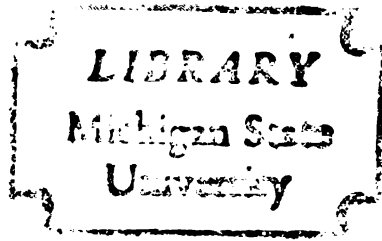




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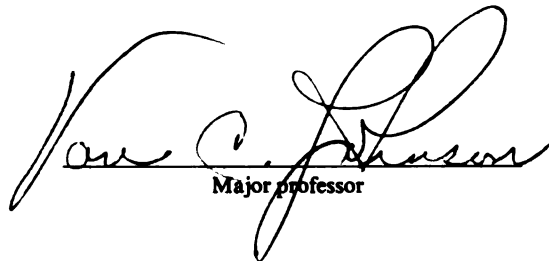
Attrition in a Graduate  
Extended Degree Program

presented by

Richard H. Potter

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ATTRITION IN A GRADUATE EXTENDED  
DEGREE PROGRAM

By

Richard Hastings Potter

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

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ABSTRACT

ATTRITION IN A GRADUATE EXTENDED DEGREE PROGRAM

By  
Richard H. Potter

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This study concentrates on the attrition of older students in a graduate extended degree program with three objectives in mind. The first is to determine the attrition rates for this population to get some idea of the magnitude of the problem of attrition. The second is to isolate demographic correlates to dropping out in order to construct a dropout profile. The final objective is to determine what factors lead students in this population to drop out. The information is intended to assist program administrators in designing retention programs for this population of students.

The study was conducted by drawing a random sample of students admitted to Central Michigan University's extended degree program in 1978. The single institution approach limits the generality, although this program was shown to have a population somewhat representative of the types of students who return to universities for graduate work while maintaining full-time employment.

Graduates and continuing students comprised 45.8 percent and 17.4 percent of the cohort, while the dropouts, non-voluntary dropouts and "no-shows" were 18.8 percent, 3.0 percent and 15.5 percent, respectively.

Very few demographic variables and individual characteristics were found to be significantly related to attrition. Among those which were significant were previous graduate work, having an advisor, receipt of experiential learning credit and the sex of the student, although there appeared to be intervening variables which reduce the relationship of sex and attrition. Some types of financial aid were found to be significant, but the affect differed for males and females by type of aid received.

Variables which were found to be of major importance in leading people to drop out tended to be variables which were not under the control of the program administrators as opposed to programmatic variables.

The study concludes that attrition, among this population at least, is a multifaceted problem that resists the construction of profiles and straight-forward interventions. Further, it concludes that emphasis should be shifted to retention rather than the prediction of attrition. Extended degree programs, with their self-contained sites, would appear to provide an ideal laboratory to pilot retention actions.

## ACKNOWLEDGEMENTS

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## CHAPTER I

### THE PROBLEM

#### Background

College attrition is a subject of interest, concern and importance to educators, and according to Summerskill (1962) has been so for forty years. Why this interest in attrition? The answer lies in the fact that attrition functions as an index of waste and failure for higher education.

For the individual, dropping out of a degree program represents a waste of valuable time and resources. Whether the program failed to live up to expectations, the individual lacked necessary prerequisites or situations developed which precluded or seemed to preclude further participation, the individual's time, effort and money have been, for the most part, for naught.

Attrition and persistence are also important indexes for institutions. Just as with the individual, attrition rates provide the institution with an index of wasted resources. Presumably, if the resources invested in recruitment and selection, to say nothing of instruction, could be focused solely upon those who would persist, many more students could be served and recruitment and selection costs would be reduced.

Attrition rates are also an index of selection failure. They indicate the extent to which the college or university is unaware of the needs its programs are actually serving and of its own purpose.

In the same vein, attrition rates could be considered an index of the lack of congruence between an institution's perception of itself and the perception of the institution by its student body.

To the extent that attrition may be due to situational aspects or conditions of the students, the study of factors causing attrition may provide direction for institutional change. Institutions may well find that changes which are inexpensive to implement and do not affect or even have positive influence upon the programs and standards of the institution may reduce attrition. Institutions may also find such "defensive" actions to be more cost beneficial than "offensive" actions--such as recruitment campaigns and advertising for new students.

Perhaps the most important role attrition rates serve for an institution is as an index of the dissatisfaction of its students. Dropouts are those who have chosen to vote against a college or university with their feet--either to leave a particular institution or to leave higher education altogether. When one considers that dropouts represent those who were once "converted," "sold," or "won," it is clear that the level of dissatisfaction is severe.

Finally, the attrition problem deserves attention from those interested in and affiliated with higher education simply on the basis of the size of the problem. For every ten freshmen admitted to a four-year college or university in the United States, only four will graduate in five years. One more will graduate from the same institution sometime after five years. Of the five dropouts, four will enroll at another institution, but only two will

graduate. Three of the ten students who entered college will never earn a degree (Eckland, 1964; Iffert, 1957).

Although the foregoing may imply that attrition is a negative concept, it is recognized that in particular situations it may not be. For example, a community college--particularly one which is responsive to serving community needs--may rightly view a "dropout" or a person who does not re-enroll as a satisfied customer who has had his or her needs met. Several critics have correctly pointed out that for some students a few years of college will in itself be beneficial or that for some dropping out can be beneficial to personal development (Astin, 1975, p. 1). For the purposes of this study, however, the term "dropout" will be used to describe one who did not complete or continue a degree program which was presumably entered into with the expectation that it would be completed.

Given the importance of attrition, it comes as no surprise that the literature of higher education is replete with studies of attrition and persistence in higher education. As extensive as is the literature on attrition, however, important gaps remain. With the exception of a very few reports (e.g., Anderson, 1978; Bhatnager, 1975; Lehman and Bradley, 1975; Renner, 1975), most studies have focused on undergraduate populations who are enrolled in traditional campus-based programs. A preliminary review of the literature reveals few attempts to study the factors that would lead the older student to drop out.

Another gap in the literature exists with regard to the study of factors leading students to withdraw from graduate degree programs. Recently, attrition from doctoral programs has been a

popular topic for study by doctoral students (Lorenz, 1972; Nagi, 1974; Reebble, 1975; Renetzky, 1976). However, the study of attrition in masters level or professional degree programs do not seem to share the same level of popularity.

A final gap, and the one which this study will attempt to begin filling, is the determination of the factors and correlates of attrition among those adults who return to further their education through completion of advanced degrees. This population has been virtually ignored in the literature.

These gaps are made all the more significant by the changing nature of American college student bodies. This change in the type of student served by higher education is brought about by two factors: a decrease in the size of the pool from which colleges and universities traditionally draw students, and an increase in the numbers of adults returning to higher education. The coming decline in the number of eighteen year olds has been a major topic in higher education literature for the last few years, as well as in the popular press. There were more people in the traditional college age group (18-21 years) in 1980 than there will be in any time during the remainder of this century--and perhaps ever again (See Table 1). Coupled with the decline in the number of students in the traditional age group is the increase in the number of people in the older age groups and the increase in their participation in higher education (See Table 2). Moreover, as colleges and universities increase the numbers of programs specifically designed to serve adults and put more emphasis on recruiting adult

students, the participation rates should increase at an even faster rate.

Table 1  
Projection of the United States Population  
By Age, 1976 - 2000 (in Thousands)

Year	16-17	18-21	22-24	25-29	30-34	35 and over
1976	8,397	16,771	11,395	17,806	14,238	89,718
1980	8,157	17,117	12,346	18,930	17,242	94,544
1984	7,056	15,988	12,491	20,405	18,798	101,172
1992	6,382	13,685	10,555	19,017	21,068	116,710
1996	7,074	13,184	9,680	17,691	19,914	125,060
2000	7,924	14,990	9,663	16,469	17,981	132,298

SOURCE: U.S. Department of Commerce, Bureau of Census. "Projections of the Population of the United States: 1977 to 2050," Current Population Reports, Series P-25, No. 704, July, 1977, p. 28, 37-60.

Indeed, the 18-21 age group no longer predominates in higher education. With the growth in evening schools, extended degree programs, graduate and professional programs, and part-time enrollments, the majority of college students are over 21 years old (See Table 3). Although this may come as a surprise to many, it is less surprising when one considers that there are only 17 million in the 18-21 age cohort as opposed to 133 million in the over 22 age cohort. Therefore, a 27 percent decline in the 18-21 enrollment could be offset by a 3.5 percent increase in the enrollment of the over 22 age group (Bowen, 1980; p. 2).

Given the growing importance of the adult student, there are several reasons why studies of attrition of these students are

Table 2  
Proportion of the Population Attending College  
By Age, 1960-1976

Year	16-17	18-21	22-24	25-29	30-34	35 and over
1960		23.1%	8.3%	4.7%	2.3%	
1965		30.8	12.6	5.7	3.0	
1970		33.9	14.3	7.0	3.7	
1971		34.5	14.8	7.6	4.6	
1972		33.2	14.4	8.4	4.4	
1973		31.0	14.0	8.3	4.3	
1974		31.3	14.7	9.3	5.4	
1975		33.5	15.7	9.7	6.2	
1976	3.4	33.4	16.8	9.8	5.7	1.4

SOURCE: Howard R. Bowen, Adult Learning, Higher Education and the Economics of Unused Capacity, Future Directions for a Learning Society, (The College Entrance Examination Board: New York, 1980, p. 27).

Table 3  
Percentage and Number of Total Population  
Attending College, By Age, 1976

Age Group	Total in Population (000)	Percent Attending	Number Attending (000)
16-17	8,397	3.4	285
18-21	16,771	33.4	5,602
22-24	11,395	16.8	1,914
25-29	17,806	9.8	1,745
30-34	14,238	5.7	812
35 and over	89,718	1.4	1,246
TOTAL	133,157	7.3	11,614

SOURCE: Howard R. Bowen, Adult Learning, Higher Education and the Economics of Unused Capacity, Future Directions for a Learning Society, (The College Entrance Examination Board: New York, 1980.

vital for administrators who seek to encourage the enrollment of adults. First, such studies give institutions an indication of how they might best appeal to adult students in recruitment efforts. For if the factors which lead students to persist can be identified, institutions may emphasize those factors in the recruitment of students. Secondly, if adult students are to play a major role in American colleges and universities, more will need to be known about the flow of such students through the institutions so realistic planning may take place. No doubt models of student behavior will need to be modified as greater numbers of nontraditional students enter higher education. Although attrition is only one of many factors in such models, the extent to which adult behavior in regard to these factors differs from that of traditional students is important.

No doubt one of the most important reasons for studying the attrition and persistence of adults, however, is to provide direction for program administrators. Many administrators have not had to deal extensively with adult students in the past and may be unfamiliar with their needs. Researching factors that cause students to drop out can provide insight into programmatic modifications that may reduce potentially high attrition rates. Moreover such study may identify administrative accommodations that will impact on attrition rates.

Finally, the attrition of adult students is of important academic interest because the population is significant and so little research has been performed on the subject.



### Purpose

The purpose of this study is to determine those factors which lead students enrolled in graduate extended degree programs to drop out. Factors which will be considered may be personal, financial, academic, and programmatic. Another purpose of the study will be to determine which factors discriminate between dropouts and those who persist.

The information provided by the study will assist program administrators in devising strategies to reduce attrition among this group of students.

In addition the study will attempt to isolate those demographic correlates most closely associated with dropping out. With this information, a "dropout profile" will be constructed in order to allow program administrators to identify potential dropouts and thereby target intervention actions at groups which may need institutional support.

A final objective will be to determine an attrition rate for this population in order to get some indication of the size of the potential problem.

### Limitations of the Study

Sample and Population Limitations: This research studies individuals admitted to the graduate extended degree program conducted by Central Michigan University during 1978. Because the students enrolled in the Central Michigan University program have been found to be similar to students involved in other adult degree programs, insofar as important demographic factors

and reasons for entering the program are concerned (Medsker, 1975), this group is believed to be representative of adult students participating in graduate degree programs nationally. The fact this study includes students enrolled at forty-three sites across the country is believed to be an additional strength in that geographic differences may be partially controlled. However, the single institution sample must be considered a limitation.

A single year group of students was utilized in order that the dropouts could be studied in relation to a control group of students who entered at the same time but who persisted. The year group 1978 was selected because it was the most recent year group involved in the program for a sufficient length of time to either complete or drop out. It was determined important to select as recent a year group as possible, since the "older" the year group, the greater the difficulty in locating both dropouts and graduates. Also, since the primary purpose of the study is to provide direction to administrators, it was desired to sample as recent a group of students as possible. This study will therefore not reveal any changes in dropouts over time.

The population under consideration includes only graduate students and conclusions drawn from the study should not be inferred to be applicable to students who are enrolling in undergraduate or community college programs. The study was purposely designed to focus on graduate students since adults returning for advanced degrees are one of the "newer audiences for higher education (Medsker, 1975; Houle, 1974) and this group appears sizable enough

to deserve special treatment. In addition, there is no indication in the literature that graduate students will react in the same manner as undergraduates and it was not, therefore, deemed appropriate to include both groups in a single study.

A final limitation with the population involved in this study is that it includes only those students who are admitted to a degree program. Thus, it does not include the hundreds of thousands of students who may take one or more courses for personal satisfaction, to acquire a specific skill or knowledge, for social reasons, or to acquire a specific number of hours necessary for a pay increase. Although all of those reasons are legitimate, it was intuitively believed that motivations for such students were likely to be fundamentally different from degree-seeking students. If this were the case, the factors which lead degree seeking students to persist or drop out would no doubt be different as well. Moreover, since one of the prime purposes of the study is to provide direction to administrators of degree programs seeking to attract and retain adult students, consideration of the non-degree student was considered inappropriate. This is not thought to be an important limitation, particularly when one considers the fairly large body of literature which exists on attrition and retention of adult students in college and university extension and continuing education courses.

### Methodology

The approach used in this study may be considered a "cross-sectional autopsy" approach. It is cross-sectional in that it

studies a single year group cohort, as was discussed above under "Sample and Population Limitations." It is an autopsy study, as opposed to a longitudinal study, in that subjects were selected for consideration only after they had "declared" themselves as persisters or dropouts by either staying or leaving. The disadvantage of the autopsy study is that it is retrospective and the reasons for dropping out may change in the mind of the subject when queried months after the fact. For example, the "passion" with which the subject was or was not convinced of the rightness of his or her decision may fade. When confronted at a later date, the subject may feel a need to demonstrate that dropping out was the correct decision. Indeed, it has been found that the reported reasons for dropping out do change with time (Eckland, 1964).

The autopsy study has several strengths. It is less costly and the results are more immediately obtainable, and may thus be put to use much more rapidly. Also, as Demitroff (1974) has reported, the need to justify the dropout decision is very strong at the time of dropping out and there is a tendency to give an "acceptable" reason at the time. He has concluded that upon reflection the subject is more likely to give responses closer to the actual reasons.

#### The Extended Degree Program

The focus of this study will be the graduate students enrolled in the extended degree program conducted by Central Michigan University, and administered by a financially self-supporting entity of the University, the Institute for Personal and Career

Development (IPCD). The IPCD was established in 1972 for the purpose of providing working adults with the opportunity to attend college and earn college degrees without giving up their jobs.

The graduate program of the IPCD, in which business and management subjects predominate, is largely offered through conventional courses held at over fifty locations throughout the United States. The IPCD serves approximately 9,000 students during the year who, with few exceptions, are part-time students. In conventional terms, the IPCD generates approximately 2,700 "Fiscal Year Equated Students."

The IPCD begins offering a program at a location at the invitation of a "sponsor" who is acting on the behalf of some constituency--normally its employees. At the present time, the IPCD is conducting programs in cooperation with sponsors which could be broadly categorized into four groups: corporations, governmental agencies, military organizations, and associations. The sponsor normally provides a physical setting at which the program may be offered, and publicizes the program to its constituency. Little else is required of the sponsor. Initially, the original constituency makes up the entire student population, although within a short time the "student body" comes to be representative of all of the major employers in the area. After a site has been operating for two years, it is unusual if the original constituency forms a majority of the students at the site.

The two most unusual characteristics of the program are intensive scheduling patterns and the credit for prematriculation

experiences or experiential learning. The courses are, without exception, conducted during evenings and weekends so that they are accessible to the working population for whom the program was designed. In addition, the class sessions are fewer and lengthier than normally offered on campus. For example, one format used at a number of sites calls for the course to meet for three hours on Friday and six hours on Saturday on four alternating weekends. Another format calls for one four-hour meeting each week for nine weeks. The most extreme example of an intensive format is where the instructor contact portion of the course takes place in a forty-hour period in a single week. All of the courses require the students to register in advance of the course at which time they receive all their texts and assignments, many of which must be completed prior to meeting with the instructor for the first time. The length of the preparation period is inversely related to the total length of the course, with the students in the "one week" format registering from 45-60 days prior to the first meeting. Normally, there is a culminating assignment which is to be handed in after the instructor contact portion of the course is completed. The intensive scheduling format is attractive to adults because the fewer number of sessions make it easier for them to plan their schedules; it reduces the number of evenings they must be away from their families; and it reduces commuting expense. The shorter duration of the courses allows for better planning.

The experiential learning program allows a student to submit a portfolio of work and non-accredited training experiences

along with a self-evaluation of the learning acquired from the experiences. A group of faculty members who have undergone a rather extensive training period evaluate the portfolio in terms of academic credit in various areas. Approximately 20 percent of the graduate students earn credit in this manner, with the average award just under six semester hours of credit or slightly less than 20 percent of the minimum number of credits required for a Master's degree.

Though the nontraditional aspects of the program no doubt contribute to its rather widespread acceptance, it appears to be commonly held among the administrators of the program that the factor contributing most to the program's success is the practice of administratively accommodating the program to the working adult student. Generally, this practice includes trying to eliminate, to the maximum extent possible, the unnecessary red tape and hurdles that public bureaucracies tend to place before people. Specifically, this means such things as allowing students to register, purchase books, borrow books, and get reprints of articles by phone, screening all forms to insure that neither unnecessary forms nor unnecessary information is required of students; and generally attempting to treat each person as though his or her time is valuable. There is no collaborative data to support this contention, but the program administrators report this as one of the most frequently mentioned aspects of the program from students who have recently attended on-campus courses.

### Definitions

The following are terms used in this study which either have special meaning to this study or which do not have a generally accepted specific meaning.

Adult Degree Program: "A degree program with policies and procedures which enhance its convenience and appeal and with content of interest to students who are beyond what has been considered the conventional college age." (Medsker, et al, 1975; p. vii)

Dropout: An individual who, having enrolled for at least one course, fails to re-enroll for a period of at least one year.

Persister: A graduate or a continuing student who is not a dropout.

Extended Degree Program: Identical to adult degree program.

Nontraditional Program: An educational program in which a major focus of the program is the unconventional student clientele, method of delivery, or subject matter.



## CHAPTER II

### REVIEW OF THE LITERATURE AND THEORETICAL FRAMEWORK

Given the importance of retention for colleges and universities, it should come as no surprise that the literature of higher education is replete with studies of attrition and persistence in higher education. There is also no question that the body of literature on this subject will continue to grow as a result of two factors. First, declining enrollments will encourage greater study in this subject, and second, under the Higher Education Act of 1979, colleges and universities are required to furnish upon request attrition and persistence rates for all of their programs. Until now, it has not been uncommon for colleges and universities not to know what proportion of their students left. Because students left quietly during breaks, the rate seemed low, particularly when their places were taken by new students and transfers (Cope & Hannah, 1975). As a result of legislation, this should no longer be the case.

