the process of achieving various goals and attribute this accomplishment to the college or university they attended.

CHAPTER SIX: *ASSESSMENT OF RUTGERS EXPERIENCES*

INTRODUCTION

Former students who responded to the attrition survey were asked to rate their academic experiences and perceptions of Rutgers. The attrition questionnaire provided students the opportunity to look back at a range of experiences while at Rutgers, including academic experiences, contact with faculty, student services, perceptions of Rutgers, and participation in extracurricular activities. These questions were the same as those asked of the graduating seniors from the class of 1992.¹ Because former students in our survey were members of the 1987 through 1992 entering classes, both surveys represent students who were at Rutgers at approximately the same time and therefore the graduating student survey provides a comparative context for the analysis of questions found in this section of the attrition survey.

OVERALL RATING OF ACADEMIC EXPERIENCE

While the overwhelming majority (83%) of graduates rated their academic experience at Rutgers positively (i.e., either “excellent” [19%] or “good” [64%]), just over half (52%) of the students who left the university without attaining a degree gave it a similar positive assessment (Table 6.1). In fact, 13 percent of the dropouts gave Rutgers a “poor” rating, compared to only one percent of 1992 graduating student respondents. Among attrition survey respondents, Asian students had the lowest percentage of all racial/ethnic groups to rate their Rutgers academic experience as “excellent” (9%), but when combined with the percentage of Asian respondents who rated their academic experience as “good” (55%), Asian students had the highest positive rating (64%) among all racial/ethnic categories of respondents to the attrition survey.² Asian students who graduated

Table 6.1
Rating of Academic Experience

	Excellent		Good		Only Fair		Poor		Total		Total	
	Attrition %	Senior %	Attrition %	Senior %	Attrition %	Senior %	Attrition %	Senior %	Attrition %	Senior %	Attritior (N)	Senior (N)
Responding Students	12	19	40	64	35	15	13	1	100	99	356	4,016
Race/Ethnicity												
African-American	15	14	32	64	44	20	10	3	101	100	41	322
Asian	9	15	55	68	25	16	11	2	100	100	44	377
Latino	11	10	44	63	33	24	11	3	99	100	27	193
White	12	20	39	58	35	21	14	2	100	100	234	3,007
Other	22	21	22	64	44	14	11	1	99	100	9	117
Gender												
Female	13	19	42	65	37	15	7	1	99	100	218	2,374
Male	9	20	36	63	31	15	23	2	99	100	137	1,641
Campus Location												
Camden	14	20	0	66	71	13	14	1	99	100	34	587
Newark	33	14	50	68	17	17	0	1	100	100	54	652
New Brunswick	14	20	32	63	41	16	13	1	100	100	267	2,776

in 1992 also gave one of the highest positive ratings of academic experience (83%) among the racial/ethnic categories presented in Table 6.1. (The “other” category had the highest percentage of graduating students (85%) rating their academic experience at the university as positive.) Former students who were white had the highest percentage of respondents giving the university a “poor” rating (14%). All racial/ethnic groups in the graduating student survey had extremely low percentages of students stating that their Rutgers academic experience was “poor.”

Among attrition survey respondents, males rated their Rutgers academic experience more poorly when compared to females (23% vs. 7%). There were no substantive observed differences between male and female responses to the graduating student survey. The majority of Newark students in both the attrition survey and the graduating student survey rated their academic experiences positively (83% and 82%, respectively), while a large difference emerged between Camden students who dropped out and who graduated in the percentage giving a positive rating to their academic experiences (14% vs. 86%, respectively).

FACULTY INTERACTION

Student-faculty interaction outside the classroom was fairly widespread among graduating students, but much less frequent among those students who dropped out (Table 6.2). Overall, graduates compared to former students had more “frequent” (16% vs. 6%) and more “occasional” contact (42% vs. 27%) with faculty. This pattern of responses for graduating and former students holds for most of the student categories of race/ethnicity, gender and campus. Only Newark graduating students indicated a lower rate of occasional contact with faculty when compared to Newark students who withdrew from Rutgers without receiving a degree (39% compared to 50%).

Table 6.2
Faculty Interaction

	Frequent		Occasional		Rare		Never		Total		Total	
	Attrition %	Senior %	Attrition %	Senior %	Attrition %	Senior %	Attrition %	Senior %	Attrition %	Senior %	Attrition (N)	Senior (N)
Responding Students	6	16	27	42	46	34	21	8	100	100	1,295	4,029
Race/Ethnicity												
African-American	7	14	29	45	44	32	20	9	100	100	41	324
Asian	2	11	30	41	47	39	21	8	100	99	43	377
Latino	0	17	22	45	48	29	30	9	100	100	27	194
White	7	16	27	41	46	35	20	8	100	100	234	3,017
Other	0	26	33	37	56	26	11	10	100	99	9	117
Gender												
Female	6	16	28	42	44	34	22	8	100	100	218	2,386
Male	6	15	26	41	48	35	19	9	99	100	136	1,642
Campus Location												
Camden	0	15	14	45	57	31	28	10	99	101	34	584
Newark	0	15	50	39	33	36	17	10	100	100	54	653
New Brunswick	9	16	29	42	41	35	21	8	100	101	266	2,791

This finding that students who withdrew from Rutgers had lower faculty contact when compared to students who graduated from the university is consistent with the theoretical work of Tinto (1993) who posited that contact with faculty by undergraduates leads to better student academic integration and hence would reduce the likelihood that such students would withdraw from school before attaining of a degree.³

OVERVIEW OF PERCEPTIONS OF RUTGERS

Students were asked whether they agreed or disagreed with thirty statements about their Rutgers experiences. Responses to these statements were tabulated according to four main areas for analysis: general, academic, campus climate, and social activities (Table 6-3). Overall, most students from both surveys had positive perceptions of Rutgers in many of these areas, and there were very few differences between the two groups of survey respondents.

