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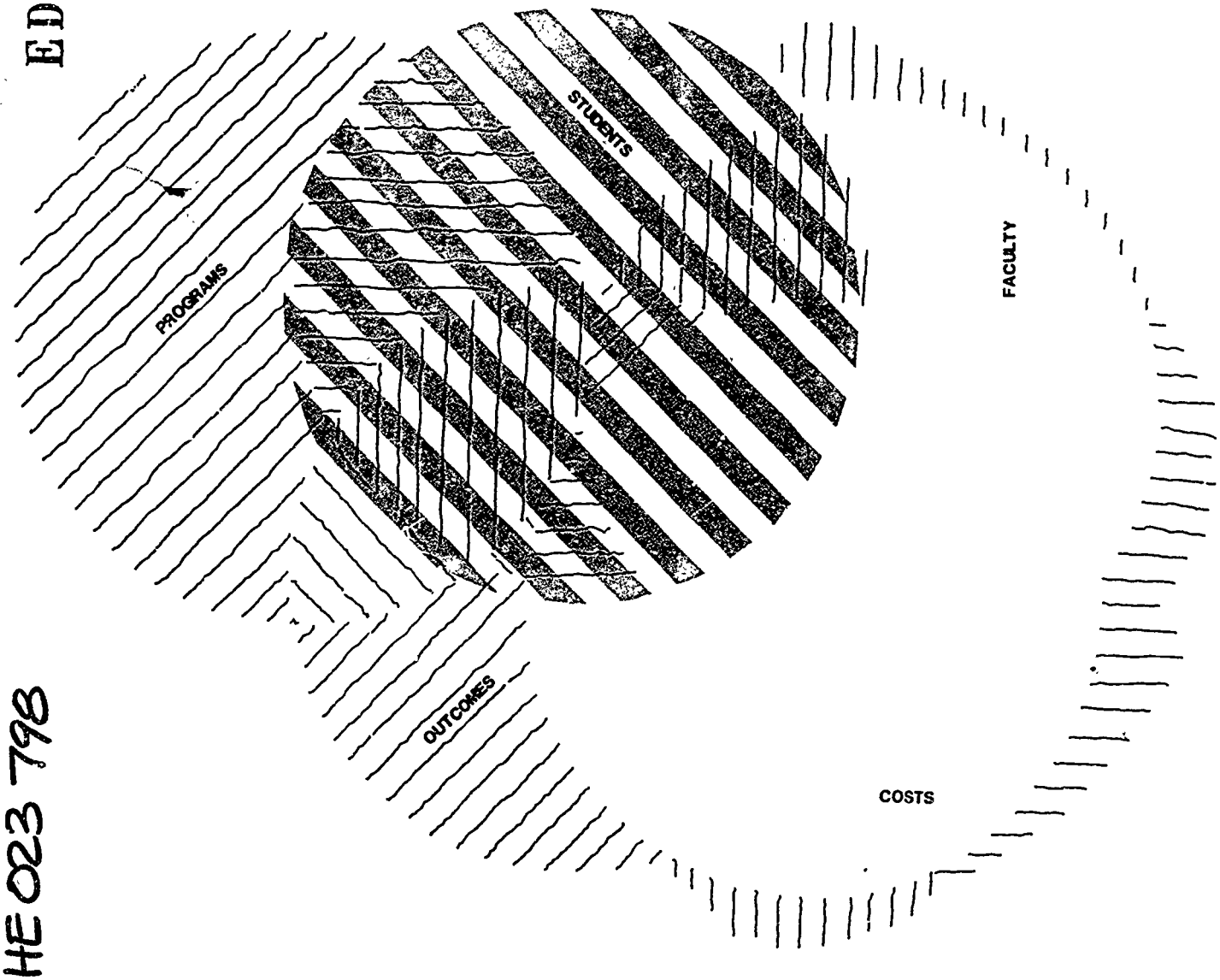
ABSTRACT

This position paper was written to answer a series of basic questions frequently asked about attrition and retention at Empire State College (ESC), New York. The questions addressed in the report are: (1) What is the attrition rate at ESC? (2) How does ESC's attrition rate compare to other colleges? (3) Who are the leavers? (4) When does attrition occur and why does it occur? (5) What are the costs of attrition? (6) What can ESC do about attrition? The paper attempts to answer these questions by mapping out student flow from the time of initial inquiry to the student's exit from the college. Twelve recommendations are outlined that are designed to form the basis of a college-wide, center-based retention program. They include: improve faculty-student interaction, improve peer interactions, be responsive to student complaints and expressed needs, present a meaningful and accurate picture of the institution, establish an early warning system, establish a recovery program at the Center level, initiate adult services and resource supports, and improve the quality of financial aid advising. Includes 51 references. (GLR).

RETENTION AND ATTRITION AT EMPIRE STATE COLLEGE



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RETENTION AND ATTRITION

AT EMPIRE STATE COLLEGE

A Working Paper

on the State of the Art

Prepared for the Research Evaluation Administrative Group

and the Administrative Council

Prepared by the

Office of Research and Evaluation

Empire State College

Saratoga Springs, New York 12866

Revised Spring 1982

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APPENDIX A

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The views of attrition and retention presented in this working paper are those of the authors and in no way represent College policy or endorsement. For the reader who is not familiar with Empire State College and its educational ideas, such as a degree program plan and mentoring, we urge the person to read an ESC Bulletin which explains much more fully the concepts used in this working paper.

ATTRITION/RETENTION HIGHLIGHTS:

Question One: What is the Attrition Rate at ESC?

--ESC's attrition rate at the end of one year is about 27%; at the end of four years, approximately 55%, using a research definition.

--ESC's attrition rate has increased since 1975, going from about 40% to 55%.

Question Two: How does ESC's Attrition Rate Compare with other Colleges?

--ESC's attrition rate is about the same as the attrition rates of typical colleges and universities across the nation, but is slightly higher than other SUNY Colleges of Liberal Arts and Sciences.

--Although attrition data from other nontraditional colleges is limited, attrition rates at these colleges range from 20% to 75%.

Question Three: Who are the Leavers?

--Men are more likely to leave than women.

--Male students who are young, single, and working full-time at blue collar jobs are more likely to leave the College.

Question Four: When Does Attrition Occur?

--Students withdraw during the assessment process more than any other time during their enrollment at the College.

--Approximately 13% of the students leave the College in the first two months after entry; almost all (85%) students who complete assessment graduate.

Question Five: Why Does Attrition Occur?

--Attractive as the unique features of ESC are in enrolling students, these same features become causes of attrition. Flexibility, credit for prior learning, work and study at same time, and independence to plan one's own degree program are prime reasons for enrolling. About one-sixth to one-fourth of the students report these same features as obstacles in getting through the ESC program.

--Personal reasons account for more than half of the reasons students cite for leaving.

--An unsatisfying student-mentor relationship accounts for approximately one-fifth of the reasons reported by students.

Question Six: What does Attrition Cost?

--The financial, academic and psychological costs of attrition are high. The replacement costs for students who leave in any given year run almost two million dollars ($1991 per student using 1980 expenditure data).

--From the faculty viewpoint, enrollment of any given student who subsequently leaves, perhaps at the assessment hurdle, represents an investment cost in energy, time and academic planning that is not recoverable.

INTRODUCTION

This position paper has been written to answer a series of basic questions frequently asked about attrition and retention at ESC.

1) What is the attrition rate at ESC?

2) How does ESC's attrition rate compare to other colleges?

3) Who are the leavers?

4) When does attrition occur?

5) Why does attrition occur?

6) What are the costs of attrition?

7) What can the College do about attrition?

In order to answer these questions and to think more systematically about the attrition issues at ESC, it is necessary to conceptualize attrition in terms of a larger framework of student flow. Therefore, this paper uses a leaky pipeline analogy to map out the flow of students from time of initial inquiry to exit from the College. This paper is intended to bring together a great deal of information now available nationally, in New York State, among other nontraditional colleges, and at ESC about various facets of the attrition/retention problem. The paper is organized in terms of the seven questions above and summarizes what we know about attrition and retention from many studies conducted at ESC and elsewhere.

A. The Pipeline Picture: How Do We Conceptualize the Problem?

There are numerous ways to think about attrition, and research on this topic has evolved along many different lines (Astin, 1975; Tinto, 1975; Spady, 1970, 1971; Cope and Hannah, 1975; Bowen, 1977). We think the distinctive features of ESC, an alternative college serving adults across the entire life cycle, require a carefully formulated framework to understand and analyze the nature, sources, consequences

and costs of attrition. The creation of such a theoretically based framework will take some time although the College is now in a position to construct such a framework.

In order to proceed with this working paper, however, we offer three different pipeline pictures. First, we take the 17 step process depicted in the Student Handbook 1980-81 as a basic way to chart out certain attrition areas. Students, in order to earn a degree at ESC, must pass through certain pressure points. Figure I, Appendix A, shows the 17 steps and pressure points from time of entry to time of exit.

A similar but more complicated picture of the ESC pipeline is shown in Figure 2--an "attrition maze" depicting a labyrinth of potential leaks and blockages in the academic, administrative, and student pipelines. Students who enroll at the College enter, in some sense, an unfathomable maze where they move or are told to move from one person or office to another both at the regional center level and at the Coordinating Center level. Figure 2, Appendix A schematically presents this maze.

To illustrate the significance of a more theoretical approach to our pipeline problem, we draw upon the work of Tinto (see Figure 3, Appendix A). Tinto's schematic diagram of the attrition process focuses on the interactions that take place between the individual and both the academic and social systems within the College and surrounding the adult student. Central to Tinto's approach are the interactions between the students and faculty in the formal academic and informal social settings (often these occur simultaneously at ESC). Both the frequency and the quality of these interactions are

crucial to modifying the students' college completion goals and commitments to the College. Factors outside the College (such as changes in employment or illness in the family) may influence significantly the students' assessment of their college goals and commitments to the College. Tinto argues if the students' college completion goals and commitments to the institution remain strong and outweigh the alternatives to pursuit of a degree, retention will occur. If not, students will withdraw. Tinto's pipeline picture requires us to focus more generally on the processes of academic and social integration although we recognize at this point such a focus is somewhat premature. We are not yet in a position to analyze data against Tinto's framework.

These three pipeline pictures give us different vantage points from which to pursue our discussions of attrition at ESC and to frame our answers to the seven questions posed in the Introduction. Let us turn to those questions.

QUESTION ONE: WHAT IS THE ATTRITION RATE AT ESC?

In order to answer this question, we need to carefully define the term, attrition, as used at ESC. There are at least four definitions of attrition that have been applied and need to be kept separate when calculating and interpreting attrition rates.

A. Administrative Definition: "One Year and a Day"

Under SUNY policies, a student who has been withdrawn from a college for one year and one day is considered to be attrition. Using cohort analysis over four different years, we now calculate our attrition rate at the end of one year as 30%; at the end of two years

50%; and at the end of four years, 55% (see Office of Research and Evaluation, 9/3/80).

B. Research Definition: "Eight Consecutive Months"

In 1975, the research office defined what it called "permanent attrition" as all those students in a given cohort who have been withdrawn for eight consecutive months and who have not reenrolled. This definition was created to essentially parallel the attrition process at traditional colleges (equated to two semesters of withdrawal exclusive of summer school). Using this definition, ESC's attrition rates in the cohorts tracked at the end of one year is about 27%.

C. Educational Definition: "Temporary Withdrawal"

One of the central features of ESC's mission is to provide a more flexible approach to student learning so that students can enroll and withdraw when educationally necessary. Thus, the phenomenon of temporary withdrawal may mean in any given period of time, say a year, a student may enroll, withdraw, reenroll and withdraw again. The rationale for this type of attrition is basically educational; that is, students may have academic reasons why it may be useful to withdraw for a certain period of time (for example, to finish completing a learning contract or to await financial or academic clearance for graduation). Using this definition, the temporary attrition rate, calculated on a monthly basis and averaged over a 12 month year, is about five percent (Office of Research and Evaluation, 12/80).

D. Life Cycle Definition: "Base Line Levels for Adults"

Because ESC enrolls adults spanning almost the entire age range, there are certain life cycle events and personal conditions that generate an irreducible level of attrition. Almost all previous research work on attrition has been done on a relatively homogeneous group of 16-23 year old students--a group with relatively fixed life cycle characteristics. Therefore, it makes some sense to consider reducing attrition for this group to near zero given the possibilities of controlling many aspects of this rather homogenous group.