#### Criticism of Attrition Research

One of the major criticisms leveled at researchers who study attrition is that each tends to define "attrition" uniquely. Summerskill (1962) reported that in the studies he surveyed, attrition was defined variously as the percentage of students lost to divisions of an institution; as the percentage of students lost

to the college as a whole; and as the percentage of students lost to higher education as a whole. He went on to point out that attrition rates have been determined on the basis of those graduated-in-four-years, those graduated-in-four-years-or-still-enrolled, graduated eventually, and here-this-term versus last term.

Pantages and Creedon (1978) note that most earlier studies were cross sectional and, therefore, defined "dropout" as any student enrolled in the previous term who was not enrolled at the time of the study. Such studies did not distinguish between permanent and temporary dropouts and, therefore, the validity of comparing the findings from separate studies is suspect.

Longitudinal studies minimize the impact of the temporary dropout. Nonetheless, even with longitudinal studies the definitional problem remains. Eckland (1964) and Selby (1973) both took into account temporary dropouts and transfer students, who they did not count as dropouts, while Panos and Astin (1968) defined persisters as those who attended college for four years or more regardless of whether or not they graduated.

With regard to definitional problems, Pantages and Creedon (1978) note that beginning with Iffert's landmark study in 1957, there has been a tendency to categorize different types of dropouts and persisters and to study the subgroups. Several researchers (Bean and Covert, 1970; Prediger, 1970; Rossman and Kirk, 1970; Tinto, 1975) believe that finer classifications yield more meaningful data and more comparable data. However, even here the classifications differ. Iffert (1957) used ten different classifications in his study of 175 institutions sponsored by the Office

of Education. Subsequent researchers have tended to opt for fewer classifications, with the most common set of classifications being "successful" and "unsuccessful" persisters and dropouts, where successful is defined as making the grade point average (GPA) necessary for graduation. This classification was originally suggested by Rose and Elton (1966) and Prediger (1965) and has since been used with slight modification by numerous researchers (Bean and Covert, 1973; Hackman and Dysinger, 1970; Tinto, 1975; Vaughn, 1968).

Other classifications of dropouts that have been used are those which categorize on the basis of the time of dropping out. Several authors have studied the differences between dropouts of various year groups such as freshmen, sophomores, etc. (Demos, 1968; Marks, 1967; Sexton, 1965; Thayer, 1973). Rose and Elton (1966) differentiated between those who dropped out in the middle of a term and those who dropped out at a break and hypothesized that the two groups were psychologically different. One study (Hitchcock, 1955) differentiated between those who enrolled and those who were admitted but never arrived, and determined both groups dropped out for many of the same reasons.

These differences in definition and basis for attrition rates, though perhaps justifiable to the researcher who is interested in a particular aspect of the problem, have made it difficult for subsequent researchers to replicate studies and build upon the body of knowledge of the subject. Commenting on this problem, Panos and Astin (1968) concluded that "the results of most studies are simply not comparable because they deal with different

phenomena" (p. 70). Tinto (1975) observed further that this definitional problem has produced findings contradictory in character and/or misleading in their implications for administrators.

A second problem with attrition research, cited by several authors (Spady, 1970 & 1971; Rootman, 1972; Tinto, 1975), is that it tends to focus on describing the process of dropping out rather than attempting to explain it. In short, Tinto argued that the majority of studies of attrition have sought personal or institutional variables which are related to dropout behavior without developing a conceptual framework upon which to focus research. The model Tinto presented was an institution-oriented model that focused on the student's interactions within the institution. Tinto hypothesized that it is the individual's "integration into the academic and social system of the college that most directly relates to his continuance in that college" (p. 96).

A third criticism of some studies which have attempted to isolate factors leading students to drop out is that they focus solely on the dropout. Gekowski and Schwartz (1961), in citing such studies note that comparison groups should be utilized when studying either persisters or dropouts, since the characteristics or factors which characterize one group are often shared by the other. Pantages and Creedon (1978) caution that conclusions drawn from studies which do not utilize control groups should be drawn with care, since such studies are generally suspect.

An additional criticism made by Edmond Marks (1967) is that research on attrition is characterized by ex post facto

methodology. He states that the typical study isolates dropouts and then examines them with regard to a host of precollegiate characteristics or post withdrawal factors. Marks and other researchers (Kohen, et al, 1978; Jex and Merrill, 1962) suggest that longitudinal studies are superior because they permit an examination of the factors that cause attrition at the very time they are operating. Moreover, such studies are better able to identify those students who eventually return, and are thus only temporary dropouts. However, Houle (1964) indicates that reasons given by students for dropping out are rarely the actual reasons anyway and that they report "acceptable reasons" that, upon reflection, are changed.

Astin (1964), Chickering and Hannah (1969), Demitroff (1974), Gekowski and Schwartz (1961), Pantages and Creedon (1978), Summerskill (1964) and others criticize unidimensional studies that attempt to focus on one or perhaps two factors in the study of attrition. All of these writers conclude that typically dropping out is associated with a complex of causes.

One final criticism levied by several researchers, including Hackman and Dysinger (1970) and Tink (1975) is that studies should differentiate between the voluntary and the nonvoluntary dropouts since their behavior patterns are quite distinct.

### Attrition Rates

A great number of the studies which deal with attrition deal with the rate of attrition. Summerskill (1962) who pointed out some of the difficulties of comparing rates from one study to another, nonetheless found that certain major studies could give

a fairly good picture of how much attrition does take place in American colleges and universities. The first of the studies cited by Summerskill was conducted by McNeeley of the U.S. Department of Education in the 1930's. McNeeley determined that on average, schools lost 62.1 percent of their students in the four years after admission. However, 17 percent were transfers to other institutions so the net loss was estimated to be 45.2 percent (McNeeley, 1937).

A similar study was conducted by Iffert and sponsored by the Department of Health, Education and Welfare. The study covered over 12,000 students in 149 institutions. This study indicated that institutions lost approximately half of their students in four years and that only slightly over 39 percent graduated in four years. Iffert estimated that approximately 59 percent graduated eventually. Summerskill concluded that although attrition rates at individual institutions vary greatly--from as little as 12 percent to as much as 82 percent--American colleges lose about half of their students in the four years after matriculation. Perhaps the most important finding in his review of the early literature was that the attrition rate had remained relatively stable for the past forty years (Summerskill, 1962; p. 630).

Several researchers have stated they believe the attrition rates reported in earlier studies to be exaggerated. In the main, they state that earlier studies failed to make adequate allowance for the prolonged nature of academic careers and the

dropouts that return. Eckland (1964) maintains that Summerskill and Iffert underestimated the number of students who returned. He found in a study of University of Illinois students that although approximately 50 percent dropped out, over 70 percent of the dropouts returned to some college during the next ten years and 55 percent of those eventually graduated. He concluded that the true completion rate was closer to 70 percent. Several other studies support Eckland's findings, including Jex and Merrill (1962) who estimated that 60 percent of the dropouts will re-enroll and graduate, while Johansson and Rossman (1973) estimate that 80 percent of the dropouts will re-enroll and 60 percent will graduate.

Pantages and Creedon (1978) draw three conclusions from these latter studies. First, that longitudinal studies of at least ten years should be utilized to study attrition since the progression toward a degree is so much longer than earlier supposed. This contention is disputed by Panos and Astin (1968) who argue that the study should be designed to suit the particular purposes of the researcher. They argue that:

Research which attempts to establish the student's permanent loss to higher education must wait for its completion until all the subjects of the study have either completed or died. The point is simply that it is important in any research on dropouts that "dropout" be unambiguously defined and that the definition make sense with regard to the problem being investigated and to the possible applications of the findings (p. 70).

The second major conclusion Pantages and Creedon draw is that previous attrition rates for undergraduates have been overestimated. They say that where earlier studies have placed

attrition at 40 percent, it should be more accurately placed at 30 percent, in light of these later studies.

Lastly, they point out that the work of Eckland and others call for further research as to the factors leading to persistence given that many of those who are believed to be dropouts actually return.

Much less information exists about attrition rates of graduate students, a lack cited by a number of authors over the last twenty years (Berelson, 1960; Pantages and Creedon, 1978; Rosenhaupt, 1958; Wright, 1964; Johnson, 1970). Rosenhaupt (1958) reported that 62 percent of the graduate students who entered Columbia between 1940 and 1956 seeking either an M.A. or Ph.D. had failed to graduate. Wright (1964), in a longitudinal study which studied masters and doctoral students in a large Midwestern university, reported a 46 percent attrition rate among masters candidates and a 54 percent attrition rate among doctoral students.

The literature on the attrition rates of adult students is even more limited than that of graduate students. Although there are many researchers who have studied the rates and causes for adults dropping out of adult education courses, all studies located as a result of this search dealt with isolated courses and workshops that were of general interest and not part of degree programs. Exceptions to this general dearth of information are studies conducted by Bradley and Lehmann (1975), Bhatnagar (1975), and Hammer and Smith (1979). Bradley and Lehmann's study found attrition rates of 42 percent and Hammer and Smith found rates of



39 percent, which are entirely within the range of normal rates found by studies of more traditional students. These findings have been supported by others who have studied adult students as well (Anderson, 1979; Bhatnagar, 1975; Bartel, 1978; Degan, 1969).

It is important to keep in mind that attrition is not a monolithic concept in that it impacts each institution equally. Summerskill's (1964) review of thirty-five attrition studies revealed rates varying from 12 percent to 82 percent. Iffert (1957) and Summerskill found that attrition was higher at public institutions than at private institutions. As might be expected, attrition rates are different at different stages of the college experience, decreasing as students progress from the freshman year through the senior year (Iffert, 1957; Karmas, 1974; Kohen et al, 1978).

#### Individual Characteristics and Dropping Out

Age: Kohen, Nestel and Karmas (1978, p. 237) point out that there are conflicting hypotheses about the relationship of age and dropping out. On the one hand, older students would be expected to be more mature, less adventuresome and more committed to their studies than their younger counterparts. On the other, older students have usually suffered some discontinuity in schooling already and may be more inclined to drop out again. Moreover, they may be at a disadvantage because of deteriorated learning skills. The literature concerning the relationships between age and attrition is inconclusive.

Several researchers, including Summerskill and Darling (1955), Sexton (1965) and Thorndike (1942) found that entering students who

are older than normal tend to drop out in greater numbers than younger students. Other researchers, including Eckland (1964), Kohen, Nestel and Karmas (1978) and Karmas (1974) did not find any relationship between age and dropping out.

Interestingly, Bhatnagar (1975) and Bradley and Lehmann (1975) both found some relationship between age and dropping out when conducting studies involving adult students. Bhatnagar found that students in the age groups 26 to 30 and 31 to 35 were less likely to drop out, while students in the age groups 20 to 25, 36 to 40 and over 41 to be more inclined to drop out. Bradley and Lehmann generally found that dropouts tended to be younger than persisters.

Most researchers, including those who have found a statistically significant relationship between age and dropping out conclude that age is not an important factor in explaining attrition.

Race: Relatively few authors have studied the relationship between race and dropping out, and these report conflicting results. Bayer (1968), in a study of over 8,000 students, reported race to have little relationship to dropping out. Astin (1972) reports differences in the dropout rates for various races, with American Indians and Hispanics, Blacks, Whites and Orientals, in that order, being most likely to drop out. He hypothesized that the reason for the high drop out rates for Hispanics was largely attributable to their high concentration in two-year colleges, which he found to significantly reduce a person's chance of persisting. In four-year

colleges, he reported that the drop out rate was actually lower for Hispanics than for Whites (p. 37).

In his 1973 study, Astin controlled for academic factors and found that differences due to race disappeared, except for Hispanic students. Regardless of ability, Hispanic students tended to drop out more frequently. These results, he reports, were similar to a study he conducted in New York City involving Puerto Rican students attending New York University (p. 303). Astin hypothesizes that the differences for Hispanic students are a result of a language handicap.

Astin (1975) also looked at the attrition rates for Blacks attending Black schools versus Blacks attending predominately White institutions. When all factors except institution were controlled, he determined that persistence of Blacks, particularly Black males, is greatly facilitated by attending a Black college. He argues that the quality of the institution was controlled and that one explanation is that Blacks attending predominately White institutions are subject to isolation and alienation that attending a Black institution would largely eliminate (p. 143).

Sex: At least a dozen studies have attempted to answer "do more men or more women drop out?" The results of these studies tend to report that though the rates of men and women vary somewhat, the differences are not significant (Fenstermacher, 1973; Iffert, 1957; Johansson and Rossman, 1973; Panos and Astin, 1968). Contrary to this general finding are a few studies which ascribe a higher rate to men (Bemis, 1962; Demos, 1968; Nelson, 1966), and

a few which ascribe a somewhat higher rate to women (Astin, 1964; Tinto, 1975). Panos and Astin (1968) found no difference until they controlled for high school GPA, whereupon women demonstrated a higher rate of attrition. Several studies have indicated that the reasons for these seemingly contradictory findings are that sex may be related to attrition at some institutions and not at others. Cope, Pailthorp, Trapp, Skaling and Hewitt (1971) found that women are more likely to drop out when attending an institution with a high male/female ratio. Similar findings have been reported by Astin (1964).

Other sex-related attrition studies include one by Knoell (1960) in which she reported a higher involuntary drop out rate by men which was offset by a higher voluntary withdrawal rate for women. Several studies have indicated that women are more likely to complete in a four year sequence, while men are more likely to return after dropping out and ultimately graduate (Astin, 1972; Panos and Astin, 1967; Tinto and Cullen, 1973; Trent and Ruyle, 1965). It should also be noted that by and large, when differences in the rates of attrition between the two sexes are found, they are normally less than 5 percent. The studies of graduate dropouts reviewed as a part of this report show slight differences between the attrition rates of males and females, but none had a sufficient population of women to draw any conclusions.

Academic Factors: In his landmark study of 1955, Iffert concluded that students in the top 20 percent of their high school graduating class were eight times more likely to graduate than

students in the bottom 20 percent. As might be expected, Bertrand (1955) showed that three quarters of the students who drop out for academic reasons are from the lowest quarter of their high school graduating class. Finally, Astin (1973) found that the probability of obtaining a bachelors degree in four years will increase by 70 percent if a student maintains a high school GPA of 3.5 or better.

The relationship between high school grades and persistence, as found by Astin, is shown in Table 4, below.

Table 4  
High School Grades of Persisters,  
Temporary and Permanent Dropouts<sup>1</sup>

Average Grade in High School	Persisters  %	Temporary Dropouts  %	Permanent Dropouts  %
A or A+	87	6	7
A-	82	7	11
B+	77	8	15
B	66	11	23
B-	62	13	25
C+	52	13	35
C	44	13	43

<sup>1</sup>Based on sample of 101,000 students entering college in 1968  
SOURCE: Alexander Astin, Preventing Students from Dropping Out,  
(San Francisco: Jossey Bass, 1975) p. 31.

Astin (1975) states that only for one group is high school rank a stronger predictor of persistence than high school grade point average--Black students attending "white" institutions. For all other groups GPA is a stronger predictor.

The majority of studies dealing with scholastic aptitude, as measured by performance on common standardized exams, demonstrate

that scores on the SAT and ACE, like grades, are strong predictors of persistence (Bayer, 1968; Panos and Astin, 1978; Astin, 1975; Summerskill, 1962). Astin (1964) found, however, that the predictive ability of scholastic aptitude test scores was significantly less than that of high school grades, particularly for Black students, for whom SAT scores are a particularly poor predictor.

As pervasive as the literature is regarding the positive relationship of high school grades, high school class rank and scholastic aptitude to persistence, there have been a few studies which have concluded that the affect of these variables has been over-emphasized. For example, some studies have found only marginal differences in high school rank and GPA between dropouts and persisters (Blanchfield, 1971; Eckland, 1964; Gekowski and Schwartz, 1971; Rossman and Kirk, 1970). No doubt one major reason for these findings is that Blanchfield, Rossman and Kirk and Gekowski and Schwartz distinguished between voluntary and non-voluntary dropouts. Eckland (1964) determined that although students with lower high school ranks tend to drop out with greater frequency, a high school rank of the 40th percentile or greater will not predict at all if a student is likely to return to higher education and eventually graduate, and concluded that class rank is not a stable predictor.

Several authors, including Blanchfield (1971), Cope and Hannah (1975), Marsh (1966), and Waller (1964) have also criticized the over-emphasis on academic factors as predictors, pointing out that few studies have demonstrated correlations of over .50 between high school rank and GPA, and attrition. These studies have thus concluded that such factors are relatively useless for explaining

the dropout phenomenon. Pantages and Creedon (1978) dispute this contention, however, stating that the fact remains that these factors are still the single strongest variables presently used in the study of persistence. Astin (1964) hypothesizes that the predictive relationship between grades and rank could be enhanced by an adjustment for the academic quality of the high school attended. He states that the students' rating of the quality of their high school could add significantly to the precision of the grade-rank predictor. Interestingly, Dressel (1939) makes a similar assertion with regard to the prediction of college grades.

Scholastic aptitude tests have also been criticized as predictors of persistence by Blanchfield (1971), Fenstemacher (1973), Schwartz (1961), and Williams (1966). One explanation given for these findings by Williams and Astin (1964) is that there is relatively little variation in scores at any single institution, which will make it difficult for the tests to predict between the two groups at any single institution. Astin found that this phenomenon was particularly true for minorities. Also, some of these authors distinguished between voluntary and non-voluntary dropouts and concluded that there was no difference between voluntary dropouts and persisters insofar as academic persistence was concerned.

An academic factor with a relationship to attrition that has been studied by several authors is GPA prior to dropping out. A review of these studies reveal mixed findings, but mixed in much the same pattern that are studies of academic factors upon entrance to college. A great number of studies report a strong relationship between first semester grades and dropping out. Summerskill (1962),

for example, found such a relationship in the over thirty studies he reviewed, and subsequent researchers have confirmed those findings. However, when dropouts are divided into voluntary and non-voluntary groups, it is normally found that there is no significant difference between persisters and voluntary dropouts with regard to first semester grades (Rossman and Kirk, 1970; Sexton, 1972). In somewhat related studies, several authors (Birney, 1969; Glasser, 1969; Thayer, 1973) have attempted to study the affect of poor grades as a producer of a negative self image that further causes a student to do poorly to the point that the student gives up. Such studies were prompted in the sixties and seventies as a result of certain attempts of colleges and universities to build nonpunitive elements into their grading systems to prompt students to "experiment," and to reflect the concept popular in some sectors that the transcript should be a record of achievement, not of failure. These studies are not conclusive, in that they have been unable to demonstrate whether the poor performance is a function of a reaction to previous poor performance or of less ability and motivation.

With regard to graduate students, both Wright (1964) and Lorenz (1972) found no relationship between undergraduate grades or scores on the Graduate Record Exam and persistence in graduate school. Renetzky (1966) obtained similar findings in his study of doctoral students at the University of Southern California.