Table 6.3
Overview of Rutgers Experience

	Strongly Agree		Agree		Disagree		Strongly Disagree		Overall Rank*		Total N	
	Attrition Senior		Attrition Senior		Attrition Senior		Attrition Senior		Attrition Senior		Attrition Senior	
	%	%	%	%	%	%	%	%			Attrition	Senior
GENERAL												
There were comfortable residence halls at Rutgers	9	8	67	71	18	18	7	4	13	12	329	3,265
There were good computer facilities at Rutgers	12	15	70	63	16	18	2	5	8	13	333	3,873
Cost of attending Rutgers was reasonable	18	21	54	56	22	17	6	5	27	14	351	4,015
Rutgers' staff cared about individual students	4	4	36	41	42	40	19	15	24	28	343	3,941
ACADEMIC EXPERIENCE												
Rutgers had high quality academic programs	28	27	60	65	9	7	2	1	4	2	351	4,010
Rutgers had a high-quality program in my major	21	29	56	51	16	14	8	5	12	11	324	4,007
Students must be above average to be admitted to Rutgers	8	12	47	55	40	29	5	4	19	19	344	3,923
Rutgers' faculty cared about individual students	4	8	37	52	40	30	19	10	21	23	351	4,007
There were opportunities to participate in a research project(s) with faculty	2	16	30	27	53	41	16	16	27	29	317	3,742
CLIMATE												
It was important for Rutgers to provide a multicultural environment	27	36	59	52	12	9	2	3	16	3	342	3,970
Minority students were afforded the same treatment as other students in the classroom	24	30	63	55	9	10	4	5	5	7	340	3,902
Rutgers should continue to increase its efforts in recruiting minority students, faculty and staff	20	21	37	40	30	28	12	11	17	21	329	3,855
Students from various racial and ethnic backgrounds got along well at Rutgers	9	6	64	60	22	27	4	6	14	18	344	3,861
Women were afforded the same treatment as men in the classroom	26	25	67	61	5	11	2	2	2	6	344	3,951
Male and female students generally respected one another	16	17	73	68	10	13	1	2	3	8	347	3,989
I found it hard to make friends at Rutgers	9	2	17	12	48	51	27	36	28	4	349	3,997
Students at Rutgers were friendly	8	9	72	77	17	13	3	1	10	5	346	3,968
Many students at Rutgers use alcohol and/or other drugs	41	38	41	43	18	17	0	2	9	9	339	3,847
I didn't have as many friends as I would have liked at Rutgers experience	12	6	25	26	44	48	18	20	26	16	349	3,940
I often felt "lost" or "alone" at Rutgers	12	17	44	50	32	26	12	6	18	17	332	3,931
(I seldom felt "lost" or "alone" at Rutgers-Senior Survey)	15		26		49		11				348	
Cheating was not a widespread problem at Rutgers	6	4	56	35	27	38	11	23	16	22	339	3,942
I had close ties and identification with my college	7	14	31	46	46	31	15	8	25	24	344	4,005
Many students at Rutgers were more interested in having fun than studying	16	12	47	45	37	40	0	3	15	25	338	3,885
The values at Rutgers reflected my values	4	5	45	47	38	38	13	10	20	26	332	3,995
I was an integral part of the university community	9	11	30	39	50	42	11	9	23	27	340	3,986
SOCIAL ACTIVITIES												
Rutgers had many activities and organizations for students	36	38	56	55	7	6	1	1	1	1	348	3,980
There were excellent recreational facilities	23	26	60	54	14	17	3	3	7	10	338	3,877
Rutgers had a strong intercollegiate athletic program	16	11	64	58	18	26	2	5	11	15	332	3,889
Intercollegiate athletics were important to me as a part of my college experience at Rutgers	6	5	14	15	59	50	21	30	29	30	340	3,609

*Rank is determined by raw numbers. This accounts for why statements with the same percentage are ranked differently. Rank is based on the percentage who strongly agree/agree.

General

At least 72 percent of the students from both surveys agreed or strongly agreed that Rutgers has comfortable residence halls, good computer facilities, and that the cost of attending Rutgers is reasonable. However, less than a majority of graduates (45%) and students who dropped out (40%) agreed that Rutgers' staff cares about individual students.