When a college like ESC enrolls adults from age 16 to 80, there occur numerous personal and family events, such as death in the family, illness, job transfer or unemployment, that generate a certain level of uncontrollable, irreducible, personal attrition. What this perspective implies, then, is that attrition rates at adult based colleges like ESC have a certain minimal fixed level that cannot be controlled. In previous studies, we have found that about 16% of the attrition rate was of this irreducible kind (Office of Research and Evaluation, January 1977).

In sum, we have presented four different ways in which ESC has defined and used "attrition rates". When the question is asked--what is ESC's attrition rate?--the answer depends, in large measure, upon what definition and context is employed. For most educational, administrative and research requests, it is appropriate to consider ESC's attrition rate to be somewhere in the range of 50-55% over four years for a given cohort of entering students. To answer the question of what does an attrition rate of 50-55% mean requires us to approach the same question from a more comparative context.

QUESTION TWO: HOW DOES ESC'S ATTRITION RATE COMPARE WITH OTHER COLLEGES?

In order to gain some perspective for interpreting whether ESC's attrition rate is too high or similar to other institutions, we need to address the comparative question. The comparative question, however, contains within it a further complexity--comparing ESC to what other colleges? We shall answer the comparative question by setting forth attrition data for different types of institutions so that we can interpret ESC in the context of these types.

A. National Attrition Rates by Type of Institution

Since the first national studies were conducted in the 1930s, the degree-completion rate at four-year residential colleges has remained relatively constant at about 40%. College graduation rates are related directly to selectivity of the colleges involved. Table 1 presents the graduation rates for five types of institutions.

TABLE 1

EVENTUAL RETURN TO COLLEGE AND GRADUATION PERCENTAGES OF STUDENTS WHO WITHDRAW FROM THEIR COLLEGE OF FIRST MATRICULATION

Type of Institution at which Students Matriculated and from which They Withdrew	Percentage of Students Returning	Percentage of Students Eventually Earning Baccalaureate Degrees
Selective Private Universities	90-95	80-85
Selective Public Universities	80-85	70-75
Typical State Universities	60-70	50-60
State Colleges	40-50	30-40
Junior and Community Colleges	20-30	10-20

Sources: These data were compiled from follow-up studies reported by Astin (1972a; 1975a); Bayer, Boyer and Webb (1973); Cope (1969); Hannah (1971); and Pervin, Reik, and Dalrymple (1966).

Note: Figures taken from Cope and Hannah (1975, p. 61).

As you can see, typical state colleges show an eventual graduation rate close to 40% - so ESC's attrition rate after four years is not out of line from the attrition rates for such colleges.

B. New York State Attrition Rates by Type of Institution

SUNY's Central Office of Institutional Research has been recently compiling attrition data on cohorts of entering students. Table 2 presents a summary of attrition rates for university centers and selected arts and science colleges. Attrition is defined in terms of cohorts of "full-time, first-time students enrolled in a degree program in Fall 1973" (Office of Institutional Research, SUNY Report 4-80). Cohorts of students were followed for five plus years and the graduation/attrition rates calculated at that point. The reader should be aware that a few students were still currently enrolled, and others, who withdrew, may seek to complete a degree at some other college. In sum, the 1973 cohorts showed a SUNY-wide picture at the baccalaureate level of 54% graduates, 2% still enrolled and 44% attrition. Table 2 summarizes the data for selected institutions and selected categories of institutions.

TABLE 2

SELECTED GRADUATION/ATTRITION RATES AMONG SUNY INSTITUTIONS

Type of Institution	Graduation Rate	Still Enrolled	Attrition Rate
Empire State College	40%	5%	55%
University Centers	60%	3%	37%
SUNY - Albany	62%	1%	37%
SUNY - Buffalo	55%	4%	41%
SUNY - Stony Brook	60%	3%	37%
University Colleges	49%	2%	49%
SUC - Brockport	45%	3%	52%
SUC - Buffalo	48%	3%	49%
SUC - Fredonia	47%	3%	50%
SUC - Geneseo	60%	1%	39%
SUC - New Paltz	32%	2%	66%
SUC - Plattsburgh	61%	1%	38%
SUC - Potsdam	52%	1%	47%
Community Colleges	41%	8%	51%

Source: Office of Institutional Research and Analytical Studies, SUNY, Attrition and Retention of First-Time, Full-Time Students in Baccalaureate and Associate Degree Programs, Class of 1977. Albany, New York: Central Staff Office of Institutional Research and Analytical Studies, Report No. 4-80, December 1980.

C. Attrition Rates at Other Nontraditional Colleges and Universities

Over the years, the research office has collected research reports and self-studies from a number of nontraditional programs. Although most nontraditional colleges have not had sufficient staff to conduct a careful program of attrition research, the following data are available. We urge some caution in interpreting and using such data given the conditions under which it may have been collected, but the data are suggestive.

Metropolitan State University (St. Paul, Minnesota)

Metropolitan State University offers an alternative educational program in the Minneapolis-St. Paul metropolitan area for adults who have completed 90 quarter credits. Authorized in June 1971 as part of the Minnesota State College System, Minnesota State University admitted its first students in February, 1972, currently enrolls 2,000 students each quarter, and has graduated 2,000 students since 1973 (Metropolitan State University, Self Study Report, March 1980, page 8). Metropolitan State University has developed an individualized, community-based, student-centered educational process that gives adults the authority and responsibility for determining the content and format of their degree programs.

As part of the 1980 Self-Study, MSU reported on the graduation/attrition rates of selected samples of degree candidates, 100 selected from each of the past five years. Table 3, taken from the Self-Study Report, shows an attrition rate for this upper-division university at about 50% for FY 75 and FY 76.

TABLE 3

ENROLLMENT STATUS OF A SAMPLE
OF DEGREE CANDIDATES, FY 75-79 (N=500)

Candidate Status	FY 75	FY 76	FY 77	FY 78	FY 79
Graduate	45%	47%	41%	19%	1%
Still Active	7%	4%	15%	48%	80%
Inactive	48%	49%	44%	33%	19%

Source: Self-Study Report, March 1980, Table 9, page 74, Metropolitan State University, 1980.

The British Open University

The British Open University was the first large-scale effort to offer an alternative educational program for previously excluded adults. Utilizing the "teaching-at-a-distance" concept, the Open University received a Royal Charter in May 1969. Students enroll in Open University courses and receive study materials by mail. Television and radio broadcasts are scheduled and matched to a fixed-calendar study format, serving as content supplements. Courses employ a set of study guides, texts and readers, as well as evaluative materials. Students work through study materials, carry out assignments, and receive written tutorial comments and help as well as receive face-to-face tutorial support on a voluntary basis at study centers throughout England. Students earn a grade upon completion of the predetermined study period which uses a fixed-calendar schedule. Students also attend a compulsory one-week summer residency.

The British Open University has invested substantially in a research office which has produced many reports over the years about its students. At the end of the first six years of operation, for example, BOU had received applications from over 250,000 people and had registered over 74,000 students. The graduation/attrition data to be presented below comes from data assembled on the first five years of operation. In Table 4, for the 1971 cohort, a total of 43% of the entering students had graduated after five years. Table 5 shows the percentage of students graduating after each year by cohort. There is a slight decline in graduation rates for succeeding cohorts after the 1971 entering group. Such year-by-year data can be compared to ESC's cohort analysis on a year-by-year basis as presented in the next section.

TABLE 4

GRADUATION RATES BY COHORTS OF STUDENTS
BRITISH OPEN UNIVERSITY 1971-75

Year of Starting	Number in Cohort	Number of Graduates by 1975	% Graduated
1971	19,581	8,486	43
1972	15,716	4,348	28
1973	12,680	2,102	17
1974	11,336	216	2

Source: Perry, 1977, adapted from Table 14a, page 196.

TABLE 5

PERCENTAGE GRADUATION BY COHORT OF STUDENTS

Cohort	% Students Who Graduated After:			
	Two Years	Three Years	Four Years	Five Years
1971	5	22	35	43
1972	2	17	28	
1973	2	17		
1974	2			
Source: Perry, 1977, adapted from Table 14b, Page 196.				

Hampshire College (Amherst, Massachusetts)

Hampshire College, a private four year alternative residential college, enrolled its first students in 1970. Begun as a result of joint faculty planning by four institutions--Amherst, Mt. Holyoke, Smith and the University of Massachusetts--the five colleges form a consortium for cooperative coursework and library use. It currently enrolls 1200 students in a traditional age range of 17-23 (average age is 20).

The basic educational concept is that of credit by examination instead of completed coursework. Students apply to take examinations in a body of knowledge in which the students help choose the form and content. Hampshire College is divided into four schools--the Natural Sciences and Mathematics; the Social Sciences; the Humanities and the Arts; and Language and Communication (Office of Research and Evaluation, Uses of PERC, 1977, pp. 65-70).

Attrition data for Hampshire College for the academic years 1970-71, 1971-72 and 1972-73 is shown in Table 6. Leavers were evenly split by gender. The greatest number of withdrawals (47%) were students who had graduated from high school in the top fifth of their class (Self-Study Report, 1974, p. 110).

TABLE 6

ATTRITION BY COHORT AT HAMPSHIRE COLLEGE

Academic Year of Cohort	Number of Students Enrolled	Number of Withdrawals	Percentage of Withdrawals
1970-71	249	22	9
1971-72	650	64	10
1972-73	998	144	14

Source: Adapted from Hampshire College Self-Study Report, January 1974, p. 111. Attrition rates are calculated on basis of students withdrawn at the end of spring semester 1973.

The reasons for withdrawal were as follows: personal, 22%; academic, 15%; administrative, 15%; financial, 3%; and medical 3% (Self-Study Report, 1974, p. 112).

University of Wisconsin-Green Bay

The unique instructional program at UW-Green Bay provides each student with the opportunity to focus on a broad problem in the physical, social or cultural environment. The program stresses flexibility and student initiative in curricular development with few required courses or prescribed sequences of courses. Students

and faculty develop close working relationships although instruction occurs in classroom settings for the most part. Advanced credit is given to students on the basis of examination test scores. Evaluation of prior learning through work experience and/or educational experience which have occurred in informal, non-college ways is creditable (Office of Research and Evaluation, Uses of PERC, 1977, pp. 87-94). The attrition rate calculated on a cohort basis from freshman to senior level at UW-GB showed a loss of 65-75% (Hogan, 1975).

External Degree Programs

Research staff contacted the Regents External Degree Program of the University of the State of New York in Albany and Thomas A. Edison State College in New Jersey regarding their experiences with retention and attrition.

The Regents External Degree Program was created in 1970 by the Board of Regents and awarded its first degree in 1972. The Regents External Degree (REX) offers "academic recognition in the form of credit and degrees to students who have demonstrated college-level learning through examinations, college coursework completed through other accredited academic institutions, and/or other approved means. REX offers eight degrees: two associate degrees and two baccalaureate degrees in the arts and sciences, two associate degrees in nursing, and baccalaureate degrees in business and nursing" (Regents External Degree, Self-Study Report, 1982, p. 1).

In a period of ten years, REX has graduated over 15,000 students (10,000 or 67% earned associate degrees) and 20,000

students actively pursue degrees. The REX student profile looks like this: mean age 33 (age range 15-87); 75% are employed full-time and 10% part-time; 80% are white, 12% black, 4% Hispanic and 4% other races; and 69% of the 1981 students live outside of New York State; 54% are male and 42% of the male students enrolled in the liberal arts and science associate degrees are military personnel; (Regents External Degree Program, Self-Study Report, 1982, pp. 44-47).

"By December 31, 1981, the cumulative enrollment in all programs totaled 52,637 candidates. Of this number 39% are actively enrolled, 30% are graduates and 31% are considered inactive. Actively enrolled indicates that the candidate is currently in a 'fee paid' status, while inactive indicates the candidate has not paid the program annual records maintenance fees for two years. The attrition rate of REX students cannot accurately be documented on a yearly basis because of the self-paced nature of the program. Many adults work on degree requirements for a time and then 'step out' for a period of time. Therefore, many REX candidates who appear as inactive may be continuing to work on degree requirements, may be studying independently, or may have enrolled in a degree program at a conventional college. REX does not consider it a negative outcome to have a student transfer to another institution" (Regents External Degree Program, Self-Study Report, 1982, pp. 48-51).

Edison State College

Edison State College was founded in July 1972 as the ninth state college in New Jersey. It was designed specifically to serve the adult population of the state and, as such, became the "first non-instructional external degree institution of its kind in the nation". Since 1972, Edison State College has enrolled over 13,500 adult students and awarded over 3000 degrees. Currently active students number 3600, of whom 75% are New Jersey residents. The current student profile looks like this: mean age 37; 84% are over 26 years old; 49% female; 74% caucasian and 11% black; 80% reported family income over $20,000 and 46% reported personal income over $20,000; 68% seek baccalaureate degrees (Edison State College, Institutional Self-Study, 1981, pp. 67-73).