Socioeconomic Status: Although Summerskill (1962) noted that Socioeconomic Status (SES) is commonly thought to be a major factor influencing attrition, the evidence of this is mixed and



depends on the SES variable being considered. A number of studies have found persistence positively related to parental education level (Astin, 1964; Chase, 1968; Eckland, 1965; Astin and Panos, 1968). However, several studies have concluded that parental educational level is not related to persistence (Rossman and Kirk, 1970).

Family income is another SES variable that would on its face seem to be strongly related to attrition, although here too the research is equivocal. A substantial number of respected researchers have reported that income is positively related to persistence (Astin, 1975; Cope, 1967; Cliff, 1962, Iffert, 1957; Thistlethwaite, 1963; Van Alstyne, 1973). An equally substantial number of respected researchers have determined that family income is not correlated to persistence (Astin, 1972; Eckland, 1965; Gonyea, 1964; Jones and Dennison, 1972; Pearlman, 1962). In any case, it appears that family income is not a major problem in persistence. And while some studies show that a substantial number of students report they withdrew because of finances, these same studies show that the chances of poorer students graduating are equal to that of more well-to-do students. Lack of money is an acceptable reason for dropping out regardless of the actual reason. Perhaps as Jenks and Reesman (1968) concluded . . . "while dropping out is not related to family income, it is related in some cases to family parsimony" (p. 120).

Several studies have attempted to use a variety of SES variables to correlate "social class" and persistence. Multi-institutional studies by Astin (1970) and Jaffee and Adams (1970)

using this approach found a positive relationship between social class and persistence. However, Morrissey (1971) also used this approach and determined there was a negative relationship between social class and persistence. He concluded that the motivation to improve social standing through achievement of a college degree was a compensating factor.

Eckland (1965) points out two flaws in the research dealing with SES that he believes contribute to the contradictory findings. First, he points out that in any one institution, the range of any SES variable is relatively small, and therefore differences will tend to be obscured and few correlations will be found. Second, because most studies disregard returning students, they do not measure the impact of SES variables in predicting which students will return. He states that in the long run, SES factors provide a strong positive predictor of which students will eventually persist.

#### Psychological Characteristics Related to Attrition

One of the more widely studied areas of attrition research is the relation of psychological characteristics to attrition and persistence. Much of this research has centered around attempting to develop a profile of dropouts and persisters through the use of psychological and personality inventories such as the MMPI and the Omnibus Personality Inventory (OPI). Typical of these studies are those performed by Gough (1962) who reported several studies in which students who scored higher on the socialization (So) and responsibility (Re) scales of the MMPI tend to be more successful

and persist in college. The So scale reflects capacity to live without friction with others, freedom from rebellion and authority problems, and personal freedom. The Re scale reflects seriousness of thought, dependability, and well-developed values. Gough concluded that the more conforming, tractable but self-sufficient student will be the most likely to persist. He points out that this finding runs counter to the commonly accepted notion of the college student as a "free spirit" who rebels against traditional values. Suczek and Alfert (1966), in a study that examined transfers, nontransfers, dropouts and returnees, found that transfers and persisters were similar and differed from dropouts and returnees. Transfers and persisters were found to be more conservative, conventional, compliant, task oriented, and ambitious. Dropouts were characterized as enjoying fantasy, being more rebellious and being more imaginative. The returnees were found to be the most mature of any group. Findings similar to these two studies have been reported by Heilbrun (1965), who essentially confirmed Gough's findings, and by Blanchfield (1971), Grace (1957), Hanson and Taylor (1970) and Rose (1965).

It is possible to find studies which ascribe consistently negative personality characteristics to dropouts along with those which ascribe relatively positive characteristics. Astin (1964), in a study involving National Merit Scholars, found dropouts to be more assertive, aloof, self-centered, and impulsive than non-dropouts. Other studies have shown dropouts to be critical, disagreeable, immature, impulsive, unstable, hedonistic (Beahan, 1966; Blanchfield, 1971; Grace, 1957; Hannah, 1969, 1971;

Vaughn, 1968). On the other hand, studies have found dropouts to be autonomous, mature, intellectually committed, imaginative students who were seeking a less conventional, more challenging education (Keniston and Helmreich, 1968; Suczek and Alfert, 1966; Trent and Ruyle, 1965). Several researchers have concluded that if voluntary dropouts are studied apart from those who were required to leave because of academic or disciplinary problems, many of the negative traits would describe only the nonvoluntary dropout (Dutt, 1971; Eckland, 1964; Rossman and Kirk, 1970).

Aside from the impreciseness of personality testing, there are several difficulties with using personality factors as predictors of attrition. First, given the attitudes in society today toward privacy, as well as the increasingly negative opinion toward standardized examinations of any type, it is extremely doubtful that psychological testing will ever play a major role in predicting dropouts. Second, Pantages and Creedon (1978) point out that for methodological reasons alone, it would be unwise to include personality or psychological testing as a criteria for admission, since to date the research has not succeeded in isolating those traits which would be significant predictors. Finally, Cope and Hannah (1975) point out that studies which focus on personality variables are replete with problems of sampling, measurement, and design.

#### Financial Aid

The impact of various types of financial aid on attrition varies with the type of aid under consideration, though there

seems to be general agreement between researchers that financial aid plays a role in attrition.

The role of loans, which are one of the more controversial sources of financial aid, with proponents arguing for their lower cost and critics complaining of burdening students with long-term debts, have an equivocal role in attrition. Blanchfield (1971) reported that loans have no relation to persistence, while Trent and Medsker (1969) reported that students who seek loans are more likely to stay in college. Astin (1975) found that reliance on loan support increases a male student's chances of dropping out by six percent (15 percent in a private institution) and a female student's by about two percent.

Astin found a similar difference in the impact of scholarships among men and women, with men's dropout rates being reduced by eight percent and women's by four percent. He also found that with the major support, the reduction is even greater. Astin's findings are supported by Blanchfield (1971) who also found an increasing relationship with the size of the scholarship, and by Kohen, Nestal and Karmas (1978), and Shelby (1973), but are contradicted by Iffert (1957) and Fields and LeMay (1973) who found no relationship between receiving a scholarship and attrition.

Astin (1975) and Wenc (1972) both found a strong relationship between support from spouses and parents. Major support from spouses was found by Astin to reduce a male's chances of dropping out by 28 percent and a women's by 15 percent. However, if the spouse provides only minor support, the effect is reversed; dropout rates increase for both men and women by 30 percent and

Nestel and Karmas (1978) and Astin (1975) found that juniors and seniors were much less affected by working than were freshmen and sophomores. Bhatnagar (1975) and Bradley and Lehmann (1975), whose studies dealt with adult students, found a positive relationship between persistence and working, with those working full-time having the smallest dropout rates.

Pantages and Creedon (1978) point out a couple of difficulties with studies which attempt to correlate attrition and financial aid. First, the cost of attendance varies greatly, as does the financial aid available at various institutions. They point out that some studies have indicated that financial aid is unimportant for certain types of students and for certain types of institutions. Certainly, traditional forms of financial aid will be of little importance to the adult student since the great numbers who are part-time students are not eligible for many types of aid. A second criticism of Pantages and Creedon is that studies that attempt to relate grants and scholarships with attrition should necessarily factor out academic ability before making any conclusions.

### Integration

A rather large body of literature related to attrition concerns itself with the integration of the individual into the college community, or "college fit." In order to analyze the interactions between the college or university and the student, several researchers have devised special instruments to measure "fit." Pace and Stern (1958) assessed fit by relating the results

eight percent, respectively. Astin hypothesizes that the level of financial support from a spouse may be an indication of the emotional support and encouragement as well, a hypothesis supported by Cope and Hannah (1975).

Relying on parental support has a smaller, but still statistically positive impact on persistence (Astin, 1975; Wengel, 1977).

Other types of support have differing impacts on persistence. For example, Astin (1975) found increases of seven percent in the dropout rate of those who rely heavily on savings or the GI Bill. ROTC stipends, however, substantially increase the likelihood of completion. Astin found that fewer than one in ten ROTC students failed to finish. Though not normally thought of as a form of financial aid, many students, particularly adult students, finance their education by working. Indeed, since many financial aid programs are only available to full-time students, working and employer assistance may very probably be the primary sources of support for most adults.

The research with regard to working for the most part considers only the traditional aged student who works part-time in addition to going to school. In such studies, working full-time seems to have a consistently negative affect on persistence (Astin, 1975; Cohen, Brauer and Conner, 1969; Kosher and Bellamy, 1969). In fact, there is an increasing chance of dropping out as students work over half-time (Astin, 1975; Fields and LeMay, 1973; Iffert, 1957). There appears to be some evidence that this relationship breaks down as a student progresses through the college. Kohen,

of two questionnaires: The College Characteristics Index and the Activities Index, which measured student needs. They found that the greater the similarity between scores on the two indexes, the greater the chance of persistence. A similar approach was taken by Astin and Holland (1961) who developed the Environmental Assessment Technique.

At one time or another, virtually every aspect of an institution and the student's role in it has been compared to attrition. These factors include size of institution (Astin and Panos, 1967; Iffert, 1957; Kamens, 1971; Nelson, 1966); religion (Astin, 1968; Pace 1974); selectivity (Astin 1972, Astin and Panos, 1969; Nelson, 1966; Wegner and Sewell, 1970); housing (Astin, 1973; Berger and Hall, 1965; Iffert, 1957; Slocum, 1956), and outside activities (Astin, 1974; Chase, 1970; Demitroff, 1974; Sexton, 1965). Generally, those factors which would tend to draw a student closer to an institution have been found to have a positive relationship to persistence. In other words, a smaller institution, a highly selective institution, a religious institution, living on campus, and participating in outside activities all seem, to a greater or lesser extent, to have a positive impact on persistence. However, no studies have been found which relate these variables to graduate students or adult students and, indeed, on their face they would seem to have less impact on adults.

One aspect of student integration which may have had significance with adults is the area of student-faculty relationships. Several authors (Spady, 1970; Tinto, 1975) have found a positive relationship between the number of non-class contacts students



have with faculty and persistence. Several other studies have confirmed this finding with a variety of types of students. For example, Wright (1964) found that 51 percent of doctoral candidates who talked frequently with faculty outside of class earned a doctorate while only 32 percent were successful who had less frequent conversations, a finding confirmed by Renetzky (1966) and Nagi (1974). Bradley and Lehmann (1975) found similar results when surveying nontraditional aged students at the undergraduate level, as did Renner (1975) who studied older women students. Pascarella and Terenzini (1977, 1978, 1979), who studied the relationship between persistence and six different types of contacts (academic counseling and information, career counseling, personal counseling, intellectual discussion, discussion of campus issues, socializing), found all types of contacts were positively related to persistence, with intellectual and academic discussions most highly related.

Advisor-student relations also appear to be of importance with regard to persistence. Bradley and Lehmann (1975) report that 21 percent of the nontraditional aged dropouts from Empire State College dropped out because of poor relations with their advisor. This finding should be interpreted with caution, however, since the advisor plays a much more important role in the student's career at Empire State than at most institutions. Gekowski and Schwartz (1961) reported that 42 percent of the dropouts could not remember the name of their advisor and only five percent felt that their advisor had a positive impact on their progress in school. The figures for a control group of persisters was 22 percent

and 41 percent, respectively. Further, a significantly greater proportion of persisting students had contact with their advisor than dropouts (63 percent v. 45 percent).

Persisters have a more positive perception of the faculty than do dropouts, as shown by several studies (Gekowski and Schwartz, 1961; Hannah, 1969; Iffert, 1957; Snyder, 1978). Hannah and Iffert's studies show a majority of the students dissatisfied with their personal relationships with faculty, indicating a desire to have more informal contact, with dropouts leading persisters.

#### Reasons Given for Dropping Out

Several researchers have sought to determine why students drop out by querying the dropouts themselves. These studies have taken several forms, from ex post facto questionnaires to interviews at the time of dropout. Several criticisms have been raised about research of this nature, some of which is noted above under the section entitled "Criticism of Attrition Research." Several studies (Astin, 1964; Iffert, 1955) have demonstrated that the reasons given vary by institution, thus making it more difficult to generalize from studies that are conducted at a single institution. Also, Pantages and Creedon (1978) report that there is a tendency for these types of studies to attempt to focus on one or two good predictor variables, an approach that ignores the complexity of the problem of attrition. Moreover, as noted by Hackman and Dysinger (1970), researchers using this approach often fail to use control groups, with the result that the problems reported may be shared by students who do not drop out.

Two types of "autopsy" studies have been used most frequently: those which determine the dropout's reason for leaving by means of an exit interview and those which query students some time after the student has departed. Kroell (1966) reports that the results obtained via the exit interview approach are relatively meaningless. She contends that when the dropout is confronted by a university official at the time of withdrawal, the first reaction is to come up with an "acceptable" reason for leaving. On the other hand, according to Kroell, the actual reasons will be reported when the dropout has had an opportunity to reflect upon his experiences and anonymity is promised. This contention is supported by Marks (1967) who found in his study of dropouts utilizing an exit interview that subjects attributed different reasons to "other" dropouts than they reported personally. When speaking of themselves, they spoke mostly of external reasons such as finances, school did not meet their needs, etc. However, when they were asked to give reasons others were dropping out, they tended to impute personal weaknesses as the primary reasons (e.g., immaturity, lack of self-discipline, etc.). Another somewhat related type of study was performed by both Demos (1968) and Demitroff (1974) in which the reasons given by students for dropping out were contrasted with those attributed to them by counselors performing exit interviews. Many times the students reported financial and other reasons which the counselors discounted.

Researchers have consistently found that the reasons given for dropping out consistently vary by sex (Astin, 1964; Eckland,

1964; Iffert, 1957; Panos and Astin, 1967, Summerskill, 1962).

Generally, the major reason given by women was marriage, while men tended to drop out as a result of dissatisfaction with the institution and from lack of motivation or interest (Iffert, 1957; Panos and Astin, 1970). Finances are consistently given as a reason by both sexes, as are dissatisfaction with the college environment, lack of interest in studies, and uncertain goals. Men are more apt to cite poor grades as a reason than women (Cope and Hannah, 1975). A summary of the reasons given by students for dropping out in various studies appears in Table 5.

Eckland (1964) and Iffert (1957) attempted to analyze the reasons for dropping out by those who drop out permanently or temporarily, and those who transfer v. those who drop out. Interestingly enough, there seem to be substantial differences between the reasons given by the various groups.

Eckland found, for example, that dropouts cited marriage, lack of interest or job opportunities rather infrequently as reasons for dropping out, but those who did, were not apt to return and graduate. In contrast, students who claimed to have quit for reasons such as lack of goals, military service or adjustment problems were quite likely to eventually graduate. Other reasons, such as academic problems or finances which were frequently cited by students, were given equally by those who eventually graduated as well as those who were permanent dropouts. In other words, about half the students citing academic or financial reasons returned and graduated.

Table 5  
Summary of Reasons Given for Dropping Out in Selected Studies, 1957-1979

Study	1	2	3	Rank 4	5	6	7	8
Iffert (1957) Men Women	Lack of Interest	Armed Services	Finances	Academic				
	Marriage	Job	Finances	Lack of Interest	Academic			
Swartz 1961	Change of Plans	Dissatisfaction with environment	Finances	Adjustment Problems	Job	Health	Academic	Armed Services
Eckland (1964)	Academic	Military Service	Finances	Job	Marriage	Housing	Illness	Lack of goals or interest
Panos & Astin (1967) Men	Environment of institution	Need time to reconsider goals & interests	Finances	Changed Plans	Academic	Marriage		
Women	Marriage	Dissatisfaction with environment	Changed Plans	Finances	Need time to reconsider goals & interests	Pregnancy		
Demos (1968) Men	Finances	Family Conflicts	Job	Health	Academic	Moving or transfer	Military	
Women	Health	Family Conflicts	Finances	Academic	Job	Moving or transfer		
Bradley & Lehmann (1978)	Personal-- Health, family, etc.	Job	Poor relationship with advisor	Finances	Red tape & administrative requirements			
Brigman (1979)	Dissatisfaction with achievement	Teaching and advising	Finances	Career	Other			

Several researchers have investigated the process the dropout goes through in deciding to drop out. Chickering and Hannah (1969) and Demos (1968) found that the decision is one to which the student gave much thought over a considerable period of time. By the time the student communicated his or her intention to university administrators or counselors, however, the decision was normally irrevocable. Chickering and Hannah (1969) and Hannah (1969) determined that students were likely to discuss their decision and their problems with parents and friends but not with college personnel. Counselors were rated the least helpful of all possible confidants. Bradley and Lehmann (1978) also queried adult undergraduates as to whose advice was sought by dropouts and they found some different results. As might be expected, the spouse was the most important single person to whom the dropout talked, but advisors and administrators were also consulted by 85 percent of the students and their advice was rated as very valuable, in contrast to the views of the younger students in the earlier studies. The advice received was also different, with Bradley and Lehmann's subjects being generally advised to drop out while the advice of both parents and peers to the younger student was overwhelmingly to stay in school.

#### Implications of the Literature Review

As has been noted above, relatively few studies of attrition and persistence deal with adult students or graduate students. Nonetheless, a review of the literature provides some definite

guideline for the study of the attrition of these populations.

Listed below are a summary of points from the literature that have been incorporated into the current study:

1. Use of a control group. As noted by Hackman and Dysinger (1970) lack of a persisting control group may lead to attributing problems to dropouts which are also common to persisters.
2. Use of a survey after the dropout has the opportunity to reflect on his or her experiences. Eckland (1964) found this method most likely to produce an accurate assessment of the reasons for dropping out.
3. Possible importance of relationships with advisors and instructors. Several of the studies which dealt with adults or graduate students have indicated that the attrition of such students may be influenced by the number and strength of relationships they have with instructors and advisors.
4. Those from whom dropouts seek advice. Bradley and Lehmann (1978) have found that adult undergraduate students sought advice from advisors as to whether they should drop out. This finding will be checked with the experiences of the sample under study.
5. Multiple factors. An investigation of multiple factors for dropping out and multiple demographic correlates of dropouts will be undertaken and multiple variate analysis will be utilized to

avoid the possibility of attributing great weight to a single or a few factors.

6. Possible factors. The literature of undergraduate attrition often studies factors which are inappropriate for a study of adult graduate students, yet some of the factors are appropriate. All factors cited in the literature which are deemed appropriate will be investigated.
7. Voluntary v. nonvoluntary dropouts. As suggested by Johansson and Rossman (1973), Rossman and Kirk (1970) and Tinto (1975), this study will treat nonvoluntary dropouts, who appear to be substantially different and motivated by different factors, separately from voluntary dropouts.



## CHAPTER III

### METHODOLOGY

This chapter presents the design of the study, including a description of the population and samples, a description of the instrument and the process used for constructing it, a description of the process used to collect the data, and the procedures used for analyzing that data. This study follows a design that has been characterized by Chapin (1947) as an "ex post facto quasi-experimental design" in that the experimenter does not have control over the degree to which the subjects are exposed to the variables under study. The purpose of this type of design is to find causal relationships between some present situation and events or factors that have occurred in the past.

#### Population

The population investigated by this study included all students who were admitted to Central Michigan University's graduate extended degree program during 1978 and who subsequently enrolled in and completed at least one course. Those students who were admitted but who never enrolled--or "no-shows" as they are commonly called by admissions people--were not included in the study. The decision to exclude these students was based upon several reasons, including the difficulty to contact them, the difficulty of designing effective interventions to utilize with those the institution never "gets its hands on," and because

these individuals may not be considered dropouts in that they have never actually participated in the processes which enrolled students go through. In short, they are considered a different population.