Academic Experiences

Both graduating students and students who left Rutgers without receiving a degree were especially likely to agree that Rutgers has high quality academic programs (92% and 88%, respectively), but respondents to the attrition survey were less inclined compared to graduating seniors to believe that students must be above average academically to have been admitted to Rutgers (55% vs. 67%). Again, however, the perception of being cared about as an individual was a concern, especially among the students who dropped out. Only 41 percent of former students agreed that Rutgers' faculty cared about individual students, compared to 60 percent of graduating students. Approximately, one in six graduates (16%) felt strongly that there were opportunities to participate in a research project(s) with faculty, but only 2% of dropouts felt this way.⁴

Campus Climate

There were seventeen items that reflected a range of social, cultural, and ethical student experiences at Rutgers. Respondents to the attrition survey as well as respondents to the graduating student survey were asked the extent of their agreement or disagreement with these items. All four items dealing with multiculturalism and equity regarding race and ethnicity were assessed positively by a majority of students on both surveys, as were the two items dealing with equity and gender. A large majority of respondents from both the attrition and graduating student survey agreed that it was important for Rutgers to provide a multicultural environment (86% and 88%, respectively). At least 85 percent of respondents to both surveys believed that minorities were afforded the same treatment in the classroom as other students. Similarly, at least 85 percent of both respondent groups believed women were afforded the same treatment as men, and that male and female students generally respected one another. Approximately three out of four former student respondents and two out of three graduating student respondents agreed that students from various racial and ethnic backgrounds got along well at Rutgers. In addition, the majority of respondents from the attrition survey and the graduating student survey (57% and 61%, respectively) agreed that Rutgers should continue to increase its efforts in recruiting minority students, faculty, and staff.

Although a high percentage of respondents thought students at Rutgers were friendly (80% of the attrition survey respondents and 86% of the graduating student survey respondents), there were differences among the two groups in making friends. Twenty-six percent of students who dropped out found it hard to make friends

at Rutgers, compared to 14 percent of students who graduated. Also, 12 percent of former students strongly agreed that they didn't have as many friends as they would have liked compared to six percent of graduating students. Roughly one-third of respondents on both surveys agreed that they did not have as many friends as they would have liked while attending Rutgers, and that they often felt "lost" or "alone" at the university.

Students generally reported feeling some attachment to the Rutgers community, although these feelings were far from universal. Graduating students were slightly more likely than students who dropped out to say identification with their undergraduate college played a positive role in their college experience (67% vs. 56%). However, the gap between survey respondents is even wider in the percentage of students who felt they had close ties and identification with Rutgers (60% of the graduating students and 38% of the former students). In addition, half of the graduating students but only 39 percent of former students reported feeling an integral part of the university community. About half of the students from both surveys believed that the values at Rutgers reflected their own values.

Finally, a large majority of former and graduating students agreed that many Rutgers students used alcohol and/or other drugs (82% and 81%, respectively). A plurality of respondents to both surveys also agreed with the notion that many students at Rutgers were more interested in having "fun" than in studying (63% of former students and 57% of graduating students agreed or strongly agreed with this perception). It is interesting to note that 62 percent of the students who dropped out felt that cheating was not a widespread problem at Rutgers, but only 39 percent of the graduating students felt this way.

Social Activities

The overwhelming majority of attrition survey and graduating student survey respondents felt that Rutgers had many activities and organizations for their participation (92% and 93%, respectively) and had excellent recreational facilities (83% and 80%, respectively). Former students were more inclined to think Rutgers had a strong intercollegiate athletic program (80%) compared to graduating students (69%). Approximately 20 percent of respondents from both surveys indicated that intercollegiate athletics were an important part of their college experience.

EXTRACURRICULAR ACTIVITIES

Table 6.4 lists the rate of participation in various extracurricular activities for both graduating and former students. The overall rate of participation in extracurricular activities is slightly higher for graduating students than for former students (68% vs. 64%). Thirty-six percent of former students did not participate in an extracurricular activity and 32 percent participated in one activity, while the rate of participation among respondents to the graduating survey was more variable (32% did not participate, 19% participated in one activity, 20% participated in two activities, and 29% participated in three or more activities).

Table 6.4
Participation in Extracurricular Activities

	Attrition %	Senior %
Activities Participated In		
Academic and professional	12	29
Honor societies	5	21
Intramurals	15	20
Community service	13	19
Greek life	9	12
Ethnic organizations	12	12
Event programming	6	11
Student government	6	9
Intercollegiate athletics	11	8
Campus media	5	7
Music	6	6
Religious	9	6
Theatre	6	3
ROTC	1	1
Other	17	11
Summary of Activities Participated In		
None	36	32
1	32	19
2	13	20
3 or more	19	29
	(356)	(4,045)

Table 6.5
Awareness, Utilization, and Satisfaction with Services

	Did not know about this service		Knew about the service but did not use it		Used the service and was satisfied		Used the service and was not satisfied		Total N	
	Attrition %	Senior %	Attrition %	Senior %	Attrition %	Senior %	Attrition %	Senior %	Attrition	Senior
Academic advising	5	3	27	25	32	39	36	33	339	3,982
Admissions	3	4	16	21	64	63	16	11	331	3,887
Bookstore	0	0	0	1	87	84	13	15	341	3,989
Campus security	2	3	52	54	36	27	10	16	338	3,947
Career planning and services	20	3	56	40	12	38	12	18	340	3,969
College cultural programs	20	23	52	52	22	21	6	4	338	3,937
Computer services	7	4	32	23	48	59	13	14	343	3,979
Dining services	2	2	10	21	64	51	23	25	345	3,973
Disabled Student Concerns	49	*	48	*	2	*	1	*	338	*
Educational Opportunity Fund (EOF)	35	27	49	61	12	9	4	2	332	3,963
Financial Aid	4	3	38	51	33	30	25	17	338	3,967
First year student orientation	5	12	11	28	67	48	16	12	346	3,935
Health services	4	3	38	33	49	42	10	22	341	3,992
Housing	1	2	24	43	57	42	17	12	344	3,987
Intercollegiate athletics programs	8	7	70	73	18	18	4	2	338	3,974
International student services	36	34	59	60	4	5	1	1	342	3,957
Library	0	0	8	2	86	91	6	7	344	4,004
Minority affairs	26	29	61	64	10	5	4	2	340	3,949
Parking	3	1	33	15	21	21	43	63	342	3,993
Psychological counseling	38	26	49	62	6	9	7	3	341	3,978
Reading, writing, math, and study skills improvement	23	23	51	61	21	13	5	3	342	3,981
Recreational services	13	13	36	35	48	49	4	3	341	3,981
Registration	0	1	2	2	62	51	36	46	340	3,986
Schedules of classes	1	0	2	1	69	56	28	42	343	3,987
Student accounting/bursar/cashier	8	5	12	11	60	63	20	21	337	3,965
Student Center	2	1	6	7	87	84	6	8	343	3,985
Student employment	15	15	57	56	23	20	6	9	341	3,963
Transportation (if applicable)	11	13	14	25	41	33	34	30	309	3,434
Tutoring	11	14	59	70	22	12	9	3	340	3,970
Undergraduate catalogs	9	5	13	10	69	79	9	6	335	3,956