As part of the self-study process, the institutional research office conducted a survey of 141 students inactive for a period of at least one year. Thirty-nine responses were received (38% completion rate) which revealed these results. "Sixteen percent actually considered themselves current Edison College students even though they have not paid their fees for over a year. These students in general have earned credits which have not yet been forwarded to the College. An additional forty percent state that they hope to continue their education in the future. Thirty-five percent state they have transferred to another institution or earned a degree from another institution. Ten percent state they have no further educational goals. These data suggest that the majority of inactive students plan to continue their higher education in the future but have not made progress to date. These

data suggest the critical importance of counseling and advisement in helping such students acquire realistic goals" (Edison State College, Office of Institutional Research, "Retention Report", 1981, p. 1).

Inactive students reported that conflict between studies and other responsibilities was the most significant barrier to completing a degree (cited by 62% of the 29 students) followed by inadequate financial resources (cited by 40%) and inadequate counseling and advising (33%). In previous studies of inactive students, the Office of Institutional Research found that those most likely to withdraw tended to have little or no previous college experience (Edison State College, Office of Institutional Research, "Retention Report", 1981, pp. 2-3).

D. ESC Attrition Rates: Yearly Cohorts, 1975-79

Using the "eight consecutive months" definition, attrition rates at ESC have been calculated for all ESC regularly enrolled students who first enrolled at the College in FY 1975-76. By use of the computer, students are grouped into cohorts of entering students by a 28 day enrollment period of initial enrollment. These cohorts have then been monitored regularly to ascertain the number and percent who on a given date are either (1) graduated or in the graduation process, (2) still enrolled, (3) withdrawn or dismissed for less than 8 consecutive months, or (4) withdrawn or dismissed for 8 or more consecutive months.

By aggregating and summing the twelve cohorts within each fiscal year, the resulting proportion of students falling into the latter category is interpreted as ESC's attrition rate for that fiscal year

cohort. Table 7 displays the attrition rates for ESC regularly enrolled students who initially enrolled at the College, FY's 1974-75 through 1978-79, up to four years after initial enrollment. The basic finding across these cohorts is that the attrition rate after one year is about 27%, after four years about 55%.

TABLE 7

ATTRITION* RATES OF EMPIRE STATE COLLEGE STUDENTS**
BY FISCAL YEAR OF INITIAL ENROLLMENT
AND BY ELAPSED TIME AFTER INITIAL ENROLLMENT

Fiscal Year of Enrollment	Enrollment Dates	No. of Students	Elapsed Time After Initial Enrollment***			
			1 Year	2 Years	3 Years	4 Years
74-75	4/1/74 - 3/31/75	3062	16%	42%	50%	49%
75-76	4/1/75 - 3/31/76	2590	21%	54%	56%	59%
76-77	4/1/76 - 3/31/77	2778	27%	50%	55%	
77-78	4/1/77 - 3/31/78	2317	25%	51%		
78-79	4/1/78 - 3/31/79	2371	29%			

*Because of the year-round enrollment possible at ESC, and the step in/step out feature inherent in the program, a definition of attrition at ESC, utilizing a temporal count, is a student withdrawn for eight consecutive months or more.

**Excluded are Labor College students, and special students not in a degree program. Included are all degree program students, in both associates and bachelors programs, full-time and part-time, first-time and transfer students.

***Elapsed time is calculated from the last day of each 28-day enrollment period during which students enrolled to the date count was taken.

Numerous factors need to be considered in the interpretation of data in this table. Various changes in the College's billing procedures have occurred during the past five years, resulting in more accurate, timely monitoring capabilities for the most recent cohorts. For example, the "prepayment of tuition" policy was established in 1977, gradually implemented during that year, with full enforcement in 1978. With enforcement of this policy, the administrative disenrollment of students at the beginning of each billing cycle is recorded on time and is more accurately reflected in the College's attrition figures.

Source: ESC Student Master File and Office of Institutional Research, 9/3/80

E. ESC Attrition Rates by Regional Centers

Using the same method described above for calculating attrition rates for the College, rates for the individual centers have been calculated for FY's 76-77, 77-78, and 78-79. The table below shows these rates for all centers except the Center for Labor Studies, Center for Distance Learning and Public Affairs Center. Almost all students enrolling at the Center for Labor Studies are handled as transient billing enrollments, and under the current computer program used to track regularly enrolled students, attrition data are unavailal le. At the Center for Distance Learning and Public Affairs Center the first regularly enrolled students were recorded in FY 79-80.

The basic findings from the regional center data show some variation among the centers. The attrition and graduation rates shown below are for the 1976-77 cohorts of entering students after three years elapsed time.

TABLE 8

ATTRITION/GRADUATION RATES BY REGIONAL CENTER AFTER THREE YEARS

Center	Attrition*	Graduation*
Genesee Valley	49%	39%
Niagara Frontier	51%	37%
Lower Hudson	52%	34%
Metropolitan	54%	37%
Statewide Programs	54%	35%
Northeast**	57%	37%
Long Island	62%	24%

*The attrition/graduation percentages do not total 100% because a few students are still either enrolled or only temporarily withdrawn.

**The Northeast Center was reorganized in 1979; a Public Affairs Center was created but insufficient time has elapsed to present attrition data on that center.

Source: Office of Institutional Research, 1980

A second set of attrition calculations for regional centers has been developed from a monthly student flow report prepared from samples of entering students who completed the Student Biographical Inventory during 1975 and 1976. A total of 1,040 students were randomly drawn from the entering SBI students and followed for five and one-half years. The basic findings for the regional centers after a total of five and one-half years are listed in Table 9.

TABLE 9

ATTRITION/GRADUATION RATES AFTER FIVE YEARS BY REGIONAL CENTERS

Center	Attrition	Still Enrolled	Graduated
Lower Hudson	39%	9%	53%
Northeast	46%	0	53%
Genesee Valley	46%	10%	44%
Statewide	58%	4%	38%
Long Island	57%	8%	35%
Niagara Frontier	51%	18%	31%
Metropolitan	62%	7%	31%

Source: Office of Research and Evaluation Student Flow Data, Fall 1980.

The reader can see there is some variation among the centers. However, in contrasting the three year attrition rates (preceding page) and the student flow graduation rates (above), two centers (Genesee Valley and Lower Hudson) are in the top three on both lists.

F. ESC Attrition Rates by Selected Programs and Courses

Although the research office has conducted almost 20 different program evaluations over the years, we have not systematically calculated attrition rates in each study. We do, however, have limited information in several studies that can be included in this section.

Bedford-Stuyvesant Unit Evaluations (1977)

The Carnegie Foundation of New York awarded a three-year grant in 1974 for the College to initiate a program in the Bedford/Stuyvesant section of Brooklyn. At the end of three

years, an extensive evaluation study was conducted to determine the effectiveness of the unit in meeting its objectives. In the limited attrition data available, the report showed 46% of the 102 newly enrolled students during a three year period as withdrawn (research definition of attrition was used). Thirty-five of the 47 (34%) withdrawn students were unable to pay their tuition; only 12% were voluntary withdrawals (Office of Research and Evaluation, Bedford-Stuyvesant Unit Evaluation, 1977, p. 88-90).

Mid-Hudson Unit Evaluation (1976)

The Mid-Hudson Unit was established as part of a cooperative venture with SUNY-New Paltz. A contract arrangement was developed for sharing faculty, FTE, learning resources, physical facilities and tutors. In the evaluation report for this unit, an attrition rate of 34% was found for the 286 students enrolled between October 1973 and May 1976 (research definition of attrition used) (Office of Research and Evaluation, Mid-Hudson Learning Unit Evaluation, 1976, p. 16).

Hauppauge Unit Evaluation (1980)

The Hauppauge program is a special program designed to serve Suffolk County employees. A total of 285 employees have enrolled since October 1974; of the 94 graduates, 88 are still employed by the county government (Morse 1980). During the calendar year (January-December 1979) a total of 121 students were enrolled in the program and 55 withdrew, yielding an attrition rate of 45% (educational definition of temporary withdrawal). Eighteen of the 55 reenrolled (33%) and another 36 say they intend to reenroll (Morse 1980).

Field Test of BOU Course at WNET-NYC (1979)

In the fall of 1979, Empire State entered into a joint course offering with WNET-Channel 13 in New York City and American Federation of Municipal, County and State Employees (District 37). An adapted version of the British Open University Course on "Making Sense of Society" with eight films along with a study guide and selected American reprints comprised the course. Two sections of this course were offered in New York City as well as to ESC contract students (N=64) in Buffalo and Albany areas. For the WNET-based courses, 44% of the enrolled students completed the course. For the ESC contract-based students 44% also completed the course (Office of Research and Evaluation, Final Report, Field Test of BOU Course at WNET-NYC, 1979, p. 13).

Center for Distance Learning - "Growing Years" Course (1980)

The research office carried out a detailed analysis of the CDL course, "The Growing Years" during fall, 1979. The course materials were evaluated, the TV presentations assessed, and the student-tutor interactions were reviewed (Office of Research and Evaluation, Evaluation of "Growing Years" Course, January 1980). A total of 22 people enrolled in the course and 6 did not complete it, yielding a course attrition rate of 27%. This 27% rate is considerably lower than the rate for the WNET course, "Making Sense of Society".

Center for Distance Learning--Attrition Rates for Terms 2A, 1B, 2B (January 1980 - January 1981)

In March, 1981, the research office completed a program evaluation of CDL and tabulated attrition for three terms covering 29 courses. Of the 798 registrations for these terms, 413 people (52%) completed the courses leaving an attrition rate of 48%. On a term-by-term basis, the attrition figures were: term 2A, 45%; term 1B, 63%; and term 2B, 43% (Office of Research and Evaluation, Center for Distance Learning Program Evaluation, March 1981, and Center for Distance Learning memorandum, June 15, 1981).

As a result of CDL's recent reorganization and more focused attention on record keeping, course list verification and tutor follow-up, the attrition rate has declined. There is still a substantial variation in attrition rates by course within a term. For example, fire service courses show a completion rate of 81% whereas the managerial accounting and finance course had a completion rate of 36% (term 2B).

QUESTION THREE: WHO ARE THE LEAVERS?

Over the years, the research office has been asked to identify who are the students most likely to leave the college. On the basis of at least eight different studies conducted since 1974, the following demographic profile of the leavers has been constructed.

Demographic Profile of Leavers

--Men are more likely to leave than women

--Younger students are more likely to leave than older adults

- age 22 and under 67% withdrawal rate
- age group (28-32) 69% withdrawal rate
- age group (38-42) had largest number of females withdraw
- age group (23-27) had largest number of males withdraw

--Marital Status - single students are more likely to withdraw than married

--Full-time workers are more likely than part-time or unemployed

--Blue collar workers are more likely to withdraw than either high white collar workers or low white collar workers

--Full-time students are more likely to leave than half-time students

Sources: ORE Studies--433 Study; January 1977 Phonothon; Bradley/Lehmann, 1975; Colleges in Partnership, 1980; Final Report-BOU-WNET, 1979; Mid-Hudson Unit Evaluation, 1976; Bedford/Stuyvesant Unit Evaluation, 1977; and Adult Development Profile paper, 1980.

QUESTION FOUR: WHEN DOES ATTRITION OCCUR?

Empire State College's academic program is a complex series of steps from time of entry to time of graduation. Earlier we mentioned that there were 17 steps in the process from entry to graduation that students must complete (Student Handbook 1980-81, Figure 1, Appendix A). Given that number of steps and the nature of student-mentor interaction, it is possible for attrition to occur at numerous points in the overall pipeline. We have not mapped the attrition rates for all of the points in this pipeline, but we do have selected information on several points.

A. First Contract Attrition

A document analysis of a fall 1975 cohort of students (N=433) was made that gives us a picture of initial enrollment attrition. The findings are these:

--13% (55 of 433) withdrew within 56 days after initial enrollment.

--Of the 55 early leavers, 74% never reenrolled after three years elapsed time.

--11% of the early leavers (6 of 55) reenrolled and subsequently graduated.

--The remaining 15% (8 of 55) who also reenrolled were withdrawn for more than eight consecutive months after three years elapsed time (Office of Research and Evaluation 433 Study, March 1979).

B. Subsequent Contract Attrition

We do not have data organized and analyzed to identify attrition rates for subsequent contracts.