Using a table of random numbers, a sample of subjects was selected from the "student master file" that lists all students admitted to Central Michigan University. This sample represents a sample of the population of students who were admitted during 1978. Attrition and persistence rates were determined by dividing the various categories of students by the total in the sample, less the "no-shows." Those categories, which are defined in Chapter I, included:

- Graduates
- Persisters
- Voluntary Dropouts
- Involuntary Dropouts

### Instrument

Following a comprehensive review of the literature, a questionnaire was developed and subsequently evaluated by administrators of the Extended Degree Program, two professional staff members of the Office of Institutional Research at Central Michigan University, and the Director of the author's doctoral committee. Those reviewing the questionnaire were requested to examine it for content, clarity, inclusiveness, and arrangement of items. As a result of this review, two very similar questionnaires were finally constructed, one to be sent to dropouts and one to be sent to persisters and graduates. Both questionnaires were pretested by the administration on 15 student assistants and staff members of the

Extended Degree Program. Copies of the two questionnaires are included in Appendix A.

The questionnaire which resulted from these efforts includes demographic variables, which are shown in Table 6.

Table 6  
Demographic Variables Studied and Possible Values

Variable	Possible Value
Age	Assigned to one of 4 groups
Sex	1 = Male; 2 = Female
Race	1 = Asian; 2 = Black; 3 = Hispanic; 4 = Native American; 5 = White; 6 = Foreign
Size and control of undergraduate institution	8 groups
Undergraduate GPA	2.00 to 4.00
Highest degree	1 = Bachelors; 2 = Masters; 3 = Professional; 4 = Doctorate
Type of financial aid available	Loans, VA, Employee Assistance, Grants, None
Time since undergraduate degree received	Assigned to one of 5 groups
Undergraduate GPA	000 to 4.00
GPA in first class	000 to 4.00
GPA in second class	000 to 4.00
Final GPA	000 to 4.00
Amount of employment	1 = full-time; 2 = part-time 3 = none
Scheduling pattern experienced	1 to 6

The participants were also asked to respond to thirty-five items in one of two ways. The dropouts were asked to respond to the question, "Listed below are some reasons for withdrawing from a degree program. To what extent are they your reasons? (Check (✓))

all appropriate responses.)" They were given four choices: "major reason," "moderate reason," "minor reason," "not a reason." The Persisters and Graduates were given the same list of items and asked to respond to the question, "Listed below are some problems students encounter in a degree program. To what extent did you encounter them? (Check (✓) all appropriate responses.)"

The items came from several sources. A majority came from the technical manual on student attrition studies published by the National Center for Higher Education Management Systems (Bower and Myers, 1976). A number were suggested by program administrators and some were taken from other studies, including Astin (1964 and 1965), Eckland (1964), Demitroff (1974), and Sexton (1965).

Participants were also asked to respond to the question, "Based upon your experience with CMU, please indicate your degree of satisfaction with the following aspects of the program." Fourteen items were presented and respondents were given an opportunity to indicate the following levels of satisfaction: None, Little, Moderate, Much, Great or Not Applicable. Dropouts were also asked which three, if any, of the factors listed if changed would have encouraged them to continue in the program.

This final set of questions was suggested by Dr. Paul Dressel of Michigan State University in a private conversation with the author. Dr. Dressel theorized that persisters and dropouts may differ more in the aspects of an educational program with which they are satisfied than those which are problems to them. He indicated that all studies with which he was familiar concentrated on only

trying to identify problems, which were often identical for both dropouts and persisters.

#### Data Collection Procedures

A ten percent random sample of students who were admitted to CMU's graduate extended degree program was drawn by using a random number table and the "IPCD Student Master," a printout of all students admitted to the extended degree program. As the Student Master also lists the Students GPA, the ending date of the last course for which the student enrolled and if a student had graduated, the students could immediately be placed in one of the five groups; graduate, continuing, voluntary dropout, nonvoluntary dropout or no-show. The numbers and percentages for each group are shown in Table 8, Incidence of Persisters and Non-Persisters, CMU Extended Degree Program, Class of 1978. Transcripts were obtained from the CMU Registrar to verify that all students were placed in the proper group.

Since the number of students in each group was too small for the study, additional students were randomly drawn from the Student Master to augment the sample so that there were 160 each in the graduate and continuing student groups and 180 in the dropout group.

Three versions of a cover letter were devised requesting the graduates, persisters and dropouts to complete and return the questionnaire (copies are contained in Appendix B). The letters were typed on an automatic typewriter and personally signed to convey to the recipients that their opinions were being personally

solicited and were important. The cover letter was designed to convey this impression as well. A postage-paid return envelope was enclosed for the convenience of the recipient. All mail was sent with the notation "Address Correction Requested." The returns are shown in Table 8, Survey Returns. Because of the large number of questionnaires initially returned with incorrect addresses, an intensive effort was made to obtain correct addresses. For the graduates, the Alumni Office was contacted and was able to give correct addresses for all graduates. For continuing students, the various IPCD Centers were contacted and were able to assist in getting a number of correct addresses. As might be expected, the greatest number of bad addresses were among the dropouts. In order to obtain new addresses, the "office phone number" from each student's application for admission was called to determine if a new address could be found. The results of these efforts are shown in Table 7, Results of Address Follow-Up, below.

Table 7  
Results of Address Follow-Up

	Graduates	Continuing	Dropouts
No. returned from Post Office	36	22	84
% of Group	23%	14%	47%
No. of new addresses located	15	8	35
No. of new addresses not located	21	14	49
A second and third follow-up letter was sent to all non-respondents whose questionnaires were not returned by the Post Office.			

### Statistical Analysis

The primary statistical technique used in this study was discriminant analysis, which is a multivariate statistical

technique designed to identify which of a variety of variables are important in discriminating between two or more groups. Discriminant analysis also identifies the level of influence of the variables upon the dependent variables.

The stepwise Discriminant Analysis Program, Discriminant, of the Statistical Package for the Social Sciences (SPSS), was used in the analysis of the data. This program requires that the experimenter select a variable from the full range of variables which has the highest value on the criterion. In this study the reasons for dropping out (questions 25-59) and the "satisfiers" questions 60-73 were first subjected to factor analysis to determine which questions were actually clusters of the same variable. Clusters of questions were then treated as a single variable. The variables were then subjected to the F-Test. Discriminant then pairs the variable with the highest value of all others, one at a time, to identify the best combination of two variables. The program continues by considering all variables, in turn, combining those variables which make a significant discriminating contribution. The final set of variables which is derived is termed the discriminant function (Klecka, 1975).

Finally, the Chi-Square Test and analysis of variance are utilized to measure the differences in demographic variables reported by the three groups.

### Research Hypotheses

The hypotheses which were the basis for analysis of this study stated in the null form, are as follows:

Hypotheses I: None of the demographic variables will discriminate among the groups of Persisters, Graduates, and Dropouts.

Hypotheses II: There is no difference between any of the groups as to those aspects of the program which satisfy or dissatisfy.

Hypotheses III: There is no difference between the problems encountered by persisters and graduates and the reasons or factors reported by dropouts as leading them to drop out.

Hypotheses IV: The groups will not differ with regard to demographic variables or scheduling patterns experienced.



# CHAPTER IV

## AN ANALYSIS OF THE DATA

This chapter provides an analysis of the data collected by the surveys sent to 500 participants in Central Michigan's adult degree program. The returns for each group of participants are shown in Table 8, below.

Table 8  
Survey Returns

	Graduate	Dropout	Current	Total
Questionnaires sent	160	180	160	500
Returned - no forwarding address	- 21	- 49	- 14	- 84
Total	<u>139</u>	<u>131</u>	<u>146</u>	<u>416</u>
Non-returns	36	50	28	114
Returns	103	81	118	302
Percent of total returned	74.1%	61.8%	80.8%	72.6%

The percentage return, especially for dropouts, was gratifying and was considered worth the time, effort and expense of the three follow-up mailings and the telephone follow-up to the dropouts. Given the fact that dropouts have no contact with the institution and have, in effect, been alienated from the institution, the return for this group is seen as significant.

### Rate of Attrition

As will be recalled from the discussion in Chapters I and III, one of the purposes of the study was to determine the attrition rate

for the sample under consideration. This was accomplished by drawing a random sample of students who were admitted during 1978, and on the basis of an examination of their records, placing them in one of the groups shown in Table 9. In addition to the groups discussed previously, another group, "non-voluntary dropouts," is identified. This group consists of those students who dropped out at a point when they were on probation and had a grade point average less than that required for graduation. A breakdown of the random sample of 1978 admittees is shown in Table 9, below.

Table 9  
Number and Percent of 1978 Admittees, by Group

Group	Number	Percent
Graduates	153	45.8%
Continuing students	58	17.4
Dropouts	63	18.8
Non-voluntary dropouts	10	3.0
No shows	50	15.0
Total	<u>334</u>	<u>100.0%</u>

The attrition rates shown here are considerably less than those reported for other graduate populations, as was discussed in Chapter II. Moreover, they are considerably lower than the attrition rates of either traditional aged or older undergraduates. Based upon the answers of the continuing students to the questions concerning the problems they are facing (see discussion on "Reasons given for dropping out" section which follows), as many as 37.3 percent, or 22 of the continuing students could be expected to drop out. That would raise the attrition rate of the sample to 28.4 percent, which is still less

than most studies have found, yet well within the range of rates reported by the studies Summerskill reviewed (Summerskill, 1964). Thus, it does not appear that this sample population is unusual with regard to the rate of attrition.

### Individual Characteristics and Dropping Out

Age: An analysis of the students' ages was made to determine if this variable had any effect on dropping out. As was discussed in Chapter II, the few studies which have considered older students have found a relationship between age and persistence that was at odds with the findings of researchers who considered only traditional aged students. Some other researchers have failed to find any relationship between age and dropping out. The distribution of students by the year in which they were born appears in Table 10 below.

Table 10

Number and Percentage Distribution of Graduates, Dropouts and Continuing Students by the Year in Which They Were Born

Year Born	Graduates		Dropouts		Continuing		Total	
	#	%	#	%	#	%	#	%
1930 and Before	5	4.8%	8	9.9%	10	8.5%	23	7.6%
1931 - 1935	8	7.8	6	7.4	8	6.8	22	7.3
1936 - 1940	11	10.7	6	7.4	11	9.3	28	9.3
1941 - 1945	29	28.2	21	25.9	25	21.2	75	24.8
1946 - 1950	32	31.1	18	22.2	31	26.2	81	26.8
1951 and Later	18	17.5	22	27.2	33	28.0	73	24.2
Total	103	100.0%	81	100.0%	118	100.0%	302	100.0%

An analysis of variance test was made of the ages of the groups with the result that the means of each group were all contained in the 95 percent confidence interval of all groups. Additionally, a

Chi-Square test was conducted which resulted in a Chi-Square value of 7.67510 with 10 degrees of freedom for a significance of .6605. This falls outside that .05 level of significance, so it may be concluded that age is not related to attrition or persistence.

Time Since Graduation: The time since the students received their undergraduate degrees was analyzed as it was thought this would be a factor in attrition and persistence. Specifically, it was believed that perhaps those who had graduated only a short time ago might have less trouble getting back into the habit of studying and might have fewer difficulties with the academic demands of the program. On the other hand, it was also assumed that the year in which the undergraduate degree was received would be a function of age, so that the general relationship which obtained with the variable age would obtain with this variable as well. As can be seen above, there is no significant relationship with age, so one might reasonably expect that there would be no relationship with the length of time since the undergraduate degree was awarded. The distribution of the various groups by the year in which their undergraduate degree was earned is shown in Table 11.

A Chi-Square test was performed with the resultant value of 5.82370 with 8 degrees of freedom which resulted in a significance level of .6670. We may thus conclude that the time since receipt of the undergraduate degree is not related to the persistence or attrition of graduates in an extended graduate degree program.

Race: The number and percentage breakdown of the three groups by race is shown in Table 12. The numbers of Native Americans (6), Hispanics (2), Asian (3) and Foreign Students (4) were so small

that they were combined into a single category of "other minority," and were not considered in the analysis.

Table 11

Number and Percentage Distribution  
of Graduates, Dropouts and Continuing Students  
by the Year in Which They Received Their Undergraduate Degrees

Year Degree Received	Graduates		Dropouts		Continuing		Total	
	#	%	#	%	#	%	#	%
1960 and Before	8	7.8%	10	12.2%	8	6.8%	26	8.6%
1961 - 1965	8	7.8	5	6.2	12	10.2	25	8.3
1966 - 1970	25	24.3	15	18.5	21	17.8	61	20.2
1971 - 1975	29	28.2	27	33.3	44	37.3	100	33.1
1976 and After	33	32.0	24	29.6	33	28.0	90	29.8
Total	103	100.0%	81	100.0%	118	100.0%	302	100.0%

Table 12

Number and Percentage of Graduates,  
Dropouts, and Continuing Students, by Race (N=298)

Group	Black		White		Other Minority	
	#	%	#	%	#	%
Graduates	16	29.1%	82	36.0%	5	33.3%
Dropouts	21	38.2	53	23.2	5	33.3
Continuing	18	32.7	93	40.8	5	33.3
Totals	55	100.0%	228	100.0%	15	100.0%

A Chi-Square was calculated with a value of 14.682 with 14 degrees of freedom and a significance of .1214. Thus, it can not be concluded that minority and white students drop out at different rates. This agrees with Astin's (1973) findings for undergraduate students. Had the current study controlled for academic factors, it may be that the percentage differences in the attrition rates for Blacks and Whites would converge even more, as they did in Astin's 1973 study.

Sex: The breakdown between the various groups by sex appears in Table 13. It could be expected that the dropout rate for women would be greater than that for men, given that it has generally been round to be the case in institutions with a high male/female ratio (Cope, Pailthorp, Trapp, Skaling and Hewitt, 1971; Astin, 1964). This is indeed what was found in the current study, with women having a 32.1 percent dropout rate and men having a 25.2 percent dropout rate.

Table 13  
Number and Percentage of Graduates,  
Dropouts and Continuing Students, by Sex (N=300)

Group	Male		Female	
	#	%	#	%
Graduates	86	38.7%	17	21.8%
Dropouts	56	25.2	25	32.1
Continuing	80	36.1	36	46.1
Total	222	100.0%	78	100.0%

It is interesting to note, however, that perhaps the difference in the dropout rate is not so much a reflection of attrition, but indicative of women taking longer to graduate than men. This is suggested by an examination of the breakdown of the types of financial aid that is received by men and women as shown in Table 14. As Table 14 demonstrates, a much greater proportion of men receive financial aid than do women, which probably enables men to progress at a faster rate than women. Moreover, the sub-sample of men may contain a large number of military personnel who have an incentive to complete as fast as possible (see discussion under section entitled "Financial Aid," below). At any rate, a Chi-Square test

of the groups on the basis of sex provided a value of 7.35077 with 2 degrees of freedom which results in a significance level of .0253 indicating that the dropout rate of women in the population is higher than that of men.

Table 14  
Type of Financial Aid Received, By Sex

Type	Male		Female	
	#	%	#	%
Insured loan	4	1.8%	4	5.1%
In-service VA	62	27.9	7	9.0
Out-of-service VA	23	10.4	0	0.0
Employer tuition assistance	112	50.5	37	47.4
Other	2	.9	10	12.8
None - paid all expenses	20	9.0	26	33.3

Academic Factors: Several academic factors were examined as a part of the current study, including undergraduate GPA, the grade received in the first and second courses and the final GPA, the highest degree held at time of entry, and whether or not the student had completed graduate work prior to entry into the program.

An analysis of variance was used to determine if the groups differed by their undergraduate grade point averages, and it was determined that in relation to the undergraduate GPA, all three groups were homogeneous subsets of the same group. In other words, the groups did not differ in terms of undergraduate GPA. (See Table 15) This finding is in agreement with the literature cited in Chapter II, since the dropouts in this study may be considered to be voluntary dropouts in that they were not in academic difficulty. Those studies which identified voluntary and non-voluntary dropouts concluded

Table 15  
Analysis of Variance of Academic Factors Between  
Graduates, Dropouts and Continuing Students

Between Group Analysis For:	D.F.	Sum of Squares	Mean Squares	F Ratio	F Probability
Undergraduate GPA	2	2.0105	1.0053	2.991	.0519
First Course GPA	2	2.0556	1.0278	3.010	.0508
Second Course GPA	2	.4861	.2431	1.077	.3420
Final GPA	2	1.5288	.7644	4.667	.0101



there was no difference between voluntary dropouts and persisters insofar as academic performance was concerned.

The grades which students received in their first two courses were examined to determine if receiving poor grades, or at least grades less than persisters, initially would discourage a student to the point where he or she dropped out. It was expected that the dropouts would show a lower GPA on the first two courses than the graduates or the continuing students. The mean "first" grades and confidence intervals for the three groups are shown in Table 16.

Table 16

Mean Grades Received in First Course for Graduates, Dropouts  
and Continuing Students and 95 Percent  
Confidence Interval

Group	Mean Grade	95% Confidence Interval
Graduates	3.6617	3.5825 to 3.7410
Dropouts	3.5460	3.4222 to 3.6699
Continuing	3.4687	3.3357 to 3.6017
Total	3.5555	

Using the Multiple Range Test, Scheffe procedure, of the Statistical Package for the Social Sciences, the three groups were determined to be homogeneous subsets. In other words, the groups did not differ with regard to the grades they received in the first course. Table 17 shows the mean grades and 95 percent confidence intervals of the grades earned in the second course. Here again, there was no difference between the groups insofar as the grades in their second course was concerned.

A similar analysis of the final GPA's of all three groups revealed that there was no difference between the groups with regard to this variable either.

Table 17

Mean Grades Received in Second Course of Graduates, Dropouts and Continuing Students and the 95 Percent Confidence Interval for the Mean

Group	Mean Grade	95% Confidence Interval
Graduates	3.5653	3.4983 to 3.6324
Dropouts	3.4895	3.3417 to 3.6373
Continuing	3.4745	3.3777 to 3.5714
Total	3.5114	

Table 18 shows the highest degree held prior to entry for each of the groups.

Table 18

Highest Degree Held Prior to Entry, Graduates, Dropouts, and Continuing Students (N=293)

Group	Bachelors		Masters		Professional		Doctorate		Total
	#	%	#	%	#	%	#	%	#
Graduate	93	93.8%	7	7.0%	0	0.0%	0	0.0%	100
Dropout	71	88.8	7	8.8	2	2.5	0	0.0	80
Continuing	103	91.2%	9	8.0	1	0.9	0	0.0	113

The small numbers of degrees, other than bachelors degrees, made this factor of little importance with regard to predictive value. Moreover, a Chi-Square analysis of the means produced a value of 3.01223 with 4 degrees of freedom for a significance of .2954, indicating that there was no difference between the groups with regard to the degrees they held prior to entry into the program.

With regard to having previous graduate experience, there was a significant difference between those who had attended other graduate schools prior to entry and those who had not, as shown by Table 19. A Chi-Square test of the means produced a value of 14.52064 with 2 degrees of freedom for a significance of .0007. We can, therefore, conclude that there is a difference between the groups with regard to whether or not they completed previous graduate work.