* Question not asked on Senior Survey

Academic and professional activities received the highest rate of participation among graduating students (29%), followed by honor societies (21%) and intramurals (20%). Attrition survey respondents selected the “other” category at the highest rate (17%), followed by intramurals (15%), and community service (13%).

RUTGERS SERVICES AND STUDENT LIFE

Attrition survey and graduating survey respondents were asked to assess their awareness, use of, and satisfaction with 30 different services offered at Rutgers.⁵ Overall, the majority of respondents to the attrition survey was aware of most of these services, and utilization and satisfaction with Rutgers services were moderate to high. The responses by former students to this section of the attrition survey are presented in Tables 6.5, 6.6 and 6.7. These responses are compared to the responses given by graduating students in 1992 to the same set of questions. Table 6.5 shows the specific percentage distribution for each service, while Table 6.6 ranks the services based on respondent awareness of their existence and Table 6.7 ranks the services based on user satisfaction.

Table 6.6
Awareness of Rutgers Services

Rank	Service	Awareness Percentage		Total N	
		Attrition %	Senior %	Attrition	Senior
1	Bookstore	99	99	341	3,989
1	Library	99	99	344	4,004
1	Registration	99	99	340	3,986
1	Schedules of classes	99	99	343	3,987
5	Housing	99	98	344	3,987
6	Campus security	98	97	338	3,947
6	Dining services	98	98	345	3,973
6	Student Center	98	99	343	3,985
9	Admissions	97	96	331	3,887
9	Parking	97	99	342	3,993
11	Financial Aid	96	97	338	3,967
11	Health services	96	97	341	3,992
13	Academic advising	95	97	339	3,982
13	First year student orientation	95	88	346	3,935
15	Computer services	93	96	343	3,979
16	Intercollegiate athletics programs	92	93	338	3,974
16	Student accounting/bursar/cashier	92	95	337	3,965
18	Undergraduate catalogs	91	95	335	3,956
19	Transportation (if applicable)	89	87	309	3,434
19	Tutoring	89	86	340	3,970
21	Recreational services	87	87	341	3,981
22	Student employment	85	85	341	3,963
23	Career planning and services	80	97	340	3,969
23	College cultural programs	80	77	338	3,937
25	Reading, writing, math, and study skills improvement	77	77	342	3,981
26	Minority affairs	74	71	340	3,949
27	Educational Opportunity Fund (EOF)	65	73	332	3,963
28	International student services	64	66	342	3,957
29	Psychological counseling	62	74	341	3,978
30	Disabled Student Concerns	51	*	338	*

* Question not asked on Senior Survey

Awareness

All but six of the 30 services listed were known to 80 percent or more of the respondents participating in both surveys (Table 6.6). Furthermore, all of the services were known to over 60 percent of the respondents participating in both surveys, with the exception of the disabled student concerns service (51%) listed on the attrition survey. In fact, all of the services with comparatively low awareness levels among respondents could be thought of as being relevant to specialized groups and thus not services that all students would necessarily know existed. For both former and graduating respondents, these latter services include: college cultural programs (80% and 77%, respectively); reading, writing, math, and study skills services (both 77%); minority

Table 6.7
User Satisfaction with Rutgers Services

Rank	Service	Satisfaction Percentage		Total N	
		Attrition %	Senior %	Attrition	Senior
1	Student Center	94	91	343	3,985
2	Library	93	93	344	4,004
2	Recreational services	93	94	341	3,981
4	Undergraduate catalogs	88	93	335	3,956
5	Bookstore	87	85	341	3,989
6	Health services	83	66	341	3,992
7	Intercollegiate athletics programs	81	90	338	3,974
7	Reading, writing, math, and study skills improvement	81	81	342	3,981
9	Admissions	80	85	331	3,887
9	Educational Opportunity Fund (EOF)	80	82	332	3,963
9	First year student orientation	80	80	346	3,935
9	Student employment	80	69	341	3,963
13	Campus security	79	63	338	3,947
13	College cultural programs	79	84	338	3,937
15	Computer services	78	81	343	3,979
15	International student services	78	83	342	3,957
17	Housing	77	78	344	3,987
18	Student accounting/bursar/cashier	75	75	337	3,965
19	Dining services	74	67	345	3,973
20	Minority affairs	72	71	340	3,949
21	Schedules of classes	71	57	343	3,987
21	Tutoring	71	80	340	3,970
23	Registration	63	53	340	3,986
24	Disabled Student Concerns	62	*	338	*
25	Financial Aid	58	64	338	3,967
26	Transportation (if applicable)	54	52	309	3,434
27	Career planning and services	52	67	340	3,969
28	Academic advising	47	54	339	3,982
29	Psychological counseling	46	75	341	3,978
30	Parking	33	25	342	3,993