C. Assessment Attrition

One of the most serious blockages in the pipeline is the student's encounter with the assessment process. The research group has identified the assessment area as a key one for focused inquiry and a plan for action designed to reduce attrition. One early study examined the likelihood of attrition after students had completed assessment.

The key findings were:

--82% of 300 randomly selected students assessed between November 1973 and April 1974 graduated (Office of Research and Evaluation,

Attrition of Assessed Students, November 1975 Bullet). More recent counts from OPRA's portfolio studies show similar findings.

--83% of 1106 students who cleared OPRA in 1978 had graduated by Spring 1981.

--73% of 918 students who cleared OPRA in 1979 had graduated by Spring 1981 (Office of Program Review and Assessment, Annual Portfolio Reports, Computer Runs, April 1981).

D. Reenrollment After Withdrawal

The document analysis study of 433 provided us with data to answer the question of the likelihood of a student returning after an extended leave.

The findings:

--63% (272 of 433) had at least one extended period of withdrawal lasting 8 or more consecutive months.

--of the 272 with a lengthy withdrawal, three years later:

- 87% never reenrolled
- 4% reenrolled and graduated
- 3% reenrolled and were still reenrolled
- 6% reenrolled but withdrew again

E. Step Out/Step In Feature of ESC Graduates

The same study above provided data to answer the question of the number of withdrawals students had prior to graduation. The findings:

--46% (69 of 149) of the graduates began and completed their programs without interruption (no withdrawals).

--32% (47 of 149) of the graduates had only one period of withdrawal between first enrollment and graduation.

--95 days was the average number of days withdrawn for those 47 graduates with only one withdrawal.

QUESTION FIVE: WHY DOES ATTRITION OCCUR?

Answering this question requires us to examine at least four clusters of variables that seem to be major causes of adult attrition--the ESC program; the personal reasons identified by the student; the nature of mentor-student interaction; and academic deficiencies of the student. Each of these clusters will be discussed and data presented from the studies conducted to date.

A. The Double-Edged Nature of ESC's Program

Many studies repeatedly show unique program features attract students to Empire State College. Such features have been identified as: independence allowed by ESC; work as well as study; possibility of receiving credit for prior learning; and special purpose programs offered. The College has, in its official publications and recruitment materials, promoted these features as providing the flexibility and options that adult learners seek. Adults who are busy handling the complex responsibilities of work, family and community need an educational program that is both flexible and individualized; ESC responded to meet these adult needs. However, the double-edged quality of ESC's appeal must be carefully examined.

Attractive as these features are in enrolling students in the College, they have become for many adults key features in attrition. Adult students who are required to design their own degree programs, prepare a portfolio of their prior college-level learnings for assessment, and undertake independent study through a series of learning contracts, frequently find such tasks challenging, threatening, difficult and arduous. Adult learners can draw upon the advice and support of their mentors and other center staff to meet these academic challenges but, for some, these supports are not enough to surmount the pressures of preparing one's own degree plan. In fact, this administrative group has identified the assessment process as a key element in both attracting and losing adult students--a very large blockage in the leaky pipe.

The Data. There are several studies already conducted that identify different aspects of the academic program and its administrative supports as primary causes of attrition. In sum, the picture looks like this:

Program Related Reasons for Student Withdrawal - 1975 (N=93)	
ESC program and/or procedures	15%
Portfolio problems	12%
Problems with bureaucracy	12%
Personal goals and college program mismatch	9%
Source: Office of Research and Evaluation, Bradley/Lehmann Report, 1975, Table 3	

Program Related Reasons for Student Withdrawal - 1977 (N=89)	
Problems with ESC program and procedures	25%
Problems with assessment	10%
Problems with billing	9%
Problems with financial aid	8%
Lack of learning resources	5%
Problems with orientation workshop	1%

Source: Office of Research and Evaluation, January 1977 Phonothon, Table 6, p. 9

FIPSE New Learners Study Program Related Reasons for Withdrawal 1980 (N=61)	
Insufficient financial aid	16%
Problems with assessment process	15%
Problems with ESC bureaucracy	16%
Problems with program structure	10%
Problems with ESC administration	11%
Problems in understanding ESC's program	11%
Could not obtain necessary learning resources	9%

Source: Colleges in Partnership, 1980, Table 9, p. 247

Bedford/Stuyvesant Evaluation Program Related Reasons for Student Withdrawal 1977 (N=47)	
Insufficient Financial Aid	34%
Problems with ESC bureaucracy	10%
Problems in negotiating ESC's program maze	5%

Source: Bedford/Stuyvesant Report, 1977, p. 89

Program Related Reasons for Withdrawal 1981 (N=27)	
Insufficient financial support	26%
Problems in understanding ESC's program	11%
Program too difficult	11%
Problems with assessment	5%
Source: Public Affairs Center Follow-up Studies, 1981.	

Entering students have been asked about their ability to finance their college education. Almost one quarter (24%) of the entering students said they definitely will need financial aid assistance to complete their degrees and an additional one quarter (23%) said they may need financial assistance. Sixty-nine percent of the entering students cited their own employment as a major source of funding for their college costs; aid from spouse was cited 26%, grants 24%, employer support 22%, loans 21% and savings, 19% (Office of Research and Evaluation, Ability to Finance a College Education, September, 1979).

Putting together data on financial aid reasons for withdrawal in the context of the College-wide needs for financial support gives us a picture for students as a group: between one-sixth and one-fourth of the students definitely need financial aid support if they are to persist in their degree program. These figures are stated on the conservative side--it is more likely that one-third to almost one-half need financial aid support and that a substantial proportion of this group become withdrawals if they do not receive financial aid.

B. Personal Reasons Identified by the Student

A second cluster of reasons are personal in nature. In four studies shown below, various kinds of personal reasons account for more than half of the reasons given by leavers. Immediate personal problems such as illness in the family, death of a parent, family change of residence, are found in at least 41-59% of the leavers. Job-related problems, such as a promotion, move to a new job site and so on, are reported by 31-57% of the leavers. Financial problems account for another 15%. Adult students are more likely than traditional-aged students to encounter serious health, family and job problems that necessitate leaving the program for an extended period of time.

Personal Reasons for Student Withdrawal - 1981 (N=27)	
Found study too time consuming	45%
Personal problems	41%
Job related problems	30%
Inadequate study habits	15%
Source: Office of Research and Evaluation, Public Affairs Center Follow-up Studies, 1981	

FIPSE New Learners Study Personal Reasons for Student Withdrawal - 1980 (N=61)	
Personal problems	59%
Job problems	57%
Preferred to attend another college	8%
Changed my occupational plans	2%
Source: Colleges in Partnership Report, 1980, Table 9, p. 247	

Personal Reasons for Student Withdrawal - 1975 (N=93)	
Personal problems (e.g., health, family, marital)	41%
Job problems	31%
Financial Problems	15%
Source: Office of Research and Evaluation, Bradley/Lehmann Report, 1975, Table 3	

Personal Reasons for Student Withdrawal - 1977 (N=89)	
Personal problems	44%
Job related problems	15%
Lost interest in ESC	6%
Source: Office of Research and Evaluation, January Phonothon 1977, Table 6, p. 9	

C. The Student-Mentor Relationship

The student-mentor relationship is the crucial relationship for keeping an adult student in the program. Because such a relationship is intense, fragile, one-to-one, and difficult to sustain, it should be expected to show up as an important cause of attrition. Where the student-mentor relationship works well, the student proceeds to earn a degree and, very frequently, expresses great satisfaction with the program. Where the student-mentor relationship does not work out, students generally withdraw from the program.

The Data. In the five studies summarized below, the student-mentor relationship accounts for approximately one-fifth of the reasons students cited for leaving. In one study we collected information about problems with a tutor (18% said this was a reason for leaving) and problems with an ESC administrator (11% said this was a cause of their leaving the College). The rather consistent finding that one-fifth of the student-mentor relationships do not work out dramatizes one place to focus for retaining students.

	Student-Mentor Relationship	
1975	Bradley/Lehmann Report (N=93)	
	Problems with the mentor	21%
1980	Colleges in Partnership Report (N=61)	
	Problems with a mentor	15%
	Problems with a tutor	18%
	Problems with the administrator	11%
1977	January Phonothon Report (N=89)	
	Problems with a mentor	25%
1977	Bedford/Stuyvesant Report (small N)	
	Problems with the mentor	20%
1981	Public Affairs Center Study (N=27)	
	Problems with the mentor	19%

D. Academic Deficiencies and Academic Difficulties

Students seldom say they left because they were unable to academically handle the program. Formal academic dismissal by the College is uncommon. Every mentor and center, however, has ample experience with many students who either have serious academic deficiencies at entry (poor preparation, weak study habits and skills, inadequate writing and thinking skills, etc.) or have serious academic difficulties in negotiating the program.

The College has made several efforts over the years to assess the academic deficiencies which can be summarized as follows:

Basic Writing Skills Data (N=1000)

The Writing Skills panel developed a technique for assessing the writing levels of entering students and most centers now obtain and evaluate writing samples of entering students. In a 1978 survey, the research office reported between one-third and one-half of the 1000 entering students at five centers had sufficient writing deficiencies below college level (Office of Research and Evaluation, Basic Writing Skills--A Status Report, 1978). Center practice varies once a student's writing level has been ascertained. Most centers provide the mentor and the student with the results so that the mentor and student can address the writing weaknesses. Most centers have either writing skills mentors, or adjuncts, or designated tutors available to work with such students.

British Open University Social Science Course--WNET Data (N=64)

Course tutors evaluated the writing abilities of these students and reported one-third of the students evidenced major writing difficulties. Since many students never completed the written assignments before withdrawing from the course, the writing inadequacies of these students may be higher than the one-third clearly identified. For those students who completed all four assignments, several showed dramatic improvement in their writing (Office of Research and Evaluation, Final Report and Recommendations, Field Test of British Open University Courses at WNET, New York City, August 1978, p. 8).

Bedford/Stuyvesant Unit Evaluation (N=47)

This report did not focus on basic skill deficiencies in a systematic fashion, but it did state that the unit and the College should pay close attention to the students' level of academic ability necessary to successfully complete the program (Office of Research and Evaluation, Bedford/Stuyvesant Report, 1977).

Satisfactory Academic Progress--Results of the Half-Time Student Record Card Survey (N=175)

In May 1981 all centers, except Labor, were asked to provide student progress data on 25 randomly selected half-time students from their student record card files for consideration by the calendar committee. The results of the study give us recent data on the progress of half-time students through the program (Office of Research and Evaluation, Report to Calendar Committee, June 1981).

- -- Half-time students earn credits at 75 percent of average enrolled (tuition) time.
- -- Including withdrawn time, half-time students earn credits at 64 percent of average enrolled (tuition) time.
- -- 29% of the students earned credits at a rate below the College's satisfactory academic progress policy.

On the basis of these reports as well as mentor and center experience, we know that a sizeable minority of entering students exhibit academic deficiencies in basic skills areas. Some of these basic skill deficiencies are corrected as the student proceeds through the program. Others are not. These academic deficiencies may be an important but more subtle cause of attrition than has been systematically uncovered by the College to date.

E. Information Session--Non-Application Attrition

We have recently conducted a study of attendees at information sessions who do not apply and do not enroll at the Public Affairs Center. This Center, located in Albany, was established by the College in 1979 to serve the educational needs of those involved or interested in public affairs and public service. Offering instruction that can combine professional preparation with liberal arts study, PAC works closely with government and public service agencies to develop and use educational resources in support of the academic and career needs of its students.

Phone interviews were made to 28 individuals employed at the Department of Labor and the Office of General Services who attended an information session but did not enroll in the College. Although the demographic characteristics of DOL and OGS attendees were different, the findings were strikingly similar:

-- Almost half stated they could not afford ESC's tuition and 72% said the agency tuition reimbursement feature would positively influence their decision to apply.

-- 36% said they did not have time available for college study.

-- 57% stated their supervisors would support their enrollment in the program; only 14% reported no support from their supervisors, and the remainder were unsure.

-- 50% were very satisfied with the orientations; 18% cited negative reactions and the remainder had mixed or no comments.

-- 68% heard about ESC's program from peers at work or other ESC students; 43% heard about the program through agency newsletters or their supervisors; and 18% heard about the program through ESC brochures. (Total percents exceed 100 because several respondents checked more than one source; percents were calculated on number citing a source to the total number interviewed--28).

For a full discussion of these results, see Office of Research and Evaluation report, Results from the Public Affairs Center Follow-up Studies, July 1981.