Table 19  
Number and Percent of Each Group Who Had Completed  
Previous Graduate Coursework (N=302)

Group	Previous Grad Work		No Previous Grad Work		Total
	#	%	#	%	
Graduates	46	44.7%	57	55.3%	103
Dropouts	23	28.4	58	71.6	81
Continuing	25	21.2	93	78.8	118
Total	94	31.3	208	69.9	302

Financial Aid: Inasmuch as a number of researchers have found a relationship between attrition and financial aid, students were queried as to whether they were receiving financial aid and what type they were receiving. As was discussed in Chapter II, loans and scholarships tended to encourage persistence while veterans' benefits tends to increase attrition, as does working more than 20 hours per week. Inasmuch as the program is designed for working adults, the impact of working on attrition is not reviewed here. Indeed, only three respondents, or approximately one percent of the sample indicated they were not working full time. Although there are relatively few governmental financial aid programs for part-time students, fully 83 percent of the respondents reported receiving some sort of assistance or financial

aid. The most common form of financial aid received was employer tuition assistance, which was received by 50 percent of the respondents. Moreover, the vast majority of those receiving employer tuition assistance received full assistance (See Table 20, below).

Table 20  
Percentage of Assistance Received by Those Students  
Receiving Employer Tuition Assistance, By Group

Percentage	Graduate		Dropout		Continuing		Total	
	#	%	#	%	#	%	#	%
10	0	0.0%	0	0.0%	2	2.9%	2	1.5%
20	0	0.0	0	0.0	1	1.4	1	0.7
25	1	2.8	0	0.0	0	0.0	1	0.7
40	1	2.8	0	0.0	0	0.0	1	0.7
50	4	11.1	2	6.5	5	7.1	11	8.0
60	1	2.8	0	0.0	0	0.0	1	0.7
70	0	0.0	1	3.2	1	1.4	2	1.5
75	4	11.1	1	3.2	3	4.3	8	5.8
80	0	0.0	1	3.2	3	4.3	4	2.9
90	2	5.6	0	0.0	4	5.7	6	4.4
100	23	63.9	26	83.9	51	72.9	100	73.0
Totals	36	100.0%	31	100.0%	70	100.0%	137	99.9%

It may be that in the future this will become an increasingly important source of financial aid to institutions as the number of adults attending institutions increases and if Federal sources of financial aid are curtailed. At the present time several major unions, including the United Automobile Workers and the Machinists have clauses in their major contracts calling for tuition assistance for their members. Moreover, a great many employers provide this benefit for their white collar employees.

The incidence of various types of financial aid is shown in Table 21.

Table 21

Number and Percent of Graduates, Dropouts and Continuing Students Receiving  
Financial Aid, by Type of Aid Received

Type of Aid Received	Graduates		Dropouts		Continuing		Total	
	#	%	#	%	#	%	#	%
Insured student loan	3	2.9%	2	2.5%	3	2.5%	8	2.6%
In-service VA benefits	41	39.8	19	23.5	10	8.5	70	23.2
Out-of-service VA benefits	9	8.7	5	6.2	10	8.5	24	7.9
Employer tuition assistance	37	35.9	39	48.1	74	91.4	150	49.7
Employer released time	1	1.0	1	1.2	10	8.5	12	4.0
Other	2	1.9	1	1.2	6	5.1	9	3.0
None	12	11.6	15	18.5	19	16.1	46	15.2
Total <sup>1</sup>	103		81		118		302	

<sup>1</sup> Columns do not add because some respondents received more than one type of financial aid.

Chi-Square tests were conducted for each different type of financial aid to determine if perhaps students acted differently depending on the type of financial aid they received. The results of those tests are shown in Table 22.

Table 22

Chi-Square Significance Levels of Various Types of Financial Aid and Dropping Out for Males and Females

Financial Aid	Males	Females	All
Insured student loan	.2797	.5076	.9787
In-service VA benefits	.0000*	.1859	.0000*
Out-of-service VA benefits	.9081	--	.7860
Employer tuition assistance	.0003*	.0390*	.0004*
Employer released time	.7102	.0110*	.0058*
Other	.0107*	.3655	.2181
None	.3944	.2961	.4127

\*Significant at the .05 level

It is clear from the above that financial aid does play a role in attrition and persistence. However, it is equally clear that the type of financial aid is important, and that different types of aid affect the recipient differently depending on the sex of the recipient.

Insured student loans and not receiving any financial aid seem to have no effect on the attrition of participants, regardless of sex. Employer tuition assistance was significant for both males and females, however, the major difference was not that individuals receiving tuition assistance either graduated or dropped out, but that they were continuing students. Almost equal numbers of those receiving this form of assistance dropped out as graduated (28.6 v. 25.9), but 45.5 percent were still continuing. This might indicate that employer tuition assistance is seen by the individual as an

indication that the employer wants the employees to participate so they do so, albeit with little enthusiasm. They continue at a pace which will allow them to tell the employer they are enrolled, and thus pursuing a professional development activity, but sacrificing as little of their spare time as possible.

This differs from the effect that in-service VA benefits have on male participants. Fully 63 percent of the male participants receiving this form of assistance were graduates as opposed to 24 percent who were dropouts and 13 percent who were still involved in the program. As was noted before under the discussion of the sex of the participants, this is no doubt a result of the occupation of these students—active duty military—as anything else. The military puts a major emphasis on the possession of a masters degree for the promotion of officers. This great emphasis may account for the apparent difference in impact of in-service VA benefits v. employer tuition assistance and out-of-service VA benefits, which seem to have no impact at all.

Employer released time was significant only for women. Program administrators report that this form of assistance is most prevalent for employers in the health care industry, which typically provide much less in the way of monetary assistance than employers in other industries. Fully 90 percent of the women who received this type of assistance were still involved in the program, while 10 percent had dropped out. Program administrators interpret this more as a reflection of an occupational difference than any other. They report that the female health care technologists (nurses, medical technologists, x-ray technologists, etc.) who are not highly paid

and who often work odd shifts, are some of the most motivated students in the program. They would interpret these findings as an indication that these students are not able to afford to proceed at a faster rate, but that they will persevere.

Undergraduate Institution: The type of undergraduate institution which the students attended was examined because some researchers (Astin, 1972, 1974; Iffert; Summerskill, 1962) found differences in attrition by the type of institution under consideration. Thus it was thought that perhaps this factor would carry over to the student's graduate program and students from various types of institutions would vary in their rates of attrition.

The students were asked to check one of eight categories of undergraduate institutions which they attended. A check of the responses indicated that there were a number of errors in the groupings in which the students placed their undergraduate institution, so a complete review was made for this item to correct the responses. Several of the groupings contained so few responses that they were combined with other groups. Specifically, "Large Private Research University" (3 responses) was combined with "Large Public Research University" to form the group "Large Research Universities;" and Proprietary (1) and Military (5) were combined with "Four Year Private Colleges." The distribution of students by the type of institution from which they received their undergraduate degree is shown in Table 23. A Chi-Square test was conducted, which resulted in a value of 7.71271 with 8 degrees of freedom and a significance level of .4620. Therefore, we can conclude that the type of institution from which students receive their undergraduate degrees does



Table 23

Distribution of Students by Type of Undergraduate Institution from which Graduated

Type	Graduates #	Graduates %	Dropouts #	Dropouts %	Continuing #	Continuing %	Total #	Total %
Four-year public colleges	38	37.3%	17	21.5%	32	28.3%	87	29.6%
Four-year private colleges	26	25.5	24	30.4	26	23.0	76	25.9
Medium-sized public universities	15	14.7	17	21.5	27	23.9	59	20.1
Medium-sized private	9	8.8	7	8.9	11	9.7	27	9.2
Large research universities	14	13.7	14	17.7	17	15.0	45	15.3
Totals	102	100.0%	79	100.0%	113	99.9%	294	100.1%

not influence the attrition rate of those students in an extended degree program.

Advising: Among the questions asked students was whether or not they had an advisor. Due to the structure of the program, it is possible for a student to avoid, almost indefinitely, meeting with an advisor and actually getting a program plan filled out. The assumption upon which the program is based and which allows this "loophole," is that students are seeking a degree and that it is in their own best interest to meet with an advisor as soon as possible after being admitted. Students were asked about their advisor because it was believed that perhaps some students never made this connection and that if so, perhaps they lacked a complete understanding of what was expected of them and what courses they should take. More importantly, it was believed that perhaps the advisor played an important role in the student's support system. If this were the case, then it would be expected that dropouts would not have advisors in much greater numbers than either graduates or continuing students. The distribution of graduates, dropouts and continuing students by whether or not they had an advisor is shown in Table 24. It is interesting to note that eight graduates indicated that they didn't have an advisor. Yet, it isn't possible to graduate without have a Graduate Program Plan which is developed by the student and an advisor and which is signed by both the student and advisor. A Chi-Square test was calculated with a value of 20.65620 with 2 degrees of freedom with results in a significance level of 0. We may, therefore, conclude that one of the variables which discriminates best between graduates and

continuing students on the one hand and dropouts on the other, is whether or not they had an advisor.

Table 24

Distribution of Graduates, Dropouts and Continuing Students Who Reported Having An Advisor or Not (N=300)

Group	Had Advisor		Didn't Have Advisor		Total
	#	%	#	%	
Graduates	9	92.2%	8	7.8%	103
Dropouts	60	75.0	20	25.0	80
Continuing	111	94.9	6	5.1	117

A second question that was asked of the students was the name of their advisor. Of those students indicating they had an advisor, 80.2 percent, 68.6 percent and 96.5 percent of the graduates, dropouts and continuing students, respectively, could remember the name of their advisor. Taken together, it is apparent that the advisor does seem to play a significant role in persistence of students in extended degree programs.

Advanced Standing: Students were examined to determine if they had received advanced standing or not and the degree or amount of advanced standing they received. It was hypothesized that students who received advanced standing, having less to accomplish, would be more apt to persist than those who did not receive advanced standing. In the program under study, there are two ways in which advanced standing can be obtained: transfer credit and experiential learning.

Experiential learning credit is credit which is awarded by a team of Central Michigan University graduate faculty members upon

the examination of an extensive portfolio prepared by the student. Once awarded, this credit may be used to fulfill degree requirements just as though it were credit earned in courses, although it is up to the advisor to determine if it is applicable. The maximum number of credits which can be earned in this manner are 10 semester hours, with the average number awarded currently 5.8 semester hours. The number of students taking advantage of this option seems to be dropping. Program administrators believe three reasons account for most of this decline. First, the average age of students being admitted to the program has declined, from 37.6 in 1974 (Medsker, 1975) to 32, a figure that was obtained by averaging the ages of every tenth person admitted from January, 1981, to July 30, 1981. To some extent, the amount and level of experience a person has is a function of age and therefore, the younger the student, the lower the expected return on the work required to prepare the portfolio. Secondly, the faculty team has become more demanding in the documentation that is required for the portfolio and the organization required to put it together is much greater than previously; therefore, unless a student can expect a fairly healthy award of credit, he or she lacks incentive to complete the portfolio. A third reason is that the program administrators believe the awards are smaller than awards for similar experience several years ago. Though there is little evidence to prove this, administrators cite the fact that people with little expectations of receiving credit are being discouraged by the lengthy process, as well as by advisors who are frankly telling students when they do not expect the student will receive any credit. With the "marginal" applications thus reduced it could be expected that the average awards would increase. This has not been the case, however, as

the average award has declined from 7.4 semester hours to 5.6 semester hours in the last four years. Table 25 below gives the distribution of students who were awarded experiential learning credit.

Table 25

Incidence of Award of Experiential Learning Credit by  
Graduates, Dropouts and Continuing Students (N=301)

Group	Applied		Did Not Apply		Total
	#	%	#	%	
Graduates	29	28.2%	54	71.8%	103
Dropouts	5	6.3	75	93.8	81
Continuing	24	20.3	94	79.7	118

A Chi-Square test was performed, which resulted in a value of 14.03194 with 2 degrees of freedom for a significance level of .0009. Thus it can be concluded that the award of experiential learning credit has a positive impact on persistence by students in an extended degree program. The amount of credit earned by the groups is shown in Table 26.

Table 26

Amount of Experiential Learning Credit Awarded, By Group

No. of Semester Hours	Graduates	Dropouts	Continuing Students
2	2	0	3
3	2	0	2
4	3	0	3
5	4	2	3
6	6	1	1
7	3	0	5
8	3	0	0
9	3	0	0
10	1	0	0
Mean	5.93	5.3	4.7

The same relationship between experiential learning and persistence does not seem to hold with regard to the amount of credit awarded.

With transfer credit, a more common form of advanced standing is examined. However, the program under study is somewhat unusual in that it allows up to fifteen semester hours, or one-half the minimum required number of hours of credit to be transferred into the program. Again, it was supposed that those students who received transfer credit would be most likely to remain in the program. Additionally, it is assumed that among the students with transfer credit, those with the greatest amount of credit would be more likely to persist than those with lesser amounts. The incidence of receiving transfer credit is shown in Table 27.

Table 27

Incidence of Transfer Credit Among Graduates,  
Dropouts and Continuing Students (N=286)

Group	Transferred Credit in		Did not Transfer		Total
	#	%	#	%	
Graduates	39	39.0%	61	61.0%	100
Dropouts	11	14.5	65	85.5	76
Continuing Students	18	16.4	92	83.6	110

A Chi-Square test was performed which resulted in a Chi-Square value of 19.75225 with 2 degrees of freedom for a significance level of .0001. Thus it can be concluded that whether or not a student receives transfer credit will help predict whether or not that student will persist. However, given the fact it will not discriminate between dropouts and continuing students, it can only be considered a weak predictor. Likewise, the amount of credit received does not

seem to distinguish between the groups, with the averages for the groups 7.4, 5.8 and 5.6 for graduates, dropouts and continuing students, respectively.

Scheduling Formats: One of the strategies often used by extended degree programs is the use of a variety of scheduling patterns to attempt to meet the particular needs of the students being served. Often this entails scheduling group activities on nights and weekends when the students are not scheduled to work. Increasingly, extended programs are using intensive scheduling patterns which involve fewer, but longer periods of instructor contact which may be separated by one or more weeks of self study. Such patterns allow the institution to draw students from a much wider geographical area and provide a scheduling pattern that is more convenient for students to plan around. For example, instruction in the University of Chicago's Executive MBA program is conducted at the O'Hare Hilton at O'Hare Airport. Students fly in from around the country to take part in intensive three-day sessions, which are spread over a weekend.

In order to determine if the type of scheduling format had an impact on attrition and persistence, the scheduling format of each location where students could take instruction was examined for the "intensiveness" of the scheduling pattern utilized at each site. There were nine different patterns identified whose "intensiveness" was judged upon a combination of the total length of the course and the length of the individual sessions. The "intensiveness" ranged from one session per week over a twelve-week period to thirty-six hours spread over a five-day period. In the latter case, students were provided with all texts and materials, as well as very complete

course outlines and advanced organizers. Each site was coded, from 1 to 9, depending on the degree to which the schedules were judged to be intensive, with 1 being the most intensive and 9 being the least intensive. Since three patterns (numbers 3, 4 and 5) contained so few cases (7, 4 and 9, respectively), they were combined into one group which is shown below as number 3.

Table 28  
Scheduling Pattern Differences of Graduates, Dropouts  
and Graduates (N=302)

Level of Intensiveness (1=most intensive)	Graduates		Dropouts		Continuing		Total	
	#	%	#	%	#	%	#	%
1	6	21.4%	5	17.9%	17	60.7%	28	100.0%
2	36	33.3	24	22.2	48	44.4	108	99.9
3	10	52.6	4	21.1	5	26.3	19	100.0
4	8	61.5	3	23.1	2	15.4	13	100.0
5	8	25.8	13	41.9	10	32.3	31	100.0
6	35	34.0	32	31.1	36	35.0	103	100.1

Chi-Square tests were performed between the proportions of each group using each pattern, between the graduates and dropouts, the graduates and continuing students and the dropouts and the continuing students. The significance levels for these tests were .3005, .0604 and .0789, respectively. This indicates that the intensiveness of the scheduling pattern seems to have no significant impact on the attrition and persistence of students in extended degree programs.

#### Reasons for Dropping Out

As was noted in Chapter II, much research has been conducted into the reasons dropouts have given for dropping out. One of the



major criticisms of this type of research has been that, more often than not, only the dropouts are surveyed, with the result that it cannot be determined whether or not the dropouts are facing different problems than others. This study attempts to avoid that problem by presenting the graduates and continuing students with those same reasons the dropouts were presented with and asking them to rate them as "major," "moderate," or "minor" problems, or not a problem at all. The dropouts, in turn, were asked to rate the reasons as a "major," "moderate" or "minor" reason for their dropping out. In this way an attempt was made to determine if the problems which were perceived by dropouts as causing them to drop out were also faced by other students who persisted, or if they were completely different problems.

Major problems (or reasons), were weighted as "3," moderate problems as "2," minor problems as "1" and if the respondent checked that a particular item was not a problem or not a reason for dropping out, it was weighted as "0." The average weights for each group for each reason are shown in Table 29. It should be noted that because of the "0" weight, many of the reasons have very low means. Also, it should be remembered that students could pick more than one reason. For the purposes of analysis, some of the reasons/problems which were similar were grouped to allow for analysis by type. These included those variables which were related to the difficulty of the program or instruction, the instructor or advisors, the cost of the program, the administration, the availability of courses, family

Table 29

Mean Weighted Responses to Problems Faced by Graduates  
and Continuing Students and Reasons for  
Dropping Out by Dropouts

Reason or Problem	Gradu- ates	Drop- outs	Con- tinuing
1. Low grades	.216	.509	.465
2. Coursework too difficult	.532	.543	.620
3. Coursework too time consuming	.765	.922	.925
4. Need a break from courses	.681	.882	.881
5. Coursework not challenging	.775	.707	.835
6. Learned what I came to learn	.666	.503	.735
7. Dissatisfied with instruction	.836	.805	.713
8. Dissatisfied with advising	.838	.834	.832
9. Inadequate instructor contact	.669	.703	.698
10. Impersonal treatment by instructor	.601	.493	.553
11. Advising unavailable	.680	.676	.689
12. Impersonal treatment by advisor	.663	.565	.700
13. Courses not relevant	.581	.741	.573
14. Program wanted not offered	.689	.891	.989
15. Courses needed not offered	.388	.494	.839
16. Excessive course cancellations	.717	.963	1.012
17. Needs met by another institution	.465	.493	.752
18. Conflict between job and studies	.194	.870	.379
19. Not enough money to continue	.792	1.256	1.017
20. Inability to get released time	.194	1.162	.883
21. Travel expense	.459	.557	.752
22. Moved too far away to participate	.310	.778	.946
23. CMU too expensive	.239	1.179	.625
24. Lack of financial aid	.611	.824	.912
25. Child care unavailable or too costly	.538	.943	.858
26. Lack of response from local staff	.219	.573	.409
27. Lack of response from university	.519	.269	.665
28. Impersonal treatment by university	.549	.458	.779
29. Health problem	.706	.447	.712
30. Marital problem	.194	0	.237
31. Need to spend more time with family	.373	.646	.594
32. Illness in family	.616	.923	.834
33. Pressure from family	.329	.424	.603
34. Reputation of school or program	.344	.542	.598

related and job related problems/reasons. The problems/reasons which comprised each of these groupings are listed below.