* Question not asked on Senior Survey

affairs (74% and 71%, respectively); Educational Opportunity Fund (EOF) (65% and 73%, respectively); international student services (64% and 66%, respectively); and psychological counseling (62% and 74%, respectively). The only service with significantly different awareness levels between the two survey groups was career planning and services. Understandably, graduating students (97%) were more aware of this service than students who left the university before attaining a degree (80%).

Utilization

There were wide variations in students' use of services. Generally, the services that were most known to the students were also the most used. The most widely known services that were not used by former and graduating students, respectively, included intercollegiate athletics programs (70% and 73%, respectively), campus security (52% and 54%, respectively), and student employment (57% and 56%, respectively) (Table 6.5). Not surprisingly, services aimed at specific undergraduate populations were less likely to be used by all students. These included minority affairs (61% and 64%, respectively), international student services (59% and 60%, respectively), psychological counseling (49% and 62%, respectively), college cultural programs (52% for both former and graduating students), and disabled students concerns (48% among attrition survey respondents). Over a third of both former and graduating students did not use recreational services available to them at the university. Graduating students compared to students who dropped out of Rutgers had higher percentages of respondents not using the following services: reading, writing, math, and study skills (61% vs. 51%); tutoring (70% vs. 59%); EOF (61% vs. 49%); and financial aid (51% vs. 38%). And again, not surprisingly, graduating students were more likely to use career planning and services compared to former students (60% and 44%, respectively).

Satisfaction with Services

Respondents were asked whether or not they were satisfied with the services that they used. Table 6.7 shows the approval rating of each service given by respondents who used each service. The only service that received a distinctly low approval rating was parking services. This was true for both former (33%) and graduating students (25%). There were a few services that received lower levels of satisfaction by graduating students compared to students who withdrew from Rutgers. Health services (66% and 83%, respectively), campus security (63% and 79%, respectively), schedules of classes (57% and 71%, respectively), student employment (69% and 80%, respectively), registration (53% and 63%, respectively), and dining services (67% and 74%, respectively) all fell into this category. These differences between graduating and former students may be a function of the amount of time spent at Rutgers, since this would increase the likelihood of one bad experience tarnishing a student's opinion of a particular service.

On the other hand, attrition survey respondents gave lower approval ratings to certain Rutgers services compared to respondents to the graduating student survey. These services included psychological counseling (46% vs. 75%), career planning (52% vs. 67%), academic advising (47% vs. 54%), financial aid (58% vs. 64%), and tutoring (71% vs. 80%).

CONCLUSION

An expected result emerging from students' responses about their degree of satisfaction with their Rutgers academic experience is that a higher percentage of graduating students indicated a greater degree of satisfaction (83% of graduating students indicated that their academic experience was "excellent" or "good") compared to former students (only 52% of former students indicated that their academic experience was "excellent" or "good"). What was a bit surprising was that a majority of former students gave a positive rating to their academic experience at Rutgers. Moreover, only 13 percent of former students stated that their Rutgers academic experience was "poor." This result signifies that regardless of the type or extent of reasons for withdrawing from Rutgers, these factors do not have a deleterious effect on students such that they view negatively the time that they spent at the university.

The results regarding faculty interaction appear to support the argument that undergraduate contact with faculty members is an important factor in the retention of students. Attrition survey respondents were much less likely to have had engaged in interaction with faculty members compared to graduating student respondents. This lack of contact with faculty among former students seems to suggest that they are not adequately integrated academically and consequently become prone to leaving Rutgers before attaining a degree. Although such a conclusion may in fact be true, part of the reason for limited contact with faculty by former students is simply a function of their length of attendance at the university. Because these attrition survey respondents took very few upper level courses,⁶ where the likelihood of faculty-student interaction is greatest, the low rate of faculty contact reported by these respondents is partly the result of diminished opportunity to engage in faculty interaction compared to graduating students. Notwithstanding this caveat, the importance of faculty contact during one's undergraduate career must be counted as playing a critical role in ensuring that a student will graduate. Indeed, the recent undergraduate initiatives emerging from the university's strategic planning efforts such as the Rutgers Calculus Project and the Writing and Speaking at Rutgers Program are examples of what can be done to increase faculty-undergraduate interaction.⁷

The results presented above regarding the perceptions of Rutgers by former students indicate that they retain a positive view of the university even though they left Rutgers before graduating. Moreover, many of the differences between attrition survey and graduating student survey respondents in indicating satisfaction or dissatisfaction with various items describing the university were minimal. However, former students did tend to indicate that they were somewhat disconnected from the university community at higher rates than respondents

who did graduate from Rutgers. This was indicated in the responses to items regarding their association with fellow students and their identification to the university. In addition, former students tended to be aware of the existence of many of the student services at Rutgers. Although they often did not utilize these services at the rate of graduating students, respondents to the attrition survey indicated satisfaction with Rutgers services at a rate that is much higher than what would blindly be assumed.