F. Some Caveats on Causes of Attrition

We have just reviewed four clusters of reasons for attrition at ESC. We know that the causes of attrition are more complex and intertwined than those four clusters of data reveal. Leavers frequently give more than one reason. Reasons are often given that are safe and acceptable rather than penetrating and critical. It is

very difficult to show conclusively causal links between attrition and retention given the complex of variables that may be involved. As a result of these caveats, it is not prudent to accept wholeheartedly students' self-reported reasons for leaving. "Students may often give an incomplete, distorted, or erroneous picture of the pattern of reasons (and priorities among those reasons) for dropping out. They often rationalize in ways that make their reasons appear to be more socially acceptable and find ways to protect their egos. It is also possible that the actual reasons are so complex and intertwined that the respondents themselves are neither cognizant of nor fully understand why they dropped out--especially if they are asked at the time of withdrawal or shortly thereafter. In these cases, they may not have had adequate time to reflect systematically and carefully" (Lenning, et.al., 1980, p. 90).

In an effort to deal with these problems, the research office has relied upon several methodological strategies that partially offset them. By using several data collection techniques (questionnaires, phone and face-to-face interviews, case studies), by asking leavers at different intervals since departure from the College, and by asking faculty and administrators to comment on the reasons given, offset to some extent the caveats above. By training research interviewers to be sensitive to and probe underneath the reasons initially offered by adult leavers, the research staff think that the reasons reported are fairly close to the mark. If any reasons are underreported, it is probably the difficulties adult students encountered with the program and their mentors.

No single study we have conducted is definitive regarding the causes of attrition. In the dozen studies conducted so far using different instruments, observers, time frames, and research strategies, we have found rather consistent results. Such findings lead us to conclude, within a fairly small margin of error, that the picture presented so far is relatively accurate.

G. Reasons in a Comparative Perspective

Thousands of attrition studies have been conducted over the past fifty years and several publications endeavor to summarize the major findings (Astin, 1975; Lenning, et. al., 1980; Miller, 1978; Tinto, 1975; Cope and Hannah, 1975). Let us briefly draw out some information that is now abundantly available from these sources.

Leonard Ramist (1981) has summarized in Table 10 numerous academic, demographic, motivational, environmental, and financial factors that previous research on traditional college students show to be related to attrition and persistence.

Astin (1975) reported the results from a national survey of 41,000 students at 358 representative two- and four-year institutions and a follow-up questionnaire administered four years later. The results are reported in Table 11.

TABLE 10

FACTORS RELATED TO STUDENT PERSISTENCE AND ATTRITION

	Related to Persistence	Related to Attrition	Relationship not clear (or not Related)
Demographic Factors	High level of parental education Oriental Hispanic Jewish Married male	Low level of parental education Married female Out-of-state, not contiguous state Small Town	Age Sex Father's occupation Parental income Big City Suburb
Academic Factors	Good high school record High SAT scores Taking Achievement Tests particularly high scorer College preparatory program Good high school rating Good college grades Biological science major Health-related professions major History and cultures major Elementary education major Good study habits	Poor high school record Low SAT scores Not taking Achievement Tests Poor high school rating Poor college grades Agricultural major Forestry & conservation major Physical education major Architecture and environmental design major Engineering major Psychology major Political science major Poor study habits	High school size High school type Years of study in social studies & biological science Business major Education major (other than elementary) Social sciences major (other than psychology)
Motivational Factors	High degree-level goal	Low degree-level goal	Vocational goal Precollege expectation Reasons for attending Parental influence
General College Environmental Factors	Four-year college Private college Religiously affiliated college Single-sex college College in Northeast or South Selective college High ability student at selective college	Two-year college Public college College in West or Southwest Nonselective college Low ability student at nonselective college	Size High ability students at nonselective college Low ability student at selective college
Financial Factors	Tuition at predominantly Black colleges Parental aid Major spouse support Part-time employment on campus Federal work-study ROTC benefits	Full-time employment GI benefits Financial aid packages	Tuition at predominantly White colleges Scholarships or grants Loans P/T employment off campus FA information

Source: Ramist, ETS Findings, Vol. 6. No. 2, 1981, p. 3)

TABLE 11

STUDENTS' REASONS FOR DROPPING OUT

	Percentage of Men	Percentage of Women	Percentage of all Students
Boredom with courses	36	25	32
Financial difficulties	29	27	28
Some other reason	31	24	28
Marriage, pregnancy or other family responsibilities	11	39	23
Poor grades	38	14	22
Dissatisfaction with requirements or regulations	24	20	22
Change in career goals	19	20	19
Inability to take desired courses or programs	12	9	11
Good job offer	10	6	9
Illness or accident	7	7	7
Difficulty commuting to college	3	3	3
Disciplinary troubles	2	2	2

Source: Astin, 1975, pp. 14-15.

The substantial percentage in the "some other reason" category probably reflects personal problems. Astin went on to identify the best predictors of collegiate success and reached these conclusions:

> The most important entering characteristics are the student's high school grades, degree aspirations, and religious background: students with good grades, plans for post-graduate degrees, Jewish parents, and Jewish religious preferences have the best chance for finishing college; those with poor grades, plans for only a bachelor's or "other" degree, Protestant parents, and no religious preference have the poorest chance. (For black students, being a cigarette smoker is also among the strongest predictors of dropping out.) The entering characteristics next in importance for staying in college are having good study habits, having high expectations about academic performance in college, having highly educated parents, being married (for men), and being single (for women).

> Other entering characteristics that add significantly but less powerfully to college persistence are high scores on college admissions tests, being Oriental, being a nonsmoker, and growing up in a moderate-size city or town (Astin, 1975, pp. 174-175).

Astin continued to analyze the experiential factors that are likely to enhance the chances of a student completing college. The key to persistence in college is involvement which manifests itself in many ways. Astin tells us that

> the most important of these [experiential factors] is getting good grades in college. Next in importance are staying single (for women) and not having children (both sexes), living in a college dormitory rather than at home, and having a part-time job (full-time jobs are to be avoided). Persistence is also enhanced by participation in ROTC or in extracurricular activities such as sports and fraternities or sororities. Being supported by one's parents also helps, as does having a scholarship or grant, but loans add little, and, for men, they reduce chances of finishing college. Students who transfer from one four-year college to another also have somewhat reduced persistence chances (p. 175).

The ESC reader by now is probably asking what has Astin's findings told us about adult attrition. Probably very little! ESC's students are the opposite of Astin's profile--the vast majority are married, work full-time, have children, live at home and do not participate in extra-curricular activities. The point of this extended discussion of a national comprehensive longitudinal study is to demonstrate how limited attrition studies are when based on a single age-homogeneous group (17-23) of traditional college students. About 95% of the previous attrition studies have been conducted on traditional-aged students which have little applicability to an adult population like that served by ESC. Thus, personal reasons may be a much more significant factor for adult students than is likely to show up in

traditional-aged based attrition studies. (See life cycle definition of attrition.)

In order to check out this hypothesis, we turned to the British Open University attrition studies as a likely source for comparable information. The British Open University has a similar student population to Empire State's. The attrition research shows that the most likely student to drop-out over time has these characteristics: younger, male, blue-collar worker, little or no previous formal education (McIntosh and Morrison, 1974; McIntosh and Wordley, 1976). As a group, housewives were noted for their "stamina with a survival rate of 64 percent" (at the end of the third enrollment year).

McIntosh states "some students will always drop out for reasons that have little or nothing to do with the Open University. Indeed the majority of our students are at a stage in their life-cycle when both pressures of work and family are likely to be at their height. The problems of reconciling the demands of home and job with that of study will always be great, and may not always prove possible" (McIntosh and Morrison, 1974).

QUESTION SIX: WHAT DOES ATTRITION COST?

The financial, academic and psychological costs of attrition, especially at a college like Empire State, are high. Because the College invests considerable staff time that is heavily personalized and prepares numerous documents on each student, the person who leaves represents a loss to the College that is not the same as a classroom departure. Until recently the College had a backlog of students awaiting entry, so actual targeted recruitment costs were low. However, center and unit staff do

expend considerable time and energy in information sessions, orientations and community activities intended to generate applicants. This section is a beginning effort to explore the various cost factors involved in the attrition/retention effort; from discussion by the research/evaluation group we hope to improve substantially our sophistication in identifying appropriate costs and improving our calculations.

A. Financial Costs of Attrition

What are the direct replacement costs if ESC loses a student? Using the March 1980 expenditure data, we identified those offices at the Coordinating Center most directly involved with students and pulled out their operating costs as follows:

Coordinating Center Operating Costs

Admissions	$ 84,400
Registrar	85,900
Financial Aid	59,400
Business Affairs	282,500
Computer Services	249,3[illegible]
Mail-Messenger Account	95,6[illegible]
Program Review and Assessment	75,7[illegible]
Maintenance of Plant	437,800
Telephone and Telegraph	343,700
Central Duplicating	106,600
	$1,820,900

Regional Center Operating Costs

Center for Distance Learning	$ 168,300
Northeast Learning Center	243,700
Metropolitan Learning Center	583,500
Genesee Valley Learning Center	596,700
Long Island Learning Center	758,900
Lower Hudson Learning Center	489,300
Center for Statewide Programs	788,100
Niagara Frontier Learning Center	493,300
Public Affairs Center	173,500
Center for Labor Studies	377,200
Totals	$4,672,500

Source: Monthly Expenditure Report, Office of Administration, Fiscal Year 1979-80, September 15, 1980.

The total operating costs directly allocated to serving students are $6,493,400. If we divide this figure by the average number of enrolled students during 1979-80 (3262 HC), we obtain an average cost per student of $1,991. This figure is below the budgeted FTE cost/student of $2,232 (1979-80 ESC budget). In order to compute the replacement cost for withdrawals, we have extrapolated for the College as a whole information on attrition rates for newly enrolled students during the first year (see Section D, Question 2). If the College loses 30% of its students during the first year of enrollment (assuming the same rate for already enrolled students), the College must replace 979 students (30% of 3262) at a cost of $1,991 each. The total replacement cost to the College is $1,949,189. Looked at in these global, approximate terms, the figure of $1.9 million is a staggering sum, three times the operating cost of a typical regional center. This figure is also stated on the conservative side since there are other coordinating and regional center costs not included in the above totals.

If we take the four year cohort attrition rates (p. 13), we have a much more serious replacement cost situation. Using an attrition rate of 55% over a four year period, the College must replace 1794 students (55% of 3262) at a cost of $1991 each, yielding a total replacement cost for 1979-80 of $3,571,854. This latter figure is probably closer to the direct attrition over a four year period and reflects the rising attrition rate.

B. Academic Costs of Attrition

From the vantage point of the faculty, the enrollment of any given student who subsequently leaves, perhaps at the assessment hurdle,

represents an investment cost in energy, time and academic planning that is not recoverable. Students who leave after a contract or two and who have started the portfolio process represent a staff and faculty investment of a sizeable nature beyond the cost calculations presented above.

From the record system vantage point, ESC faces particular cost factors. ESC is a college that literally runs on documents. Since each entering student generates numerous documents, the costs of maintaining, operating and storing student records, we think, is sizeable.

C. Psychological Costs of Attrition

There are a variety of subtle and more intangible psychological costs involved in the attrition area. These costs must be identified and, as much as possible, calculated so that we have a more comprehensive view of the attrition/retention cost picture. Perhaps an argument could be made that this area of costs is the most significant of all since faculty and staff involvement with students in a direct, personal way takes a toll in frustration, burn out, and decreased motivation when students leave. Further study in this area remains to be done.

QUESTION SEVEN: WHAT CAN BE DONE?

A. Previous ESC Efforts

Over the years, attrition has periodically become a concern when the College was below its enrollment targets. At those times, various efforts were launched to recruit new students and retain enrolled students. In addition, the research office was asked on those

occasions to investigate what the attrition problems might be and to recommend appropriate action to reduce the rate. The response to the attrition question has varied at the center level. For those few centers who historically have had a backlog of students, the attrition issue has not been particularly of concern. For other centers, various strategies have been used: exit interviews with leavers; phone calls to former students seeking reenrollment; changes in mentor assignments: follow-up letters, etc. Such strategies have been employed on an ad hoc, periodic basis and their effectiveness has not been fully assessed.