<u>Difficulty (DIFF)</u>	<u>Job (JOB)</u>
(1) Low grades	(18) Conflict between job and studies
(2) Coursework too difficult	(20) Inability to get release time
(3) Coursework too time consuming	
<u>Cost (COST)</u>	<u>Instruction (INST)</u>
(19) Not enough money to continue	(7) Dissatisfied with instruction
(21) Travel expense	(8) Dissatisfied with advising
(23) CMU too expensive	(9) Inadequate instructor contact
(25) Child care unavailable or too costly	(11) Advising unavailable
(27) Lack of financial aid	(10) Impersonal treatment by instructor
	(12) Impersonal treatment by advisor
<u>Administration (ADMIN)</u>	<u>Family (FAMILY)</u>
(26) Lack of response from local staff	(30) Marital problem
(27) Lack of response from university	(31) Need to spend more time with family
(28) Impersonal treatment by university	(32) Illness in family
	(33) Pressure in family
	<u>Availability</u>
	(14) Program wanted not available
	(15) Courses needed not offered
	(16) Excessive course cancellations
	(13) Courses not relevant
	(17) Needs met by another institution

The means of each item and the above groupings of items were compared using F-tests. A total of 17 items received an F-value at the .05 level of significance; those items, their F-values and level of significance is shown in Table 30, below. Since the students who are still continuing in the program will at some point be graduates or dropouts, the F-tests were taken only of the latter two groups.

Table 30

F-Values and Levels of Significance of Items which are Significant at the .05 Level, for Mean Responses of Graduates and Dropouts

Item	F-Value	Signi- ficance	Item	F-Value	Signi- ficance
INST	8.245	.0046	17	13.040	.0004
COST	11.650	.0008	18	10.660	.0013
ADMIN	5.546	.0196	19	29.080	.0000
JOB	7.308	.0075	21	4.443	.0364
5	6.918	.0093	22	23.600	.0000
6	9.821	.0020	24	4.239	.0409
7	6.660	.0106	28	5.926	.0159
9	4.141	.0433	34	5.067	.0256
10	5.535	.0197			

The results with regard to "INST," which represent those items related to instruction, were somewhat unexpected in that they indicate that graduates responded that they were dissatisfied with instruction to a greater extent than dropouts. Certainly they received a much greater exposure to instructors and advisors than the dropouts. In addition, as was discussed above under "Advising," most dropouts had no contact with advisors at all. Indeed, graduates had higher mean responses on every item which made up "INST."

"Cost," as a problem, was cited by dropouts much more than other students. This is somewhat unexpected, in that not

receiving any financial aid was not shown to have an effect on attrition and graduates and dropouts were about equally represented by those who received loans or employer tuition assistance. Perhaps we are seeing here the attempt of dropouts to provide acceptable reasons for dropping out. As with the graduates in the "INST" grouping, dropouts had higher means in every item of the "COST" group.

As with "INST," graduates have had much more contact with the program and, therefore, it is expected that they would evidence more dissatisfaction with "ADMIN," or those items which inquired as to the responsiveness of the administration of the program. Graduates gave higher mean responses on every item which comprised this group of questions.

The individual items followed the same pattern as the grouped items in that of all the items listed, only eleven were significant and they were among those which also appeared in one of the groups.

One conclusion is clear from the responses to the individual items; without exception, the graduates indicate they had greater problems with various aspects of the program--from dissatisfaction with the instructor and administration to dissatisfaction with the reputation of the program--than did dropouts. The dropouts, on the other hand, had more problems with factors external to the program itself, including financial aid and conflict with their jobs. The single greatest reason for dropping out, according to the dropout, was that they moved too far away to participate.

Discriminant analysis was used to determine by how much the responses to the problems/reasons distinguished between the groups. Essentially, discriminant analysis first selects the item which is

most discriminating between the groups and then in stepwise fashion selects the second, third, fourth, etc., items which will, in combination with those selected previously, discriminate even more optimally. Inasmuch as "moved too far away to participate" was such an obvious discriminator, the discriminate analysis was conducted twice - once including it and once excluding it. Also, since the grouped questions were obviously related, they were pooled so as to be included as one time in order to simplify the analysis. The listing of those items which, because they were most discriminating in both analyses are shown in Table 31.

As a result of the discriminant analysis, the researcher is able to determine the degree to which the various groups are distinguished by the manner in which they respond to the instrument. Moreover, in this instance, it provides a prediction of the extent to which continuing students will become either graduates or dropouts on the basis of their responses.

Since the variable "moved too far away to participate" was the single greatest problem cited by dropouts, its inclusion helps to decisively discriminate between dropouts and graduates. As shown in Table 32, 85 percent of the graduates and dropouts are correctly classified as a result of their responses to the problems/reasons. This percentage drops to 79 percent when the item "moved too far to participate" is excluded, but still represents a significant level of discrimination between the two groups. On the basis of their responses to the items, it is predicted that 62 percent of the continuing students will persist to graduation and that 38 percent will eventually drop out.

Table 31  
Items Included in the Discriminant Analysis and the  
Step at Which Included

Step	Analysis Including the Item "Moved Too Far Away"	Analysis Excluding the Item "Moved Too Far Away"
1	"Moved too far away to participate"	"Needs met by another institution"
2	"COST"	"Learned what I came to learn"
3	"Needs met by another institution"	"Job"
4	"Learned what I came to learn"	"INST"
5	"JOB"	"COST"
6	"INST"	"Health problems"
7	"Need a break from courses"	"ADMIN"
8	"Health problems"	"Reputation of school or program"
9	"Family"	"Family"
10	"Reputation of school or program"	-----

Table 32

Classification Results for Discriminant Analysis of  
Problems Faced by Graduates and Dropouts

Group	Predicted Group Membership			
	"Moved Away" Included		"Moved Away" Excluded	
	Graduates	Dropouts	Graduates	Dropouts
Graduates	91.3%	8.7%	80.6%	19.4%
Dropouts	21.0	79.0	29.6	70.4
Continuing	62.7	37.3	61.9	38.1
Percent of grads & drops correctly classified	85.87%		76.09%	

Aspects Which Satisfy Students

As was discussed in Chapter III, it was hypothesized that students may differ as much with regard to those aspects that are satisfying as with those aspects which are problems or dissatisfying. Therefore, a section was included which asked students to respond to a question as to the degree of satisfaction with various aspects of the program (questions number 60-73 on the survey).

Students were asked to indicate whether they had "little," "moderate," "much" or "great" satisfaction or no satisfaction with fourteen aspects of the program. The responses were weighted "1, 2, 3, 4 or 0" respectively, and F-tests were computed for the means of the graduates and dropouts group for each aspect of the program. Three aspects proved to be significant in regard to the differences between the mean responses; "Information about the program before enrolling," "Quality of Students" and "Availability of Experiential Learning." In each instance, the graduates showed greater satisfaction than the dropouts.



With regard to "Information about Program," this might indicate that students who dropped out came into the program with expectations which were not fulfilled by the program. As was discussed above, students who graduated applied for experiential learning in much greater numbers than dropouts, thus it isn't surprising that the graduates were much more satisfied with the "Availability of Experiential Learning Opportunity."

A discriminant analysis was conducted of the responses to satisfying aspects of the program in the same manner as with the problems. Only three variables combined to help discriminate between graduates and dropouts: "Experiential Learning Opportunity," "Quality of Students" and "Course Content." In each instance these aspects satisfied the graduates more than dropouts. The classification results for the three satisfying aspects are shown in Table 33, below.

Table 33

Classification Results of the Discriminant Analysis of  
Satisfying Aspects of the Program

Actual Group	Predicted Group Memberships	
	Graduates	Dropouts
Graduates	67.9%	32.1%
Dropouts	37.5	62.5
Continuing	52.4	47.6
Percent of graduates and cases		
Dropouts correctly classified	65.35%	

Finally, dropouts were asked to name the three aspects of the program which if different would have changed their decision to drop out. The responses to this question are shown in Table 34.

Table 34  
Factors Dropouts Reported Would Have Influenced  
Decision to Drop Out

Factor	Frequency Checked Importance (1 = Most Important)			Total Checks
	1	2	3	
Advising	5	5	3	13
Library	0	2	2	4
Instruction	6	4	1	11
Cost of attending	7	5	2	14
Financial aid opportunity	4	4	4	12
Intellectual stimulation	4	4	6	14
Course content	2	3	0	5
Contact with instructors	7	4	0	11
Information about program before enrolling	1	1	2	4
Quality of students	0	3	1	4
Scheduling of courses	9	7	6	22
Reputation of program	1	2	5	8
Administrative regulations	0	2	4	6
Availability of Experiential Learning	3	3	5	11
No response	23	30	39	

The single most important factor is the scheduling format, which, given that the program consciously attempts to schedule courses at times when they will be convenient to students, must reflect the fact that not everyone can be served in the best of situations. It might also reflect that perhaps the needs of students change and that continuing attention needs to be paid to such things as scheduling format. "Cost of Attending" and "Financial Aid Opportunity" reflect the cost aspects which the dropouts have indicated earlier in the study as a problem. Finally, some dropouts are obviously concerned with programmatic and academic aspects of the program as indicated by the responses to "Advising," "Instruction," and "Intellectual Stimulation."

#### Advising the Dropout

Dropouts were asked with whom they discussed their decision to withdraw, and gave the responses shown in Table 35.

Table 35

Incidence of Discussion with Another About  
the Decision to Drop Out

	Percent Reporting*
Spouse	30.9%
Advisor	7.4
Friend	7.4
Employer or supervisor	9.9
Instructor	0
CMU staff member	3.7
No one	45.7

\*Will not add to 100 because respondents would indicate more than one.

It is clear that the University will not get much warning of a student's decision to drop out, since few discuss the matter with

advisors, instructors or staff members, and almost half do not discuss it with anyone. Indeed, at most only 5 percent discuss their decision with more than one of the sources.

#### Intent to Re-enroll

As was discussed in Chapter II, several authors believe that the dropout rate is overstated, because only longitudinal studies can determine if the dropouts really drop out or eventually graduate from the institution or another institution. The dropouts in this study were asked if they planned to re-enroll, with the result that 35.8 percent said they would re-enroll at CMU, and 32.1 percent said they would enroll in another graduate program. Care should be taken in interpreting these results, however, since it is believed that most students interpreted the question to ask if they would enroll in one or the other. Moreover, a number of students wrote in the margin of the questionnaire statements that greatly qualified their response or indicated that they were expressing their hopes as much as their plans.

## CHAPTER V

### FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was threefold. The first objective was to determine the attrition rates for the graduate students admitted to Central Michigan University's extended degree program. As was discussed earlier, these students are believed to be representative of the growing number of adult students who are returning to higher education after a hiatus of anywhere from five to twenty-five years. Their growing importance to American higher education was discussed at some length in Chapter I. The objective was thought to be very important given the almost total lack of information about this type of student, which was brought out in the review of the literature in Chapter II.

The second purpose of the study was to attempt to determine whether those who dropped out were "different people" from those who persisted. This purpose was pursued with the idea that if there existed demographic correlates which were closely associated with dropping out, perhaps a dropout profile could be constructed which would allow potential dropouts to be identified early in their program. The benefit of this type of information is obvious: it would, of course, be of importance to admissions officers and in informing admissions criteria. More importantly, perhaps, it could be of value to counselors and advisors who would be able to focus their efforts on students who might be most in need of their

services. Finally, it would allow program administrators to identify those student populations toward whom administrative and programmatic intervention should be focused.

The third purpose of the study was to isolate those factors which lead students to drop out of graduate extended degree programs. The reason for undertaking this objective was to distinguish those factors from problems which are faced by all students so that program administrators would be provided the information necessary to devise strategies and programmatic interventions to reduce attrition.

### Conclusions

Attrition Rates: Three years after admission, it was determined that 45.8 percent of the sample population had graduated and an additional 17.4 percent of the students are actively involved in the program. Of the remaining, 3.0 percent were "non-voluntary" dropouts--students who are either counseled out or dropped out because of low grade point averages; 15.5 percent were "no shows"--students who were admitted but never enrolled and 18.8 percent were "voluntary" dropouts. As was discussed in Chapter II, these attrition rates are less than have been reported for other types of graduate populations. In addition, they are lower than those reported for either traditional aged or older undergraduates.

This information conforms to the opinions of program administrators and faculty who participate in these programs that these students are generally more highly motivated than more traditional aged students. Intuitively, one would expect that perhaps these students would be more purposeful in their studies and more certain of their goals than younger students.

Individual Characteristics and Dropping Out: The findings and conclusions with regard to demographic characteristics are summarized below.

1. Age: No relationship was found between age and attrition or persistence. This finding differs from a number of studies of younger undergraduate populations, where a somewhat negative relationship between age and persistence was found.
2. Time Elapsed Since Undergraduate School: It was hypothesized that students may have more difficulty and be more inclined to drop out the longer they had been away from college studies. This was not found to be the case, since there was no relationship between attrition and the time since completion of the undergraduate program.
3. Race: No relationship was found between the attrition rates of Blacks, Whites or "Other" minorities. This finding conforms to Astin's, 1973 study of undergraduates, which controlled for academic factors, but does not conform to a number of studies which did not. Though this study did not explicitly control for academic factors, it did implicitly by considering only graduate students.
4. Sex: There were differences in the rates demonstrated by men and those shown by women, but the differences were not so much between those who persisted as opposed

to dropped out, but between graduates and continuing students. Men seem to complete at a faster rate than do women. However, an examination of the financial aid received also indicates that a much higher percentage of men receive financial aid than women. This may indicate that women are forced to take longer to complete than men.

5. Undergraduate GPA: No significant relationship was found between the undergraduate GPA and attrition and persistence rates. Since high school grades are related to undergraduate persistence, it was hypothesized that perhaps undergraduate grades may be related to graduate grades. At least with this population, this was not the case.
6. First and Second Course Grades: It was hypothesized that not doing well in the first courses may discourage students and encourage them to drop out. However, this does not seem to be the case since the relationship between grades in the first courses and attrition was not significant.
7. Highest Degree Held Prior to Entry: This factor was found to be of little importance since so few students possessed more than a bachelors degree prior to entry. Moreover, no significant difference was found between the attrition of those who possessed bachelors, masters or professional degrees.



8. Financial Aid: As was discussed in Chapter II, a number of authors have found a relationship between various types of financial aid and attrition of younger undergraduate students. Such a relationship also exists with the population under consideration in this study. For males, the receipt of in-service veterans' benefits and employer tuition assistance was positively related to persistence. For females, employer tuition assistance and employer released time were positively related. Insured student loans and out-of-service veterans' benefits seem to be unrelated to attrition and persistence. It is possible that the occupations of the students represent intervening variables which have as much impact on attrition and persistence as does financial aid itself. This certainly could be the case with in-service veterans' benefits and employer tuition assistance.
9. Undergraduate Institution: Since a number of researchers had found differences between the attrition rates of various types of undergraduate institutions, it was hypothesized that perhaps this influence would carry over to the graduate program. Thus the attrition rates of those coming from various types of institutions were reviewed. No significant relationship was found between the type of undergraduate institution attended and attrition.
10. Transfer Credit: It was hypothesized that the awarding of advanced standing on the basis of transfer credit

would be positively related to persistence since it effectively means the student will have a shorter program to complete. Indeed this was the case since a strong relationship was established.

11. Experiential Learning Credit: A finding similar to transfer credit was found with regard to experiential learning credit, or credit awarded on the basis of an evaluation of non-formal educational experiences.
12. Scheduling Formats: It was hypothesized that perhaps different scheduling formats, ranging from very intensive to more extended, might have an impact on persistence. However, the relationship between scheduling formats and attrition was not found to be significant.
13. Advising: The assumption was made that those students who had an advisor with whom they had met would be closer to and more integrated into the institution and thus more likely to persist. This was the case since a highly significant relationship was found between having and meeting with an advisor and persisting.

There are a number of individual characteristics that might have been investigated in addition to those enumerated above. Occupation, undergraduate major and reasons for entering the program come to mind as possibilities. However, it seems clear that attrition is a much more complex concept than anticipated by this research; perhaps even more complex when associated with older students in an extended degree program than with more traditional populations. In

short, it does not appear that a meaningful profile can be constructed which will allow potential dropouts to be identified ahead of time or to whom programmatic interventions could be focused.

However, there is nonetheless some valuable information to be gleaned from this attempt. First, it did point out the importance of the advisor and in getting students linked up with advisors as soon as possible. Further research needs to be conducted to determine how and why the advisor plays the role demonstrated by this study. Second, it seems clear that financial aid and its impact on adult students is an important topic for further research. It appears that financial aid, at least employer supplied assistance, may have a highly positive impact on persistence. Moreover, with the decreasing role of the federal government in providing financial aid and the increasing numbers of older part-time students who are not eligible for many of the conventional forms of assistance, employer tuition assistance may become one of the largest sources of financial aid in American higher education. The fact that half of the population sampled received employer tuition assistance is an indication of the potential that form of assistance has in making a great impact on higher education.

Factors Leading Students to Drop Out: Thirty-four factors or types of problems were investigated to determine which were factors that lead students to drop out. Dropouts were asked to check those which lead them to decide to drop, while graduate and continuing students were asked to check which were problems they faced. Both the dropouts and the persisters were asked to rank the factor as major, minor, moderate or not a problem or factor. The reason for

presenting the same list to both groups was to allay the criticism that has been levied at other studies that the factors dropouts report as leading them to drop out are no different than the problems faced and overcome by persisters.

Of the thirty-four items, twelve proved to significantly discriminate between dropouts and graduates. In addition, an analysis of six related groups of items was made and the combined responses of dropouts and graduates in four groups were significantly different. The items seem to fall easily into two categories: programmatic or external considerations. The items are listed below in their appropriate group, with the notation (d) or (g) beside it to indicate the group which rated the item as a greater problem or factor.

<u>Programmatic Consideration</u>	<u>External Consideration</u>
Instruction group of Items (g)	Job group of items (d)
Cost group of items (d)	Learned what I came to learn (g)
Administration group of items (g)	Conflict between job and studies (d)
Coursework not challenging (g)	Needs met by another institution (d)
Dissatisfied with instruction (g)	Travel expense (d)
Inadequate instructor contact (d)	Moved too far away to participate (d)
Impersonal treatment by instructor (g)	
Lack of financial aid (d)	
Impersonal treatment by university (g)	
Reputation of school or program (d)	

Using Discriminate Analysis, it was determined that based on responses to ten items and item groups, 85 percent of the dropouts and graduates could be placed in their proper group. When the item "moved too far away to participate" was excluded, this percentage dropped to 79 percent.

The ironic thing about these results is that, unexpectedly, the persisters cited more problems with programmatic items than

dropouts. Although the program administrators may take heart in the fact that little they are doing is driving students away, this also means that there is little they can change that will retain students. Generally speaking, the persisters have bigger problems with the instruction and administration of the program than dropouts. The dropouts have problems with their studies conflicting with their jobs and cost. Two programmatic considerations which can be affected by administrative intervention are "Inadequate Instructor Contact" and Financial Aid." The complaint of insufficient contact with instructors is related to the finding that the lack of an advisor is one of the significant differences between dropouts and persisters. Moreover it brings into question whether or not a major difference between the groups may be the degree of integration the individuals in the two groups feel with the institution. A review of the responses to the question "Do you have any comments that you believe will help CMU to improve its programs?", which appear in Appendix D, supports the finding in this area. Generally, the graduates and continuing students were much more prone to write comments and much more critical of the program itself; the dropouts were generally much more passive.