ENDNOTES

¹ *1992 Graduating Student Opinion Survey.*

² To reiterate the point made in Chapter 3, these percentages for the various racial/ethnic categories are based on very low sample sizes and consequently need to be approached with caution. This is also true for the campus-wide breakouts.

³ See the discussion in the concluding section of this chapter for an elaboration of this point.

⁴ The reader needs to keep in mind, however, that research projects usually arise in the latter years of college and many former students withdrew from the university before they were able to take upper division classes where faculty-student collaboration on research projects would take place.

⁵ On the graduating student survey 29 services were evaluated; the “Disabled Student Concerns” item was added to the attrition survey.

⁶ Forty-nine percent of respondents left Rutgers after the first year and 35 percent left after their second year at Rutgers.

⁷ *University Strategic Plan: A New Vision of Excellence Implementation Progress Report.*

CHAPTER SEVEN: *REVIEW OF FINDINGS*

INTRODUCTION

A comparison of undergraduate attrition rates at Rutgers to attrition rates at other public AAU institutions revealed that Rutgers performs well in this area. It has one of the lowest one-year, two-year, and three-year rates of attrition among public AAU schools and has made substantial progress in reducing undergraduate attrition during the past two decades. Findings such as these support the position that the many and varied retention and academic support programs that presently exist at the university have met, at the very least, with some success. But in order to continue the success of reducing undergraduate attrition at Rutgers, the gathering of information that will inform our understanding of attrition and the corresponding efforts to control and reduce its occurrence at the university is needed. In an effort to meet this need, a survey of former Rutgers undergraduates was undertaken and this report presents its results.

THE SURVEY

An attrition survey designed for former students who left Rutgers before graduating was administered during August and September 1995. Selected combinations of students from the 1987 through 1992 cohorts of first-time undergraduates who did not register for classes for three consecutive semesters were identified and included in the target survey population. These former students were further distinguished by the number of years they had attended Rutgers before they withdrew from the university. A total of 1,295 students were identified and sent a closed-ended questionnaire via United States mail. The survey instrument asked a variety of questions pertaining to reasons for leaving Rutgers, present educational and employment status, perceptions regarding the university, academic goals, and academic experiences at Rutgers.

MAJOR FINDINGS OF THE SURVEY

A review of some of the major findings of this survey of former undergraduates follow.

Characteristics of the Survey Respondents

A total of 365 survey instruments were returned for a response rate of 27 percent. The profile of survey respondents was not too different from the overall profile of the target population and the overall undergraduate population. Females and non-EOF respondents were somewhat over-represented among respondents. Moreover, the relatively low sample "N"s in some of the categories of students (e.g., race/ethnicity and campus affiliation) necessitate caution when looking at the distribution of the survey responses by these categories of student classification.

In addition to general student demographic and academic information available from the university registrar's database, respondents were asked to provide additional information such as family income, parents' educational attainment, and marital status. Students were also asked to provide information regarding their academic pursuits since they left Rutgers and their current employment situation.

Respondents were somewhat diverse with regard to both parental educational level and family income. Most respondents indicated that they were not married when they attended Rutgers nor that they are presently married, although females had a higher rate of marriage presently than males. Fifty-two percent of respondents indicated that they had worked both full-time and part-time at different points of their undergraduate studies at Rutgers. Forty percent of respondents worked exclusively part-time and six percent worked exclusively full-time while at Rutgers. Presently, one-third of respondents are employed part-time while four out of ten respondents are working full-time. Almost two out of ten respondents are presently unemployed.

Seventy-seven percent of survey respondents have attended at least one other institution of higher education since leaving Rutgers, while approximately one-third of respondents attained at least one postsecondary degree or certificate by the time the attrition survey was administered.

Reasons for Leaving Rutgers

Respondents cited a variety of reasons for leaving Rutgers. These included academic, financial, and other reasons that were both student-related and institutional-related. The reason given most often by respondents for withdrawing from Rutgers was transferring to another college or university. Further analysis of this reason for withdrawing from Rutgers revealed that students who selected transferring to another college were more likely to be generally dissatisfied with the academic environment at Rutgers, while students who did not indicate that they left Rutgers because they transferred to another school cited more student-related rather than Rutgers-related reasons for withdrawing from the university.

Beyond the selection of transferring to another school, it is clear from the responses given by former students that the overriding factors contributing to their decision to withdraw from Rutgers before attaining a degree are academic in nature. Of the ten reasons most cited by students, seven were academic reasons and included both individual-related (i.e., attributable to the student) and Rutgers-related (i.e., attributable to Rutgers) items. This finding provides support for the thesis that non-integration of the student into the academic community of Rutgers is an important factor in the decision to leave Rutgers before attainment of a degree.

Results from this section of the attrition survey also show that financial considerations of students are critical to their decision to remain or withdraw from Rutgers. Respondents indicated the salience of financial concerns by their selection of items such as the lack of money to finance their education and the lack of adequate financial aid. Although the rate of selection for items that indicated personal and social reasons for withdrawing

from Rutgers was generally lower than the rates given for either academic or financial considerations, these factors also contributed to the decision of many students to withdraw from the university.

Because the number of reasons cited for withdrawing from school can be taken as indicative of the degree of difficulty a student may have been experiencing while at Rutgers, it was of interest to determine the extent to which reasons for withdrawing from Rutgers were cited by former students. Almost one in two respondents cited between two and four reasons, twenty percent gave only one reason, and one-third of the respondents cited five or more reasons for withdrawing from the university.