This section of the report was written to serve two purposes: first, briefly review national and state suggestions regarding effective retention programs so that the reader has a general idea of "what works" elsewhere; and second, offer a set of recommendations for ESC to consider at the center and office level. The research and evaluation administrative group has spent several meetings discussing an earlier draft of this report and debating specific strategies and recommendations covering what centers and administrative offices might do to reduce attrition, improve recruiting, secure enrollment, increase the effectiveness of orientation sessions, streamline financial aid, ease the assessment process, and reduce bureaucratic blockages in the overall student-flow pipeline. There is a fairly high degree of consensus among the administrative group regarding these suggestions. These suggestions, however, should be considered by centers and administrative offices as possible guidelines for action. Each center and office must conduct its own "situational audit" and determine whether a strategy for reducing attrition or

recovering students is appropriate given the context and circumstances of that center/office. The research/evaluation group focused on those recommendations that, we hope, have immediate, practical consequence for College operations and practice. We also recognize that some of the recommendations (for example, in assessment) carry longer range implications and require more complex, coordinated actions to be placed in effect. The guiding question posed repeatedly for our discussions was: what do you recommend today with very limited staff time and energy that is likely to reduce attrition (or promote reenrollment) by five percent? We were also aware of the danger of producing a lengthy check list of recommendations that represents more of a wishful future state of affairs than current reality permits. We have striven, therefore, for a balance between carefully chosen recommendations for major impact and a longer list of major and minor ideas for center/office consideration.

B. National Retention Suggestions

Where are the strategic levers at ESC that can reduce the attrition flow? What can we learn from national and state publications drawing upon experience at other colleges? A recent NCHEMS publication, Retention and Attrition: Evidence for Action and Research, provides four general recommendations for positive retention program (NCHEMS, 1980, pp. 95-104).

RECOMMENDATION ONE: IMPROVE FACULTY-STUDENT INTERACTION

The frequency and quality of faculty and student interaction can have a primary effect on student retention. Well-designed advisory programs can make an important difference. The dropout rate is very

low among graduate students who have mentors to act as advocates for them (NCHEMS, 1980, p. 101).

In the data reviewed on ESC, we have seen about 20-25% of the reasons students give for dropping out focus on ineffective student-mentor relationships. ESC has much practical, on-the-job experience with advising and mentoring over the years and periodically has held College-wide workshops that focus on the student-mentor relationship. Since this area is one within the immediate control of the College, it is a likely target for reducing attrition. As the NCHEMS statement summarizes, other colleges have systematically designed retention programs that substantially reduce this source of attrition. We need to further identify the specific ways attrition can be reduced through a micro-analysis of student-mentor interactions. A few suggestive items might be:

--how do mentors diagnose an entering student's learning interests and academic needs?

--what specifically do experienced mentors do when an adult student is scared, upset or fearful of engaging in ESC's program?

--what happens when either the student or the mentor decide that a particular relationship is not working?

--how are mentors assigned to an entering student?

--what happens when a student wants to change his/her mentor?

At every center there are a few faculty who generate disproportionately higher graduation rates from the students they mentor during a given year(s). The administrative group discussed the implications of these facts and concluded that a special focus on

those faculty who have very high graduation rates would tell us how they effectively work with students. Sorting out what such mentors do differently from others may provide clues to suggest how to improve student-mentor interaction with attrition-prone faculty. Center administrators could carry out such discussions immediately. A more carefully planned mentor retraining program might be initiated in those centers where the situation warrants it. Future new-mentor workshops might include the topic of attrition-retention on the agenda with a focus on those proven practices and techniques of mentor-student interaction that reduce attrition.

RECOMMENDATION TWO: IMPROVE PEER INTERACTIONS

Numerous studies have shown that peers exert more influence over traditional-age college students than anyone else, so reaching student leaders, peer counseling, encouraging "significant other" peer friendships, and programs that promote voluntary and informal peer intellectual discussions and other interactions would be expected to improve student retention (NCHEMS, 1980).

Although ESC does not have the traditional peer group setting of a residential campus, adult students have expressed strong needs for meeting and working with other students. One recent graduate said: "the greatest 'hole' in my education was that I never got together with other students taking similar or related contracts" (Alumni Office, Quotes File, 1980). The College has responded to these "peer group needs" through a variety of group studies, weekend residencies, intensive workshops and mini-courses as well as providing the

opportunity for students to cross-register in courses given at other colleges in the state (about 16% of ESC students do this). Questions still remain here: are there enough group-based activities to meet the adults' needs? Is the timing of center group activities appropriate to the adults' particular desire for a group experience? Is a lack of systematic group experience a major cause of attrition? The Public Affairs Center follow-up studies seem to indicate this. At the Department of Labor, for example, clerical workers repeatedly stated that their high entry level anxieties about entering college for the first time and the lack of structure and group studies were significant reasons for their leaving (Office of Research and Evaluation, Public Affairs Center Follow-up Studies, 1981).

The question of what is the appropriate peer group for an adult student may need further exploration. One way to identify an adult's peers is to form a group from similar students at a center orientation who desire group interaction. An interesting experiment currently underway and also being carefully evaluated is the Long Island effort to provide a "transition program for adults returning to college". Starting September 1980, a small group of students were introduced to individualized education over an eight week period and by now over 80 people have participated in these workshops (see Steltenpohl and Shipton, 1980). The research office is currently planning to undertake a comparative study of 80 participants and 80 matched students who enrolled in the center during the same period so that the effects of this type of workshop, with a heavy peer group focus, can be assessed.

Another way to describe the adult's peers would be to focus on the adult's spouse, employer, coworkers and "significant others" (i.e., close friends) that form a support group for the adult. If we took seriously this type of peer group, what are the implications for program planning and contract work? How would we construct or build off this potential group experience base to strengthen the students' educational experience? We recommend that centers think about answers to these questions and experiment with alternative peer group projects to evaluate its contribution not only to attrition but also to the quality of the academic program. We also think that alumni volunteers may be very helpful as peers for adult learners.

RECOMMENDATION THREE: BE RESPONSIVE TO STUDENT COMPLAINTS AND EXPRESSED NEEDS

The College and several centers have had an ombudsperson working to handle student complaints and to expedite paperwork or inquire into various problems students have. Given the nature of the College and the importance of close student-mentor working relationships, most students' formal complaints are acted upon and resolved.

The research office has collected open-ended comments of students through a series of questionnaires over the years. Using the Student Experience Questionnaire as an example, responses to the question on improving the portfolio and degree program process have been extracted. Students' comments ranged from not receiving adequate advice from the mentor to the need for clearer guidelines on separating prior learning into concentration and general learning components, to vague and

inadequate portfolio workshops, to the need to streamline the paperwork involved, to basic difficulties in understanding the portfolio process.

The research group determined very early in its discussions of attrition that assessment was the major leak in the academic side of the pipeline. Although exact figures on attrition losses during assessment do not exist, the judgment of this group was that the assessment process raised students' anxieties to a high level, confused them regarding how to assemble a portfolio and plan a degree program, and caused great frustration about the process and procedures for assessing prior learning.

Last fall, the Office of Program Review and Assessment circulated a comprehensive report on "Assessment at ESC" which contained numerous recommendations that have direct implications for reducing attrition. The research group examined this report at some length and focused on those recommendations most likely to reduce attrition. Although many of OPRA's recommendations involve longer range and more complicated policy changes, the research group endorses the following steps as important ones for reducing the assessment bottleneck.

Simplify the Degree Program Document

By reducing the number and frequency of clerical tasks (e.g., by not requiring a letter-perfect transcript copy at every step of the process) the College may alleviate student frustration and facilitate the process of review. Clerical requirements impede smooth flow of the document through the review process. A simplified degree program form, eliminating IIIa, IIIb and source labels, would also streamline the process (Office of Program Review and Assessment, 1980, pp. 3-4).

Secure Upfront Evaluations

Elapsed time between portfolio submission and approval needs to be as short as possible. Each center needs to identify clearly who has the responsibility (associate dean, assessment counselor, mentor) for initially securing an outside evaluator and for determining the submitted evaluation's acceptability. If evaluations are not done correctly the first time or at the "front end" of the process, delays and frustrations occur at the "back end" of the process. Reducing delays here improved the probabilities of students getting through the assessment hurdle (Office of Program Review and Assessment, 1980, pp. 8, 14).

Reduce Mentor Variability in Degree Program Planning

It is the experience of the associate deans in the research group that there is an excessive variability in the way mentors work with students on the degree program document. Students often come to the College with high expectations about the amount of credit they will receive. Mentors who give consistent, clear, accurate advice on the degree plan and portfolio and who ease the students' anxieties seem to work more effectively with fewer cases of attrition than other mentors. There seems to be some evidence that those centers employing a primary mentor mode have overall less attrition than other centers.

After 10 years of operation, it may be appropriate to review what is being asked of mentors regarding assessment. Not all mentors are ready to handle nor are they interested in the complexities and challenges of assessment; yet the expectation is that all mentors will. Some mentors enjoy working on assessment and have over the years developed special skills, knowledge and techniques in working

with students. It may be time to review what mentors are expected to do in degree program planning and assessment. There may be major advantages from a division of labor at centers regarding who is best able to handle the degree program plans for students.

Conflicting Purposes of the General Essay

The general essay can be a significant tool for educational planning, for providing a context for assessment and for reviewing the degree program. It should not, however, be considered by the student or evaluators as a primary document of evidence regarding what was learned. What seems to have happened is that the component essay shifts to the student many of the tasks involved in evaluation. As a result, students face an incredible task of constructing detailed essays that are often inappropriate to the educational purpose involved and become inefficient ways to demonstrate learning. Students express great frustration in putting such essays together and revising them. Some attrition occurs at this point. The research group recommends that the educational purposes of the general essay be clearly stated to incoming students and reaffirmed in mentor practices but that the use of the essay for evaluative purposes be eliminated (Office of Program Review and Assessment, 1980, pp. 14-15).

Upfront Assessment

Over the years, the College has moved to provide degree program planning and assessment earlier in the students' overall program. New students still ask how much credit they will receive prior to enrolling. The College has considered various strategies for quicker upfront assessment, including the idea of an assessment center, a transcript of evaluated learnings, and the idea of a credit bank.

Students do not understand why the College cannot provide a pre-enrollment assessment of student learning (or early assessment).

Two centers, PAC and CDL, are working on proposals for more streamlined and standardized approaches to assessment that would recognize and award credit for common areas of learning. The research group thinks it's time to seriously examine the possibilities for a pre-enrollment assessment effort and/or for an upfront assessment determination upon initial enrollment. Such an assessment judgment, which may be incomplete and nct tied to a degree program plan, may go a long way toward reducing entry level anxieties and fears students have and provide a sense of direction to their emerging degree plans.

RECOMMENDATION FOUR: PRESENT A MEANINGFUL AND ACCURATE PICTURE OF THE INSTITUTION

Presenting a misleading picture of the institution to prospective students can have serious negative effects on retention. Dropouts will share their disillusionment with relatives and friends, and this can negatively affect future recruitment. It is suggested that well-designed, extended orientation programs have a positive effect on retention. Efforts toward increased retention must be shared by the entire college community (NCHEMS, 1980).

In Section A, Question 5, we discussed the double-edged nature of ESC's attrition. The College has certain features that are very attractive to entering students (e.g., credit for prior learning, work and study at the same time); yet for some students who enroll, those same features, such as assessment, may become huge stumbling blocks to earning a degree.

Presenting a meaningful and accurate picture of the College starts with the basic information sent out to applicants as well as what happens at orientation workshops. A recent evaluation report of the Public Affairs Center (1980) identified orientation workshops as an area for careful review and potential improvement. A recent report on assessment at the College provides valuable insight into the entire process and offers an agenda for improving College practice (Office of Program Review and Assessment, October, 1980). The research and evaluation administrative group, itself, has a great deal of experience and background to address the question of whether the College "limits its promises or promises the limits".

Several studies cited in this report as well as the general discussion by the research group focused on the topic of how College information is received, understood, and acted upon by potential students and currently enrolled students. For example, the study of PAC non-applicants revealed that a small number of people (20%) were confused by the College's basic concepts as presented at information/orientation sessions (Public Affairs Center, 1981). The double edged nature of the College's program, discussed on page 23, indicates that a minority of potential as well as current students have difficulty understanding the concepts of assessment, contract learning and individualized education in practical terms. We recommend a careful evaluation of orientation workshops so that the impact of College presentations on different kinds of students can be assessed (transfers, first-time students, etc.).

C. SUNY Retention Suggestions

In 1977 the Chancellor created a SUNY-wide Retention Improvement Programs Task Force to review the causes of attrition and to prepare recommendations for SUNY campuses to deal more effectively with retention of students. The Task Force prepared and distributed to the 64 campuses a Retention Resources Manual (1978) which is a useful collection of materials on attrition, individual college attrition studies, recommendations for individual campuses and selected retention programs operating nationally that have reduced attrition.

The Retention Resources Manual contains valuable information and suggestions in many areas; we have extracted from the Manual a few items that provide a context for ESC's review of the attrition question.