Recommendations for Further Research: There are several types of study that are suggested by the questions this report was unable to answer. One of the first that suggests itself is a longitudinal study that would identify participants as they enter into the program. Such a study would have several advantages over the "autopsy" approach of this study.

First, such a study could assess at the time of entry the reasons students were coming into the program. It may well be that

whether or not the student is working toward a promotion will have a significant impact on whether or not an individual persists. Although such motivations could be investigated through the use of an autopsy study, no doubt students' perceptions of their motivations are going to change after four or five years. Moreover, a longitudinal study would reveal if people return after dropping out or perhaps continue with their studies at another institution. Perhaps as Eckland (1964) and Johansson and Rossman (1973) determined with undergraduates, attrition for this population is overstated because many will actually return and graduate. Finally, a longitudinal study would be able to better examine the process of dropping and since it could study it as it happens rather than several years later.

One negative recommendation which appears to be appropriate as a result of this study is that much of it needn't be replicated. It appears that attrition is caused by an interplay of a vast number of interrelated variables. As a result, attempts to isolate demographic correlates or even groups of determinant factors for the purpose of constructing dropout profiles or making individual programmatic modifications, would seem to be futile except in the most general manner.

A second major thrust that is suggested is to concentrate on reducing attrition rather than predicting it. Extended degree programs provide a laboratory type arrangement with their self-contained sites—providing the perfect place to test and evaluate intervention strategies such as orientation programs, advising interventions, support groups, etc.

A third and final type of research suggested by this study is simply a study of the population of potential students among the working adult population of this country. Such a study could focus on the needs of this group which could be fulfilled by higher education. As was discussed in Chapter I, this group is increasing its participation rate in higher education at an accelerating rate. Higher education would do well to find out more about this group. Such studies should include an investigation of the role of adult development in determining the needs and desires of this population and in formulating methods of serving them.

## APPENDIX A



## APPENDIX A

### Questionnaire Sent to Dropouts

CENTRAL MICHIGAN UNIVERSITY  
INSTITUTE FOR PERSONAL AND CAREER DEVELOPMENT  
STUDENT FOLLOW-UP QUESTIONNAIRE

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

1. Location where you enrolled in CMU Program \_\_\_\_\_

2. Birthdate \_\_\_\_\_

3. Year received undergraduate degree, 19\_\_\_\_

4. School from which undergraduate degree received \_\_\_\_\_

To answer the following questions, please enter the appropriate number of your response in the space provided in the left margin.

\_\_\_\_ 5. Sex: (1) male; (2) female

\_\_\_\_ 6. Race: (1) Asian or Pacific Islander American; (2) Black;  
(3) Hispanic; (4) Native American; (5) White;  
(6) Foreign

\_\_\_\_ 7. Type of institution from which you received your undergraduate degree:

- |                       |                                       |
|-----------------------|---------------------------------------|
| (1) Four Year Public  | (5) Medium-sized Public University    |
| (2) Four Year Private | (6) Medium-sized Private University   |
| (3) Proprietary       | (7) Large Public Research University  |
| (4) Military Academy  | (8) Large Private Research University |

\_\_\_\_ 8. Did you have an academic advisor while attending CMU? (1) Yes;  
(2) No. If so, what was his or her name (if known) \_\_\_\_\_

\_\_\_\_ 9. Did you apply for Experiential Learning? (1) Yes; (2) No

\_\_\_\_ 10. If the answer for Question 9 was yes, how many semester hours of credit were awarded? (Enter number of hours in space provided in left margin.)

To answer the following questions, please enter the appropriate number of your response in the space provided in the left margin.

- \_\_\_ 11. Did you complete any graduate work prior to enrolling with CMU? (1) Yes; (2) No
- \_\_\_ 12. Did you apply to have previous credit transferred to your CMU graduate program? (1) Yes; (2) No
- \_\_\_ 13. If the answer to Question 12 is yes, how many semester hours were accepted for transfer? (Enter number of hours in space provided in left margin.)
- \_\_\_ 14. What is the highest degree you possessed prior to enrolling in CMU's graduate program?  
       (1) Bachelor's degree       (3) Professional degree (law, divinity,  
       (2) Master's degree       medicine, etc.)  
                                       (4) Doctorate (PhD, DBA, EdD, etc.)
- \_\_\_ 15. Have you enrolled with any other institution since enrolling with CMU? (1) Yes; (2) No  
       If so, please name \_\_\_\_\_
- \_\_\_ 16. What is the highest degree you presently hold?  
       (1) Bachelor's degree       (3) Professional degree  
       (2) Master's degree        (4) Doctorate
- \_\_\_ 17. During the time you were enrolled with CMU, were you working?  
       (1) Full-time; (2) Part-time; (3) Not working

Listed below are types of financial assistance. Please check each one that you received while attending CMU.

- \_\_\_ 18. Insured Student Loan
- \_\_\_ 19. In-Service Veterans Benefits
- \_\_\_ 20. Out-of-Service Veterans Benefits
- \_\_\_ 21. Employer Tuition Assistance (\_\_\_% tuition furnished?)
- \_\_\_ 22. Employer Release Time
- \_\_\_ 23. Other - Please specify \_\_\_\_\_
- \_\_\_ 24. None - paid all expenses myself

Listed below are some reasons for withdrawing from a degree program. To what extent are these your reasons? (Check (✓) all appropriate responses)

	Major Reason (3)	Moderate Reason (2)	Minor Reason (1)	Not a Reason (0)
25. Low grades	_____	_____	_____	_____
26. Course work too difficult	_____	_____	_____	_____
27. Course work too time consuming	_____	_____	_____	_____
28. Need a break from courses	_____	_____	_____	_____
29. Course work not challenging	_____	_____	_____	_____
30. Learned what I came to learn	_____	_____	_____	_____
31. Dissatisfied with instruction	_____	_____	_____	_____
32. Dissatisfied with advising	_____	_____	_____	_____
33. Inadequate instructor contact	_____	_____	_____	_____
34. Impersonal treatment by instructor	_____	_____	_____	_____
35. Advising unavailable	_____	_____	_____	_____
36. Impersonal treatment by advisor	_____	_____	_____	_____
37. Courses not relevant	_____	_____	_____	_____
38. Program I wanted not offered	_____	_____	_____	_____
39. Courses needed were not offered	_____	_____	_____	_____
40. Excessive course cancellations	_____	_____	_____	_____
41. Needs met by another institution	_____	_____	_____	_____
42. Conflict between job and studies	_____	_____	_____	_____
43. Not enough money to continue	_____	_____	_____	_____
44. Inability to get release time	_____	_____	_____	_____
45. Travel expense	_____	_____	_____	_____
46. Moved too far away to participate	_____	_____	_____	_____
47. CMU too expensive	_____	_____	_____	_____
48. Lack of financial aid	_____	_____	_____	_____
49. Child care unavailable or too costly	_____	_____	_____	_____
50. Lack of response from local staff	_____	_____	_____	_____
51. Lack of response from university	_____	_____	_____	_____
52. Impersonal treatment from university	_____	_____	_____	_____
53. Health problem	_____	_____	_____	_____
54. Marital problem	_____	_____	_____	_____
55. Need to spend more time with family	_____	_____	_____	_____
56. Illness in family	_____	_____	_____	_____
57. Pressure from family	_____	_____	_____	_____
58. Reputation of school of program	_____	_____	_____	_____
59. Other _____	_____	_____	_____	_____

Based upon your experience with CMU, please indicate your degree of satisfaction with the following aspects of the program.

	None	Little	Moderate	Much	Great	Not Appli- cable
60. Advising	_____	_____	_____	_____	_____	_____
61. Library services	_____	_____	_____	_____	_____	_____
62. Instruction	_____	_____	_____	_____	_____	_____
63. Cost of attending	_____	_____	_____	_____	_____	_____
64. Financial aid opportunity	_____	_____	_____	_____	_____	_____
65. Intellectual stimulation	_____	_____	_____	_____	_____	_____
66. Course content	_____	_____	_____	_____	_____	_____
67. Contact with instructors	_____	_____	_____	_____	_____	_____
68. Information about pro- gram	_____	_____	_____	_____	_____	_____
69. Quality of students	_____	_____	_____	_____	_____	_____
70. Scheduling of classes	_____	_____	_____	_____	_____	_____
71. Reputation of program	_____	_____	_____	_____	_____	_____
72. Administrative regula- tions	_____	_____	_____	_____	_____	_____
73. Availability of Experi- ential Learning Opportunity	_____	_____	_____	_____	_____	_____

In order of importance, what are the three most important factors listed above that if changed would have encouraged you to continue in the CMU program? (enter the appropriate number of the factor)

- \_\_\_\_ 74. Most important factor  
 \_\_\_\_ 75. Second most important factor  
 \_\_\_\_ 76. Third most important factor

With which of the following people did you discuss your decision to withdraw from the CMU program?

- \_\_\_\_ 77. Spouse  
 \_\_\_\_ 78. Advisor  
 \_\_\_\_ 79. Friend  
 \_\_\_\_ 80. Employer or Supervisor  
 \_\_\_\_ 81. Instructor  
 \_\_\_\_ 82. CMU staff member  
 \_\_\_\_ 83. I did not discuss my decision with anyone  
 \_\_\_\_ 84. Do you plan to re-enroll in the CMU program ? (1) Yes; (2) No  
 \_\_\_\_ 85. Do you plan to enroll in another Master's Degree program?  
 (1) Yes; (2) No  
 86. Do you have any comments that you believe will help CMU to im-  
 prove its program?

---

UGGPA	FGPA	SGPA	FINGA
_____	_____	_____	_____

## APPENDIX A

Questionnaire Sent to Graduates and  
Continuing StudentsCENTRAL MICHIGAN UNIVERSITY  
INSTITUTE FOR PERSONAL AND CAREER DEVELOPMENT

## STUDENT FOLLOW-UP QUESTIONNAIRE

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

1. Location where you enrolled in CMU Program \_\_\_\_\_

2. Birthdate \_\_\_\_\_

3. Year received undergraduate degree, 19\_\_

4. School from which undergraduate degree received \_\_\_\_\_

To answer the following questions, please enter the appropriate number of your response in the space provided in the left margin.

5. Sex: (1) male; (2) female

\_\_\_\_ 6. Race: (1) Asian or Pacific Islander American; (2) Black;  
(3) Hispanic; (4) Native American; (5) White; (6) Foreign

\_\_\_\_ 7. Type of institution from which you received your undergraduate degree:

- |                       |                                       |
|-----------------------|---------------------------------------|
| (1) Four Year Public  | (5) Medium-sized Public University    |
| (2) Four Year Private | (6) Medium-sized Private University   |
| (3) Proprietary       | (7) Large Public Research University  |
| (4) Military Academy  | (8) Large Private Research University |

\_\_\_\_ 8. Did you have an academic advisor while attending CMU? (1) Yes;  
(2) No If so, what was his or her name (if known) \_\_\_\_\_

\_\_\_\_ 9. Did you apply for Experiential Learning? (1) Yes; (2) No

\_\_\_\_ 10. If the answer for Question 9 was yes, how many semester hours of credit were awarded? (Enter number of hours in space provided in left margin.)

\_\_\_\_ 11. Did you complete any graduate work prior to enrolling with CMU?  
(1) Yes; (2) No

To answer the following questions, please enter the appropriate number of your response in the space provided in the left margin.

- \_\_\_\_ 12. Did you apply to have previous credit transferred to your CMU graduate program? (1) Yes; (2) No
- \_\_\_\_ 13. If the answer to Question 12 is yes, how many semester hours were accepted for transfer? (Enter number of hours in space provided in left margin.)
- \_\_\_\_ 14. What is the highest degree you possessed prior to enrolling in CMU's graduate program?  
       (1) Bachelor's degree       (3) Professional degree (law, divinity,  
       (2) Master's degree       medicine, etc.)  
                                       (4) Doctorate (PhD, DBA, EdD, etc.)
- \_\_\_\_ 15. Have you enrolled with any other institution since enrolling with CMU? (1) Yes; (2) No  
       If so, please name \_\_\_\_\_  
       \_\_\_\_\_
- \_\_\_\_ 16. What is the highest degree you presently hold?  
       (1) Bachelor's degree       (3) Professional degree  
       (2) Master's degree       (4) Doctorate
- \_\_\_\_ 17. During the time you were enrolled with CMU, were you working?  
       (1) Full-time; (2) Part-time; (3) Not working

Listed below are types of financial assistance. Please check each one that you received while attending CMU.

- \_\_\_\_ 18. Insured Student Loan
- \_\_\_\_ 19. In-Service Veterans Benefits
- \_\_\_\_ 20. Out-of-Service Veterans Benefits
- \_\_\_\_ 21. Employer Tuition Assistance (\_\_\_\_% tuition furnished?)
- \_\_\_\_ 22. Employer Release Time
- \_\_\_\_ 23. Other - Please specify \_\_\_\_\_
- \_\_\_\_ 24. None- paid all expenses myself

Listed below are some problems students encounter in a degree program. To what extent did you encounter them? (Check (✓) all appropriate responses.)

	Major Problem (3)	Moderate Problem (2)	Minor Problem (1)	Not a Problem (0)
25. Low grades	_____	_____	_____	_____
26. Course work too difficult	_____	_____	_____	_____
27. Course work too time consuming	_____	_____	_____	_____
28. Need a break from courses	_____	_____	_____	_____
29. Course work not challenging	_____	_____	_____	_____
30. Learned what I came to learn	_____	_____	_____	_____
31. Dissatisfied with instruction	_____	_____	_____	_____
32. Dissatisfied with advising	_____	_____	_____	_____
33. Inadequate instructor contact	_____	_____	_____	_____
34. Impersonal treatment by instructor	_____	_____	_____	_____
35. Advising unavailable	_____	_____	_____	_____
36. Impersonal treatment by advisor	_____	_____	_____	_____
37. Courses not relevant	_____	_____	_____	_____
38. Program I wanted not offered	_____	_____	_____	_____
39. Courses needed were not offered	_____	_____	_____	_____
40. Excessive course cancellations	_____	_____	_____	_____
41. Needs met by another institution	_____	_____	_____	_____
42. Conflict between job and studies	_____	_____	_____	_____
43. Not enough money to continue	_____	_____	_____	_____
44. Inability to get release time	_____	_____	_____	_____
45. Travel expense	_____	_____	_____	_____
46. Moved too far away to participate	_____	_____	_____	_____
47. CMU too expensive	_____	_____	_____	_____
48. Lack of financial aid	_____	_____	_____	_____
49. Child care unavailable or too costly	_____	_____	_____	_____
50. Lack of response from local staff	_____	_____	_____	_____
51. Lack of response from university offices	_____	_____	_____	_____
52. Impersonal treatment from university	_____	_____	_____	_____
53. Health problem	_____	_____	_____	_____
54. Marital problem	_____	_____	_____	_____
55. Need to spend more time with family	_____	_____	_____	_____
56. Illness in family	_____	_____	_____	_____
57. Pressure from family	_____	_____	_____	_____
58. Reputation of school or program	_____	_____	_____	_____
59. Other _____	_____	_____	_____	_____

Based upon your experience with CMU, please indicate your degree of satisfaction with the following aspects of the program.

	None	Little	Moderate	Much	Great	Not Appli- cable
60. Advising	_____	_____	_____	_____	_____	_____
61. Library Services	_____	_____	_____	_____	_____	_____
62. Instructor	_____	_____	_____	_____	_____	_____
63. Cost of attending	_____	_____	_____	_____	_____	_____
64. Financial aid oppor- tunity	_____	_____	_____	_____	_____	_____
65. Intellectual stimulation	_____	_____	_____	_____	_____	_____
66. Course content	_____	_____	_____	_____	_____	_____
67. Contact with instructors	_____	_____	_____	_____	_____	_____
68. Information about pro- gram before enrolling	_____	_____	_____	_____	_____	_____
69. Quality of students	_____	_____	_____	_____	_____	_____
70. Scheduling of classes	_____	_____	_____	_____	_____	_____
71. Reputation of program	_____	_____	_____	_____	_____	_____
72. Administrative regu- lations	_____	_____	_____	_____	_____	_____
73. Availability of experi- ential learning opportunity	_____	_____	_____	_____	_____	_____

74. Do you have any comments that you believe will help CMU to improve its program?

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UGGPA

FGPA

SGPA

FINGA

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## APPENDIX B

## APPENDIX B



## Letter Sent to Graduates

## CENTRAL MICHIGAN UNIVERSITY

INSTITUTE FOR PERSONAL AND CAREER DEVELOPMENT

Dear

We really need your help! As a graduate of the CMU graduate program, you are in perhaps the best position to inform us as to the strengths and weaknesses of the program you have completed. Though this information will not be of direct benefit to you, it will help improve the program for others. It will also help me complete my doctorate, since the information you provide will help form the basis for my dissertation.

You may perform this role of valued critic by completing the enclosed questionnaire, which will take only a few minutes, and returning it in the enclosed postage-paid envelope. Individual responses will, of course, be treated in the strictest confidence. If you are not willing to participate, please so indicate on the form and return it to me so I will not continue to send you mail or attempt to contact you by phone. Please return the questionnaire as soon as possible.

Sincerely,

Richard H. Potter  
Assistant Director  
Institute for Personal  
and Career Development

RP:jp

Enclosures

## APPENDIX C

## APPENDIX C

Responses of Dropouts to the Request "Briefly state the reason(s) you chose not to re-enroll at CMU."

I can only attend classes at the Wisconsin Ave. Center; the courses offered at this center were either almost always cancelled or were courses not required in my curriculum.

I have not re-enrolled recently primarily because of a shortage of funds and a lack of time stemming from job and personal commitments.

There are some nebulous reasons, and a combination of several circumstances all coming together at about the same time, but they're very secondary to the only real problem - lack of funds. P.S. I still haven't consciously given up on going again....

I moved out of the area serviced by CMU. I would like to finish out my degree program with CMU, but it is going to require flexibility and cooperation from CMU which has not been the case.

I am (was) disenchanted with stupid term papers which are totally time wasters, encourage cheating, and detract from learning! Collateral to the above I saw this going on, as well as passing students who should never have passed a decent undergraduate program! I want to spend time learning, not bogged down in busy work!.

Financial reasons.

Needed a break from classes. Plan on attending in the fall, either CMU or LIT graduate engineering program.

Transferred by USAF to Hanscom AFB (Boston) MA. Would like to re-enroll if Branch was available in area.

Job required more time.

Since I took my last class at CMU in Spring of 1978 I have been pursuing my CPA certificate in Virginia. Once completed, I plan to continue studying towards a master's degree.

While attending CMU, I was promoted to the position of Executive Officer, Law Library, Library of Congress. I found that the responsibilities of this position, including evening and weekend work, did not permit me to devote adequate time to my studies.

Monetary - the policy of CMU locally with respect to the tuition collection made it impossible for me to continue at this time. I do fully plan to enroll in future classes and obtain my master's degree.

After completing one course in the CMU Masters Degree Program (Jan., 1979), I was reassigned to afternoon shift at the Ford Motor location where I work. I am currently enrolled again in this program and about to begin my second course 2-9-81.