Such findings attest to the variety of problems that students cite as reasons for the discontinuance of their studies at Rutgers. However, the multiplicity of reasons affecting student withdrawal from Rutgers also seriously affects the types and range of intervention strategies that can be implemented to help students overcome these barriers and successfully complete their studies at the university. Indeed, as a testament to the wide expanse of challenges that students face during their undergraduate careers, there are already a plethora of programs in existence at the university that are designed to help undergraduates succeed at Rutgers and attain their degrees. Some of these programs are geared to help first year students transcend the difficulties that they may face during their initial year at Rutgers (e.g., the Gateway Program), while others are geared to help students throughout their undergraduate careers (e.g., the EOF and TRIO Programs). If the reasons for withdrawing from Rutgers as stated by the attrition survey respondents reveal anything, they most definitely show that there is a need for programs that are currently in place.

Setting and Achievement of Goals

The attrition survey also asked respondents about the importance and achievement of various goals. The goals asked about in the attrition survey instrument cover many dimensions of student life. These include academic, career, social, and personal dimensions. The responses by survey participants to the attrition survey were compared to responses to the same questions asked of graduating seniors who participated in the *1992 Graduating Student Opinion Survey*.

Former students lagged behind graduating seniors in attributing their achievement of goals to Rutgers. Although former students had lower rates of attributing the achievement of goals to Rutgers when compared to graduating seniors, substantial percentages of former students nevertheless did indicate the importance of Rutgers in their achievement of goals ranging across academic, career, social and personal dimensions.

On the other hand, former students identified many of the goals listed in the survey as important at higher rates than graduating seniors. In the setting of academic, career, social, and personal goals, former students consistently had higher rates of selecting goals to achieve compared to students who graduated from Rutgers. A number of reasons were offered to explain this finding and included: former students shared similar qualities that caused them to select goals to achieve at higher rates than graduating students; the failure to achieve many of the

stated goals seemingly enhanced their importance among former students; and the extended period of time between their attendance at Rutgers and when the survey instrument was administered may have caused respondents to attribute more importance to these goals than they would have if the survey was administered closer to the time when they attended the university.

Assessment of Rutgers Experiences

The following findings were among those presented in this section of the report:

- Students who graduated from Rutgers had a higher degree of satisfaction than students who did not graduate. However, very few of the former students responding to the attrition survey indicated complete dissatisfaction with their academic experience while at Rutgers;
- Attrition survey respondents indicated much less faculty contact than students who graduated from Rutgers;
- Many students who left Rutgers prior to achieving a baccalaureate degree retain a positive view of the university;
- Except for items that described Rutgers as a place where students were closely connected as a university community (i.e., former students indicated more dissatisfaction with the description of Rutgers as a place where students are an integral part of the university community), the extent of differences between students who left the university and those who graduated with regard to their satisfaction with various descriptions of Rutgers were minimal;
- Attrition survey respondents surprisingly indicated levels of satisfaction that were higher than what would be expected given that these students left the university before graduating.

CONCLUSION

This report provides the findings of a survey administered to students who had attended Rutgers but withdrew before attaining their baccalaureate degree. A look at undergraduate attrition rates at Rutgers comparatively and over time revealed that the university has been meeting the problem of attrition with some success. The comparatively low rates of attrition and their gradual decline over the past two decades yield support for the position that retention and academic support programs have been effective at Rutgers. Yet it is also clear that more needs to be done in the effort to reduce undergraduate attrition at the university. Toward this end, a survey of former undergraduates who withdrew from Rutgers before graduating was undertaken and this report contains its results. It is hoped that these results will contribute to enhancing our understanding of undergraduate attrition at Rutgers and provide valuable information to administrators and faculty in their ongoing effort to reduce undergraduate attrition at Rutgers.