RECOMMENDATION FIVE: INDIVIDUAL CAMPUS PRESIDENTS SHOULD MAINTAIN AN ACTIVE AND VISIBLE PROFILE WITH REGARD TO INSTITUTIONAL CONCERN AND ACTION TOWARD THE RETENTION OF STUDENTS

As a point of departure, each campus president may wish to examine the appropriateness of each of the following "First Steps in Developing A Campus Retention Program":

a) Determine the facts on attrition for your campus. Who is dropping out at what point? Do attrition rates differ by class? race? sex? major program? off-campus/on-campus? etc.

b) Gather information as to why students drop out and why they stay. Identify institutional features and/or practices which unnecessarily wear students down.

c) Analyze and assess the admissions program including recruitment practices and materials for both full-time and part-time, freshmen and transfers.

d) Evaluate the impact of your Orientation Programs (both freshman and transfer) on establishing institutional image and expectations.

e) Determine the adequacy and effectiveness of your program of student support services, from admissions counseling to job placement.

f) Evaluate the effectiveness of your student information and tracking system.

g) Determine whether the quality of student life is a major, campuswide concern which involves the time and energies of faculty as well as student affairs and business affairs staff?

h) Ask students to evaluate the academic advising program. If they say it needs improvement, do something about it!

i) Develop an effective early alert system which targets in on student groups known to be dropout prone (e.g., marginal ability, those undecided about major, students on probation).

j) Assure that your institution has a sensitive exit interview process.

k) Establish a retention study group to highlight retention as a continuing concern.

l) Review the college's requirements, policies and regulations to assure their efficacy and appropriateness.

m) Review college procedures to assure they are simplified and responsive to students.

n) Insist there be a campus-wide attitude of serving students.

Source: Retention Resources Manual, SUNY Retention Improvement Program, Task Force 1978, p. 10. See also Schroder, Directory of Retention Programs in SUNY Colleges, 1981.

This working paper brings together information that answers many of the questions posed by the SUNY task force and indicates Empire State has engaged in previous, although somewhat ad hoc, efforts to eliminate certain bottlenecks in the pipeline.

The research/evaluation group now wants to discuss several components to an overall strategy for retaining students at the centers and offers these suggestions for more careful consideration.

RECOMMENDATION SIX: ESTABLISH AN EARLY WARNING SYSTEM

After digesting the data in this report, we now have a fairly good profile of the student most likely to withdraw: in terms of demographic characteristics, leavers are more likely to be young, male, single, enrolled full-time and working full-time in a blue-collar occupation. There are more specific target profiles that can be developed for each center and for special programs within a given center. For example, we now have profiles for the OGS and DOL programs within the Public Affairs Center which differ in certain respects from the general College-wide profile. Those centers desiring further analysis of their student population may request assistance from the research/evaluation group.

Each center may have a slightly different profile (or profiles) of students most likely to leave. Therefore, the design of an early warning system to flag potential leavers may vary across the centers. Attrition-prone target groups are best aided by a particular action program which also has the advantage of economizing on center staff, time and energy. A center may develop an early warning system that focuses attention on entering students who fit the demographic profile, or who are high risk students, or who have low academic performance (or weak writing skills), or who are undecided about their educational goals, or who have no or very little prior learning. These are but a few of the target groups that might be included in an early warning system.

Each center may develop a plan of action after determining what target groups of attrition-prone students need attention. These students may need extra support during the first contract, may need additional help in planning their degree program, may need more focused and thorough advising by mentors, and may find group studies with similar students a valuable support structure. There are, to be sure, many other activities that a center could identify as ways to better integrate attrition-prone students into the program. Centers might draw upon interested alumni and other students as well as faculty, support staff and administrators to assist in working with students likely to withdraw.

RECOMMENDATION SEVEN: PROVIDE REGULAR OPPORTUNITIES FOR STUDENTS TO ENGAGE IN GROUP LEARNING EXPERIENCES

There is a significant minority of ESC students who desire and need a group-based learning experience. Literature on attrition repeatedly cites the importance of integrating a student into the academic and social environment of a college. Recall our earlier discussion of conceptual models (p. 2) and Tinto's depiction (Figure 3, Appendix A) of academic and social integration as important bonds linking an adult to the program.

For those ESC students who see themselves as isolated, alone, and facing all the hurdles of the academic program by themselves, the invitation to participate in a regular group experience may be a most welcome relief. What is important to these potential leavers is that there be available a regular opportunity for a group-based learning experience so that the powerful dynamics of the group process can reinforce the mentor-student relationship. We recognize this recommendation runs in part counter to the individualized nature of ESC's academic program and that providing frequent group learning experiences have important implications as to how centers are organized, staffed and operated. Yet the research group thinks the merits of group studies for particular clusters of students, such as the clerical workers at DOL, during the entry phase far outweigh the College's historical resistance to "reinstituting" the classroom and are worthy of small scale experimental efforts to determine their impact.

RECOMMENDATION EIGHT: ESTABLISH A RECOVERY PROGRAM AT THE CENTER LEVEL

Attrition is expensive. Every time the College must replace a student who leaves because of college-related reasons, we start the entire process of recruitment, orientation, admissions over again. We know that in order to maintain an FTE enrollment of 3500, the College actually handles over 7,000 students in a given year. Our cost figures show an aggregate replacement cost of more than two million dollars each year. Given these facts, it is imperative that the College develop a more systematic recovery program for those adults who once were enrolled in the program. Some centers may want to build the recovery program into their strategic planning activity.

Since former students are already familiar to some extent with the College and its ideas, processses and practices, it may be more practical to focus on recovering some of these students. A direct example of one such recovery effort was the January phonothon of 1977. In this phonothon, the Coordinating Center staff identified those former students with problems that the College could resolve and initiated steps to remedy those situations that needed attention. Seven months later, the research office checked the enollment status of the withdrawn students and found:

--35% (19 of 55) of the voluntarily withdrawn students who said they would reenroll did, in fact, reenroll.

-- 14% (2 of 14) administratively dismissed students did reenroll.

A very recent example of phone follow-up calls was the PAC attrition study. As a result of those phone calls and further discussions with the project coordinators, approximately 15% of the former students returned to the program three months after the calls

were made (Public Affairs Center, 1981). The PAC report contains several recommendations regarding the need for establishing a recovery program.

These reenrollment figures seem to suggest that a phone call followed up, where appropriate, by administrative action to correct problems needing such action leads to a return of former students, especially the voluntarily withdrawn type. This recovery approach seems to be worth more systematic attention by the College.

RECOMMENDATION NINE: INITIATE ADULT SERVICES AND RESOURCE SUPPORTS

The Student Affairs Committee, various centers, and students over the years have advocated that the College should provide in a more systematic way student services and supports for adults. In the past, the College has conducted assessment workshops, mentor advising workshops, academic and career counseling on an individual basis, life planning activities, limited job placement services and some bureaucratic expediting efforts. Some centers, such as Long Island and Statewide, have supported on a part-time basis a person as a local ombudsperson to handle student problems on a much more personal basis. The 1982-83 College budget again requests support for three student affairs positions.

Not all ESC students require or request the traditional student services available on a regular campus nor is it appropriate and feasible for the College to develop such services. The College's previous efforts might be characterized as a "sink or swim" set of support services. There are, however, distinct services appropriate

to adult students, such as career counseling, financial aid advisement, life/cycle planning, mid-career/mid-life placement services, and the dual career family academic counseling. Services of this kind require the College to think in new terms and in new directions about adult needs, resources and supports (Knefelkamp, et. al., 1978; Weathersby, 1980; McCoy, 1978; Knox, 1979; Shipton and Steltenpohl, 1981). What is needed at this juncture are small-scale experiments, such as the one presently being tried out by Shipton/Steltenpohl on Long Island on life cycle planning at orientation. As part of these experiments, we may need to draw upon the interests, skills, and expertise of current students and/or alumni as resources for improving adult services. Financial planning and personal scheduling, including contingency scheduling, are two areas that particularly need to be addressed, as previous studies reveal the difficulties adults encounter with the twin problems of how to allocate precious time and money.

It is appropriate to return to our conceptual models for a final word on adult resources and supports. The Tinto model (p. 2) describes the academic system and the social system as two parallel processes at work leading to academic integration and social integration. In the first ten years, the College addressed the academic system and focused on how to achieve academic program integration. It is now time to turn attention more carefully to the area of social integration, particularly its meaning for adult students who are not on a campus and are not interested in extra-curricular activities.

Coordinating Center Offices

Student records and paperwork flow through a pipeline connecting several Coordinating Center offices during the time an adult is enrolled at the College. The research group recognized that a full scale inquiry into such offices as admissions, academic records, student accounting, and academic affairs was beyond the scope of this first year effort. The research group did, however, single out two offices for a more intensive analysis--financial aids and OPRA.

Office of Financial Aid

Securing the level of financial support, including financial aid, is a most important activity for approximately 50% of ESC's students (see Section B, Question 5). The financial aid office has been working steadily over the past few years to inform students about the length of processing time various types of aid require, to advise students on the amount and type of aid available, to hold center workshops for those staff who will advise students about financial aid matters, and to prepare for a computerized financial aid system which should improve the processing of applications and provide a quick check of financial aid status of any person. All of these steps have been taken to reduce the bottlenecks in the process and to better inform the student and the center about the financial aid status of each person. Working with the financial aid office, the Student Affairs Committee has prepared a financial aid planning calendar, recently printed, that should facilitate the preparation process. The research group supports the activities underway by the financial aid office and offers the follo ng recommendations as additional ways to improve the process.

RECOMMENDATION TEN: EXPLORE WAYS TO OBTAIN BEOG AS UPFRONT MONEY FOR TUITION REIMBURSABLE STUDENTS

One of the problems identified in various places in this report concerns a group of students who have great difficulty coming up with tuition money but, upon completion of their work, are eligible for tuition reimbursement. Initial discussions in the research/evaluation group indicated that some of these students might qualify for a BEOG grant. If so, then this type of student may be able to handle the financial support problem in a very different way than currently occurs.

RECOMMENDATION ELEVEN: IMPROVE THE QUALITY OF FINANCIAL AID ADVISING AT THE CENTER LEVEL

Financial aid forms are complicated, technical, and very difficult to fill out. Often times the forms are filled out incompletely or incorrectly, thereby increasing the time to straighten out the paperwork. Furthermore, it is often the least prepared or least educated person who seeks financial aid support. One source of attrition, then, is that group of adults who are perplexed and defeated by the forms. The quality of assistance provided by the centers varies by the person doing the advising. Although the financial aid staff visit the centers yearly and conduct training workshops, this important effort only begins to meet the need for high quality financial aid advising. Because financial aid advice is important to center recruitment and enrollment in a college with a year-round calendar, we recommend that additional training activities be conducted to reduce attrition from this source.

Office of Program Review and Assessment

RECOMMENDATION TWELVE: OPRA SHOULD STUDY THE POST-ASSESSMENT ATTRITION PROBLEM

This report discussed assessment/attrition questions earlier (pp. 55-58) and will not repeat that analysis here. We do want to raise, however, one issue that needs further study. The research group clearly recognized the importance of the degree plan and portfolio preparation as a major source of attrition; yet we expected to find that upon completion of the assessment process, almost all students would end up earning a degree. Such is not the case. Early studies showed about 80% of those completing assessment graduated (p. 21) and the most recent two years (1978 and 1979) revealed that 83% and 73% respectively earned a degree. What happens to a mysterious 20-25% who complete assessment but do not graduate two or more years later? Barylski's studies several years ago revealed a six-eight month clearance hurdle (academic and financial) but the recent data indicate for many students the time lapse is considerably longer.

CONCLUSION

This working paper provides Empire State College answers to seven basic questions about attrition and retention. The data assembled and analyzed in this report from ESC studies provide a rather unique picture of attrition among adult students. Ninety-nine percent of the previous attrition studies focus exclusively on an age-homogeneous group (18-23 year olds) and on a social-psychologically homogeneous group of students. Empire State, on the other hand, is characterized by diversity--diversity

in age, background, motivation, learning style, programs offered, educational resources employed, and educational outcomes obtained. Generalizations drawn from previous research apply to ESC in only a limited and incomplete way.

The research group has offered a set of recommendations that may form the basis of a College-wide, center-based retention program. These recommendations represent a first year review of the attrition-retention area and an effort to focus on the major leaks in the ESC pipeline. Since the strategic planning group is requesting centers to prepare an enrollment plan during the fall, the question of enrollment-attrition-retention becomes a crucial one to consider. The information provided here as well as the recommendations offered may serve, in part, as a framework for such enrollment plans.

What works in student retention? The elements of successful retention programs have been discussed in this report. The next steps are clear. Empire State needs to experiment with various strategies and techniques for retaining students. Promising projects are currently underway at several centers and need to be continued and expanded. Furthermore, as part of the strategic planning process, the topic of retention for some centers should be a central part of this enrollment plan.

The research group considers ESC's attrition rate to be too high. We know that attrition is very costly both to the students and to the College. In fact, many of the real costs are hidden and very difficult to identify. To assume, however, that retention equals success and attrition equals failure poses a serious misconception of the retention/attrition process. The primary aim of retention efforts should not be to help the College achieve numeric goals for enrollment, degrees granted, reduced costs per

student and so on. Rather, the aim of such retention programs should be to help adults achieve their educational goals, and resolve their individual problems in ways that meet their educational interests. A secondary aim of any effective retention strategy should be to serve the College (attracting, educating, graduating adults) by keeping it competitive, financially healthy, and educationally innovative.

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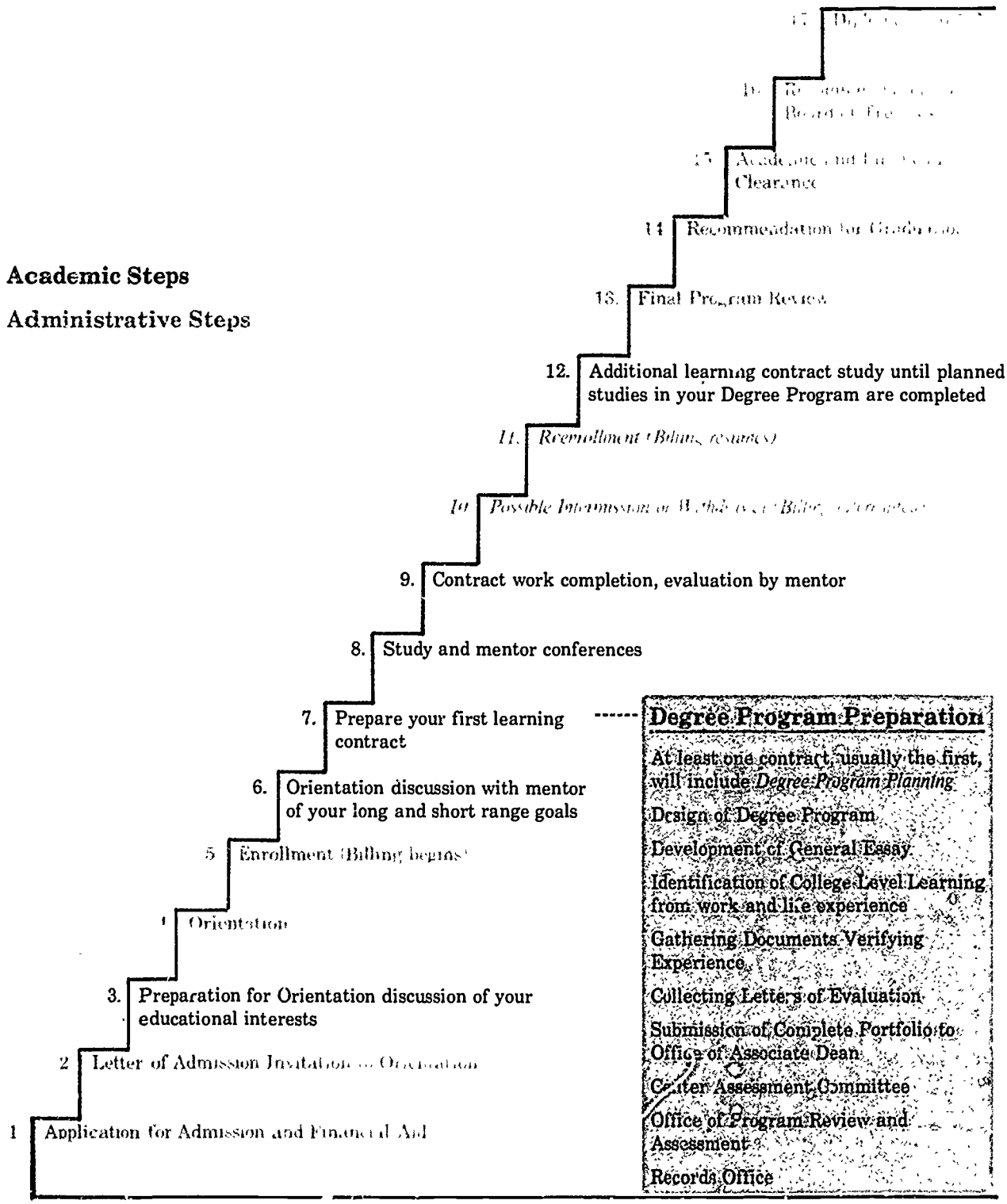
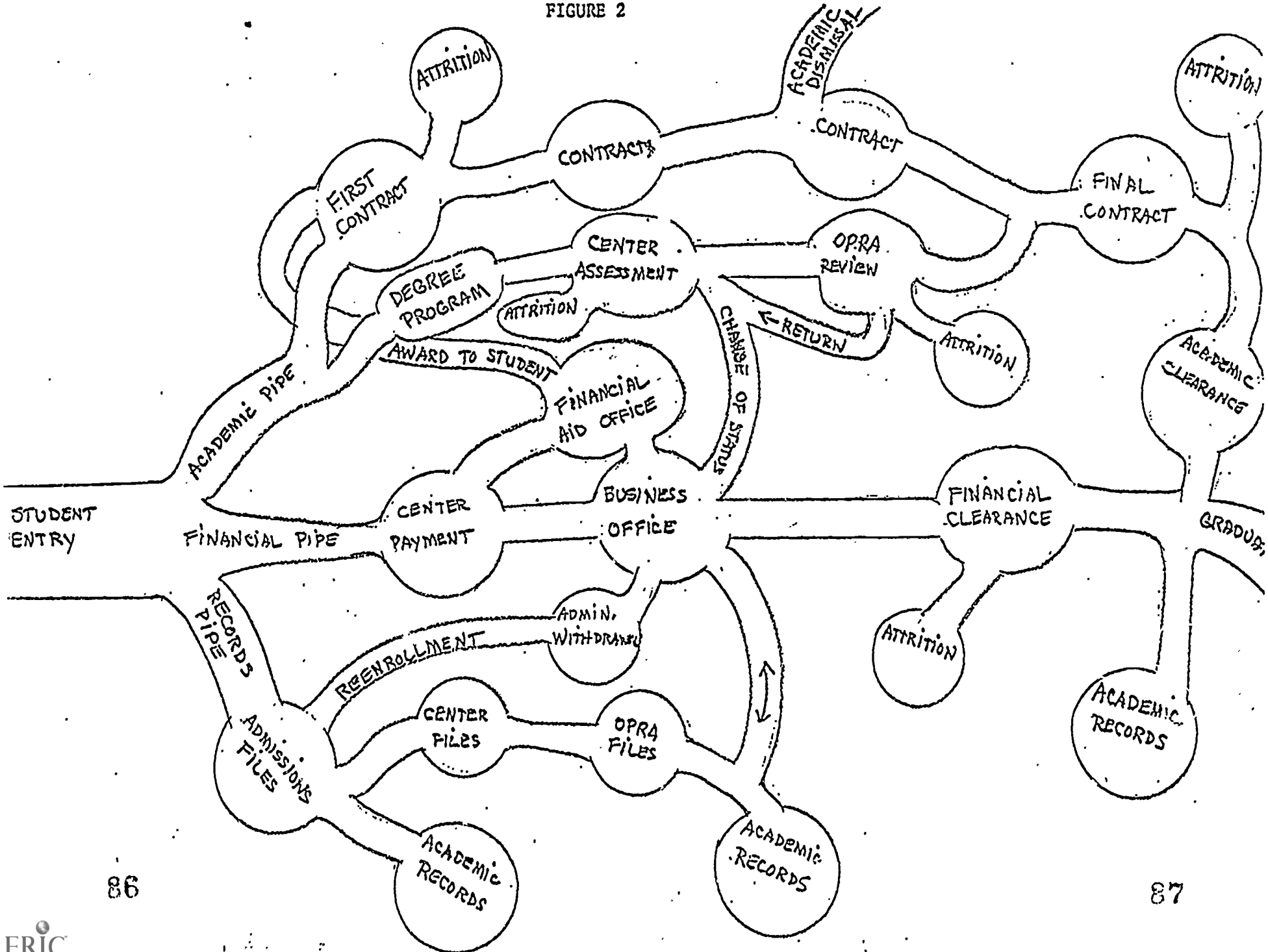
Figure 1

Steps to an Empire State Degree



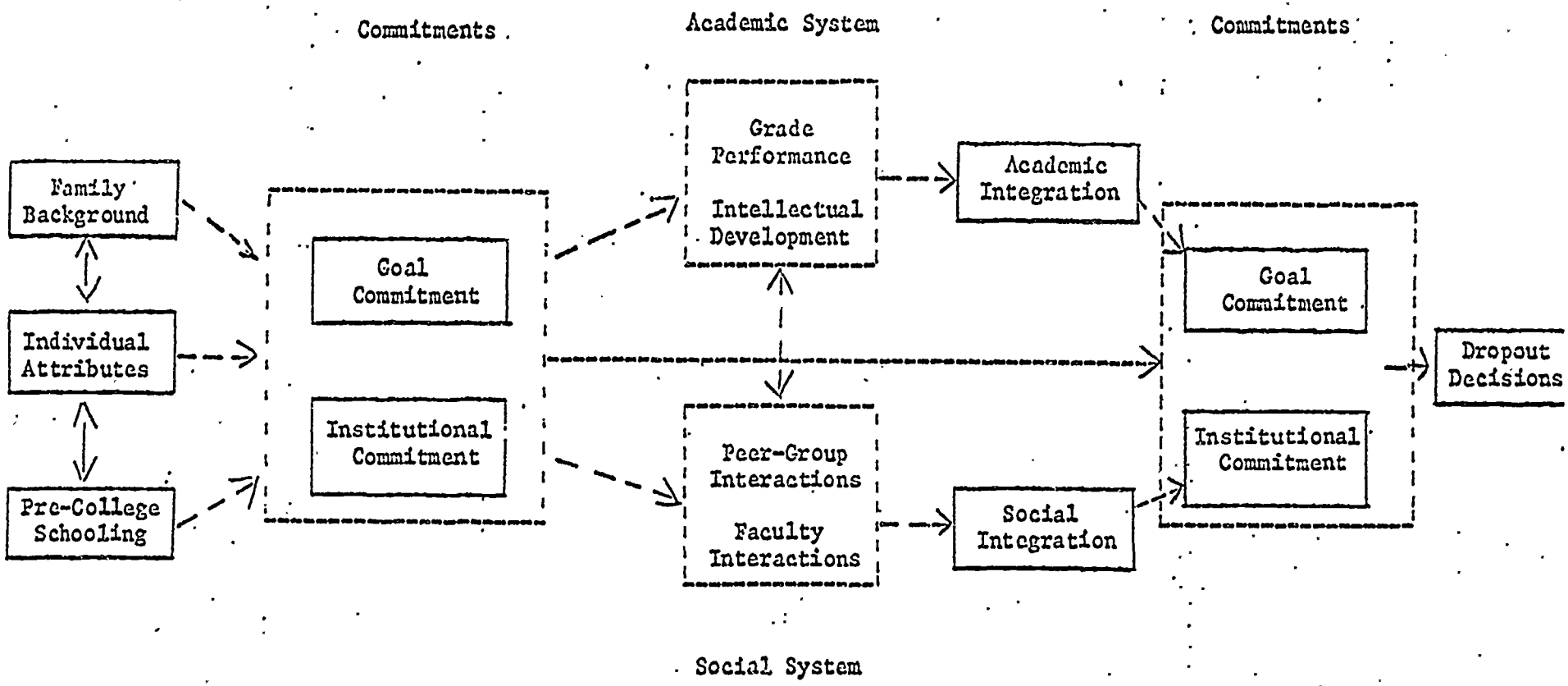
Source: Empire State College 1978/79 Handbook: Saratoga Springs, NY, Empire State College, 1979, p. 20.

FIGURE 2



Source: Simplified Pipeline Constructed from Student Handbook 1980-81 and Research Office Files, 1981.

Figure 3: Tinto's Model of Retention and Attrition



Source: Vincent Tinto, "Dropout from Higher Education: A Theoretical Synthesis of Recent Research," Review of Educational Research 45 (Winter 1975): 89 - 125.