BIBLIOGRAPHY

- Allison, P. D. 1984. *Event History Analysis: Regression for Longitudinal Event Data*. Beverly Hills, CA: Sage Publications.
- _____. 1995. *Survival Analysis Using the SAS System: A Practical Guide*. Cary, North Carolina: SAS Institute's Author Service.
- Astin, A. W. 1975. *Preventing Students from Dropping Out*. San Francisco: Jossey-Bass.
- _____. 1993. *What Matters in College: Four Critical Years Revisited*. San Francisco: Jossey-Bass.
- _____. 1996. *How Good is Your Institution's Retention Rate*. Unpublished manuscript. Los Angeles: Higher Education Research Institute, UCLA.
- Astin, A. W., Avalos, J. and Tsui, L. 1996. *Degree Attainment Rates at American Colleges and Universities: Effects of Race, Gender, and Institutional Type*. Los Angeles: Higher Education Research Institute, UCLA.
- Bean, J. P. 1982. Student Attrition, Intentions and Confidence. *Research in Higher Education* 17: 291-320.
- Bellah, R. N., R. Madsen, W. M. Sullivan, A. Swidler, and S. M. Tipton. 1992. *The Good Society*. New York: Vintage Books.
- Berkner, L. K., Cuccaro-Alamin, S., and McCormick, A. C. Descriptive Summary of 1989-90. Beginning Postsecondary Students: 5 Years Later. National Center for Education Statistics, *Statistical Analysis Report*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. May, 1996.
- Bowles, S., and H. Gintis. 1976. *Schooling in Capitalist America*. New York: Basic Books.
- Carroll, D. 1989. *College Persistence and Degree Attainment for 1980 High School Graduates: Hazards for Transfers, Stopouts, and Part-timers*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.
- Carter, D. and R. Wilson, 1995. *Annual Status Report on Minorities in Higher Education*. Washington, D.C.: American Council on Education.
- Chaney, B., and E. Farris. 1991. *Survey on Retention at Higher Education Institutions*. Higher Education Surveys Report, Survey Number 14. A Report Written for Planning and Evaluation Service, Office of the Undersecretary, U.S. Department of Education.
- Chapman, D. W. 1982. New Directions for Institutional Research: Studying Student Attrition. *Resources for Research on Student Attrition*. Pp 93-100. San Francisco: Jossey-Bass Publishers.
- Collett, D. 1994. *Modelling Survival Data in Medical Research*. London: Chapman and Hall.
- Collins, R. 1979. *The Credential Society*. New York: Academic Press.
- Duncan, O. D., D. L. Featherman, and B. Duncan. 1972. *Socioeconomic Background and Achievement*. New York: Seminar Press.
- Featherman, D. L., and R. Hauser. 1978. *Opportunity and Change*. New York: Academic Press.
- Fishbein, M. and Ajzen I. *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, Mass.: Addition-Wesley, 1975.
- Fitzgerald, R., Berkner, L., Choy, S., Hoachlander, G., Horn, L. 1994. Descriptive Summary of 1989-90. Beginning Attrition Survey

Postsecondary Students: Two Years Later. National Center for Education Statistics, *Statistical Analysis Report*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. July, 1994.

Jennings, J. T. 1993. *Voting and Registration in the Election of November 1992*. Current Population Reports, pp. 20-446. Washington, DC: U.S. Government Printing Office.

Kroc, R., R. Howard, and D. Woodard. 1995. *Predicting Graduation Rates: A Study of Land Grant, Research I and AAU Universities*. Association for Institutional Research Forum, Boston

Lenning, O., P. Beal, and K. Sauer. 1980. *Retention and Attrition. Evidence for Action and Research*. Boulder: National Center for Higher Education Management Systems.

Mortenson, T. G. 1996a. Freshman-to-Sophomore Persistence by Institutional level, Control and Academic Selectivity. *Postsecondary Education Opportunity*, The Mortenson Research Seminar on Public Policy Analysis of Opportunity for Postsecondary Education. Number 44. Pp 1-9. February 1996.

Mortenson, T. G. 1996b. FY1996 State Budget Actions. *Postsecondary Education Opportunity*, The Mortenson Research Seminar on Public Policy Analysis of Opportunity for Postsecondary Education. Number 44. Pp 10-14. February 1996.

Mortenson, T. G. 1996c. Political Engagement of College Students 1966 to 1995. *Postsecondary Education Opportunity*, The Mortenson Research Seminar on Public Policy Analysis of Opportunity for Postsecondary Education. Number 52. Pp 1-8. October 1996.

Mortenson, T. G. 1995. Educational Attainment. *Postsecondary Education Opportunity*, The Mortenson Research Seminar on Public Policy Analysis of Opportunity for Postsecondary Education. Number 35. Pp 1-4. May 1995.

Pascarella, E. T. 1980. Student-faculty Informal Contact and College Outcomes. *Review of Educational Research* 50: 545-95.

Pratt, D. J., Becker, E. A., Blackwell, K. M., Forsyth, B. H., Smith, T. K., Wine, J. S., Whitmore, R. W. Beginning Postsecondary Students Longitudinal Study Second Follow-up (BPS: 90/94) Final Technical Report. National Center for Education Statistics, *Technical Report*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. May, 1996.

Ronco, S. L. 1996. *How Enrollment Ends: Analyzing the Correlates of Student Graduation, Transfer and Dropout with a Competing Risks Model*. Association of Institutional Research Professional File, 61. Summer 1996.

Spady, W. 1970. Dropouts from Higher Education: An Interdisciplinary Review and Synthesis. *Interchange*. 1: 64-85.

_____. 1971. Dropouts from Higher Education: Toward an Empirical Model. *Interchange* 2: 38-62.

Stouffer, S. A. 1955. *Communism, Conformity, and Civil Liberties*. pp. 83-86. New York: Doubleday and Co., Inc.

Tinto, V. 1993. *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Chicago: The University of Chicago Press.

U.S. Department of Commerce, Bureau of the Census, Acting as Collecting Agent for the U.S. Department of Education National Center for Education Statistics, *Integrated Postsecondary Education Data System, Graduation Rate Survey*, 1997. Washington. D.C.

National Center for Education Statistics. *Digest of Education Statistics 1991*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement. July, 1991.

National Center for Education Statistics. *Digest of Education Statistics 1994*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement. July, 1994.

National Center for Education Statistics. *Digest of Education Statistics 1995*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement. July, 1995.

National Center for Education Statistics. *Digest of Education Statistics 1996*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement. May, 1996.

Willet, J. B. and J. D. Singer, 1991. *From Whether to When: New Methods for Studying Student Dropout and Teacher Attrition*. *Review of Educational Research*, 61, 407-450. American Educational Research Association.

Yamaguchi, K. 1991. *Event History Analysis, Applied Social Research Methods Series, 28*. California: SAGE Publications, Inc.