- 1) I was disenchanted with the instructor for my second course.
  - 2) I felt I was not going to earn a "quality" business degree in the CMU program.
- 
- 1) At time of first course, marriage was falling apart, followed by divorce and am now single parent of 8th grader; resultant financial status.
  - 2) Courses needed have been offered at a distance that would make child care necessary during school year and I've found that extremely difficult with ex-spouse in town.
  - 3) Summer courses - the child care wouldn't be a big problem, but arranging time off is difficult.
  - 4) Promoted to Chief Tech position in an expanding lab that has kept me very busy.
- 
- 1) Advisor advised me to take a break. Bad decision; once I was in and going strong I shouldn't have stopped.
  - 2) Classes too far from home, class enrollment center too far from home.

This program did not carry the counseling curriculum I wanted.

I retired from the Air Force, moved to California and took a new job as Program Manager for a major DOD laser weapons effort.

I was transferred to Guam.

My attitude toward college degrees changed. It seemed like I was just filling a square.

Pregnancy and new parenthood.

All personal - full time job; raising a 5 yr. old boy by myself; not being able to spend time with son; not being able to start to study before 9:30-10:00 pm because of spending time with son and working a part-time business.

Because of job-related responsibilities and the working environment here at Chrysler headquarters. I decided that re-enrollment would be too difficult to handle at this time.

I may not be a valid candidate for your questionnaire because I have not intentionally "dropped out." Our home was destroyed in the 1979

tornado and that set us back financially and slowed down my education, but I have taken at least one course per calendar year each year since enrolling.

Lack of tuition costs, required in advance of veterans' benefit reimbursement. Because, usually 2 months of tuition will have to be paid before the first benefit check will be received.

Found the courses lacking in rigor and content; part-time instructor inept.

I enrolled at University of MO. in a masters program in Microbiology, my area of interest, in hopes of obtaining a position in medical school.

I received two "incomplete" grades in a row for not completing the final term paper; my other responsibilities are temporarily (I hope) more important than attending grad school.

Credits too expensive - classes a joke - just a way for CMU to get more easy \$. It was too "Mickey Mouse" - The instructors and students did not take the idea of "getting an education" seriously. Receiving a degree from there has no respect because it is too easy - put your time in and out comes a degree is no accomplishment.

Military duties and family activities conflicted with times courses were being offered--i.e., weekends.

My work schedule and job changed drastically so that I had to travel extensively and could no longer attend sufficient classes in any one month to complete the courses.

Unsure of direction I want to take in library field. I enjoyed the one course I took, but I'm not sure I want to pursue degree in program.

I am not a business major. My degree is in nursing. The instructor could not work with students on an individual basis who had no background. No access to a good library source.

Only needed two courses to complete requirements for U. of Utah MBA program that I had started while overseas. The Utah program is not available here...the CMU work was done and the credits used to finish the Utah MBA.

Voc. Ed. masters not offered.

Insufficient time available.

Left state. Discharged from service.

I have started toward MSW studies. I still plan to return to Central Michigan.

Returned to Wayne State Univ. where I graduated Dec. 80. Transfer back to Wayne was purely a matter of logistics. Wayne was closer and more convenient to my home and job.

Classes moved away from the plant. Change in teacher attitude outside of plant. Change in course approach outside of plant.

Lack of financial aid.

I decided to retire from Civil Service after 29 years and age 60. I just didn't have money to continue paying for the courses.

Tuition too high. Courses not available in nearby area. Hotel cost too high. Air fare to courses I needed too expensive.

Became a parent - work full time.

Initially - lack of time. Later - current freeze on financial aid by employer.

Started own business - saw no direct value in obtaining degree - classes that were taken were too general in nature and did not relate directly to everyday business.

Due to seven-day work schedule, found it impossible to attend.

I am not employed in a firm that reimburses tuition cost as I was when enrolled at CMU. It is not financially feasible for me at this time to continue.

Insufficient time for study due to job demands and family responsibilities.

Weekend time involved, plus travel distance from Fort Leavenworth KS to Kansas City.

I have six credits from CMU and six from Pepperdine that seem to be in question.

I'm going to try for experience credit but haven't yet submitted for evaluation. I have managed engineers for over 15 yrs; currently manage a 40-man branch with programs (all) funded in excess of six million dollars.

Air Force reassignment to Offutt AFB NE, which does not have a CMU extension program.

## APPENDIX D



## APPENDIX D

Responses to the question, "Do you have any comments that will help CMU improve its program?"

### Graduates

Perhaps some type of method to insure that all graduates have a grasp of the information studies (a comprehensive exam) this type of test would help to raise the reputation of the program and its graduates.

Just keep up the good work!

Continue as is.

There should be a better selection of qualified instructors. MBA should be offered.

I would like to see an MBA option. I followed the Mgt. & Super. Major and would like to have had an opportunity for more depth in that field.

Some courses like accounting and Org. Finance could give more information. Material needed for course assignments was often not in the textbooks.

Continue to get instructors that challenge you to think, observe and reason instead of regurgitate facts and figures. It makes a hell of a difference.

I believe it would be helpful to become fully accredited and not make IPCD courses appear distinctive from other CMU programs. After implementing these suggestions, it is important to advertise more.

I'm very well satisfied with the instruction, the attention and courtesies of CMU staff members and the course in general.

Improve advising--send advisors to classes instead of program coordinator--Coordinator can only take care of hotel, etc., can't help the students, can't answer any questions, etc.--waste of money.

I wish some of the courses were a bit more technical.

Quicker response time for notification of transfer credits--reduce duplication of course material--offer MBA degree. (I had substantial math/engineering/statistical background yet could not obtain MBA off-campus because of school policy; otherwise--quite pleased with school.)

Completely satisfied with all programs that led to my degree--(good luck on your project).

The program is too much like an extension of an undergraduate program--not as stimulating or exacting as I expected a post-graduate degree to be. Need to tighten admission policies and watch that GPA people who could barely graduate from a bachelor's program with a 2.00 were getting into the program. Credits were expensive but the seminars I've taken (no-credit) at U.M. Mott were expensive, but good, seminars.

1. Was very pleased with CMU. I am sorry you will not receive this questionnaire prior to the suspense date, but we have PCs'd and it did not arrive at my current address until 21 Feb 81.

Stop trading off knowledge for credits earned elsewhere. Widened exposure and thought-provoking instruction of greater value than double credit. Dump experiential learning and other fudges.

I appreciate the opportunity to obtain an MA while working full time but was irritated by the numbers of people who were only there for the piece of paper and who lacked both ability for and interest in graduate work. I feel there should be at least minimal GPA requirements above Bachelors degree.

Increase post-graduate activities such as placement, alumni activities. Concentrate on more promotion of the program--it is superb! Consider a doctorate program.

Extension of M.A. program into a doctorate granting program using same format of instruction and requirement.

Availability of more courses.

Keep up the good work!

Offer a degree in something other than Management and Supervision; e.g., a Masters in Pub. Adm. (MPA) would do a lot to enhance the reputation of CMU. Improve the quality of the diplomas.

Keep up the good work!

Communicate more with your students and especially graduates from CMU. Encourage each person to seek talented individuals to attend CMU. More advertising is in order--be proud--you have a good program. Get the word out!

None. Keep up the good work! I was very satisfied with the overall CMU program.

Offer a full-fledged MBA program with stricter entrance requirements and more regimented course scheduling. More emphasis on prerequisites for advanced courses.

Some of the instructors tried to impress the students with what they knew rather than trying to teach the course. I used the nearest University (Georgia State) library to do research. Some instructors had little contact with the students or appeared to be disinterested in the students questions or problems. Some of the instructors really stunk while others were very impressive. I did most of my learning on my own which accounts for my 3.84 grade average.

I was a little disappointed with my degree in that I felt it would give me more job mobility than it really has. In my area it also is not a highly regarded degree.

Continue the program in the field past the masters to the doctorate.

Program suited my personal needs in all respects. Only comment I have would be to take a serious look at instructors whom students evaluate as not totally adequate/desireable, etc. Keep the students perceptions first and foremost in keeping instructors or replacing them.

Encourage more employers to recruit from the CMU graduates upon graduation. I neither heard nor saw one recruiting effort.

Could interview and screen out some instructors and their intentions on how to teach a particular subject before students are subjected to them.

My only criticism of the program was moonlighting instructors from the traditional undergraduate program who used or tried to use undergraduate material to teach a graduate program even if the material did not match. Attitude of said instructors toward adults. They were so threatened by adults they did not know how to cope except to threaten with grades. They were not adult enough to realize the grade game was beyond our values.

All CMU is concerned about is the income derived; thus many students have the attitude of I paid my money, give me my grade. Make the program a true M.A. program.

Would like to have a doctorate program offered.

After working 8 hours a day, it was very strenuous to have to sit in class 4 1/2 hours. I would have preferred going biweekly, or for a longer duration of weeks.

I thought that the program was an excellent one. I would suggest, however, that students be screened more carefully, in order that all contribute to each class on a truly graduate level. For example, on a number of occasions, student presentations reflected little intellectual thought or outside research. The instructors did not seem to mind this or at least did not show it. Hope this helps you. I've got your name for when I begin work on my dissertation!

Too much overlap on subject content; e.g., Human Motivation, Organizational Psychology, Organizational Behavior and Change, etc. all covered hierarchy of needs, leadership styles, etc. Very redundant. Mr. Rom was a joke as an instructor: Dr. Parsons and labor relations instructor, best instructors. Because of current economic climate in automotive business, it is hard to assess whether or not the program will result in promotional opportunities--in the long run, I tend to feel that it will. Were I to leave Ford, I am sure the degree would enhance job potentials. Class time was exceptionally long, especially when the instructor was boring; hence the need for more stimulating instructors.

I thoroughly enjoyed my time in the CMU course. The ones through ASMT (5 days straight) were easiest to schedule and very good if preparation by others was good. I would like to take more.

Keep up the good work. The master's program has helped me very much.

High quality instruction is #1 priority; I had the feeling that several instructors came to teach strictly attracted by money, not by teaching opportunity.

I would like CMU to offer a doctorate program through the Institute for Personal and Career Development (away from CMU campus).

Careful selection of instructors--occasionally out-of-town instructors not fully aware that most graduate students carry full time employment while attending school--there is a difference between young adults and older students who usually hold mid-management or executive-level jobs with responsibility. On the whole, however, excellent program and program direction!!

The program met the requirements I established for myself in enrolling in the program. Overall with the type of program it was designed for, fast and short I was outguided.

I believe the program fills a valid need for employees in this area. I feel that cost is high but no more so than similar programs from other schools in the area. I liked the one month format, however, I do not feel it provides the extensive knowledge that a semester program would afford. I would like to see CMU start a semester and monthly program. I would also like to see CMU start other Master's programs in this area. I believe I would attend. Convenience of location was a very positive factor.

I wish you had a PhD or Doctoral program similar to the MA program. Good luck with your survey.

Extend facilities to more military bases. Finished in 1978 with 29 hours and had to do extensive coordination to finish program by taking University of Oklahoma course. My advisor departed and I encountered a great deal of bureaucratic snafu in meeting final course graduation objectives. People failed to tell me that application for graduation was mandatory and caused me to lose 6 months before degree was awarded. Not fully satisfied until I personally traveled to Washington D.C. area to get the needed action taken.

Provide counseling service in between class meetings. Specifically, have counselors available when classes are not in session.

Try to work on an MBA, not just an M.A. Maybe, some job placement assistance.

An excellent program, designed to fit the needs of working people. I would recommend the program to anyone. There were only two courses that I feel were not at the graduate level.

Offer degrees in an area that the students may use the degree in pursuing employment.

Higher scholastic requirements for students entering the program. Text and instruction should be of a higher level than what it is right now.

Ensure you maintain quality standards in your off-campus degree programs. They must remain challenging and deliver a qualified graduate.

Is there a doctoral program in Washington, D.C. area?

I completed studies in JUN 79 and before I left I asked if I was all set for graduation and the staff said yes. I left in early July expecting AUG 79 degree. I traveled a lot up until the end of OCT 79 when I called to ask why I hadn't received my diploma. I was informed I had not yet applied for graduation. This, after I had been told everything was OK for AUG. graduation and I would have to wait until JUN 80, at which time I received my diploma. This displays extreme inflexibility and non concern for a student with a special problem, caused, it seems to me, mostly by the school administration!

Monitor textbook selection. Several textbooks were either inappropriate or of little or no value.

The size of classes should be better controlled, and they should be smaller. Sometimes there were so many students it was hard to find a place to sit. Also, three weeks between "marathon" class weekends would make it easier on students. I skipped at least one month between each course to recuperate, and feel I learned more by doing

so. First advisor with whom I met, (Brandt, I believe) did not give me an adequate introduction to the program. In retrospect, it was like he just wanted to get another student enrolled.

I am very displeased with the attitude taken by main campus professors. This program deserves a diploma identical to the main campus. Class distinction is hog wash!!!

CMU should offer a masters program in business specializing in different areas such as: marketing, finance, account, etc.

- 1) Research studies were almost non-existent.
- 2) Directed studies should be made available so students on irregular schedules can continue participation.
- 3) Hank English offers no guidance or help. He is only interested in class fill, not student needs. He should be considered strongly for replacement.

Note: CMU has a good program with good professors. Problems are the impersonal, sloppy, unprofessional method administration is handled. The graduation notice quality is one of the sloppy examples I speak of and poor grade turn around time.

A good program for what it's worth.

One instructor just attended but did little instructing (only one out of 10). One instructor did give much too much outside work for people who were working full time and going to school (again only 1 out of 10).

The program seems to be gaining popularity in this area and a reputation as a papermill.

Health Care Administration courses not perceived as challenging at graduate level.

CMU needs an accredited masters program. A 45 - 60 hour MBA would increase enrollment and university stature.

Richard - more emphasis is needed in computer education. If your university offers a specialist program for this subject matter in an extension program, I would be interested. Thank you.

Expand courses to more than two weekends - perhaps to three.

Eliminate survey courses such as the computer course. More detail in courses.

Determine if program is going to be academic weighted or work experience weighted and advertise it as such. Toward end of my coursework, program tended to become more and more "bookishly" academic vs. "working manager" oriented. Decide and act accordingly so prospective students won't be surprised.

They should increase the program to include an MBA and PhD. Both are good marketing degrees and offered by more and more schools in this country. Good luck in your doctorate.

Higher, better quality of instructor.

Significant amount of class time was lost due to time conflicts experienced by the instructors. They were frequently late or cancelled classes due to other requirements. Would suggest more control be exercised in this area.

Mr. English (my advisor) was not personable and exhibited little interest in my desires and thoughts on what I felt I should do. He appeared to be employed solely for personal financial benefit vs. student assistance!

Improve MA program to be a full MBA program.

Having talked with other schools and having tried other extension programs, I would say that CMU has the best idea and the best execution, so don't change except to expand (other fields or PhD?).

(Library services) In the Atlanta area I used the services of Georgia State (my wife was a student) and Georgia Tech (our son was a student).

- 1) Stand up lectures in Economics for eight 4-hour classes are too much.
- 2) Instructors place undue emphasis on written exams for grading purposes (in some cases all). In a 4-hour class format twice a week, with mature students, they alibi that CMU requires them to grade and that's the easy way out. They all give B's anyway to insure renewal of contract and reduce complaints.

There was a tremendous divergence of teaching and grading methods, which caused much confusion and irritability among the students. One teacher would ascribe no work and award all A's. Another would just pile work on and give no A's. This just didn't seem right.

School must stand behind instructors in most areas particularly course content, and evaluation procedures, in order to improve and insure consistent standards.

I was pleased that instructors generally did not yield to class pressure for light assignments and class work-load simply because most people also work full-time. However, having gone through the homework assignment and paperwriting exercise, it wasn't terribly difficult to get an "A" for the course. In my opinion, the CMU program suffers from the reputation of being an easy degree--"just pay the money and show up for class."

Yes, a Master of Business Administration addition would be nice. Really enjoyed program, it gives "C" students another chance.

For me, I was satisfied with the program and my degree. I had only one instructor who I was really unhappy with--he did not teach well, although he was eminently qualified, and he gave unfair exams. He was also inaccessible. He missed a class and scheduled the final on the first night of my next class and I had to make up the exam in the middle of the office--too distracting, noisy, etc.

Students should not make this a correspondence course. I believe to get a quality education you must attend all classes. For my degree to mean something, I think stricter attendance policies should be instituted.

Entrance/degree standards should be increased to develop reputation of institution. GRE should be required - thesis and higher standards for transfer of credits should be established. Credibility of program is not as high as others.

Close the disparity of teaching quality between local hire professors and imported professors. Fly in more mainland profs., they are definitely superior in discipline and requirements.

### Dropouts

The experiential package does not seem to get the quality or number of credits awarded to military members as it should - try checking into some of our classes I think you'll find more credit should be given to some of our courses, i.e., Squadron Officers School in residence.

Coordination with other schools re: graduate credit simplification and advice on how much info is required for experimental learning credit.

Schedule a one week break during each term to allow students time to catch up on reading, term projects, etc.

A number of persons have questioned me as to CMU's program. Some good, strong P.R. could help. Also a more stable campus situation here in Columbus.

Have courses in areas that will benefit everyone and reduce traveling expense. I felt my choices were extremely limited, and in the end it would have been a very expensive degree.

Be helpful in placements.

I thought it a very good program. My purpose for attending was because it was something I wanted to do for me.



I would prefer to attend classes on the first and last weekends of the month; therefore allowing more time to prepare studies and papers.

Have academic advisors available on military bases.

Experiential learning opportunity bound up in too much formality, red tape and irrelevancies.

See better facilities for off-campus program; "classrooms" used in my program were overcrowded and not well suited for classwork.

On the whole I think the program is quite good in terms of content and instructors. The intensive one month schedule of classes is both desirable and frustrating - there is not time to absorb and reflect on the material or to do really good studying in such a short time. The change of location of the classes at Library of Congress was a total disaster for me - it became completely inconvenient. This type of program is not particularly well regarded by other academic institutions which was a deterrent to me since I have quite a bit of career experience in colleges and will possibly want to enter a PhD program.

No, but I appreciate the fact that someone at the Univ. is concerned enough to find out why the enrollment is dropping.

Admission requirements are so low I doubt CMU could ever be respected. When the instructor on the first day of class says: "I know none of you are here to learn anything, but just to get the Gold Star at the end," i.e., degree, the problem runs deep.

Only if you could improve the reputation of the course without increasing the "out-of-class" workload of the students.

The local Kansas City extension needs book buy-back.

I believe a program should be developed for those students who qualify for neither Veterans benefits nor financial aid, which allows program participation first, and the tuition payment to be forwarded to school where advanced payment is not possible.

Make it easier to apply for the Experimental Learning Opportunity. Courses like Government Bureaucracy should be dropped.

- o Offer more technical business courses (MBA related).
- o Hire the best instructors.
- o Offer a wider selection of business courses.

Basically I am quite happy with this program. It is a convenient program with the working person in mind! I am anxious to begin again 2-9-81.

The program is very good as a whole, my only current problem is monetary aid.

Good program to get a Masters expediently and hold job. Instructors are 'top notch' and I enjoyed participation until moved out of state! Is it available in Boston, Mass area?

- o Take hard look at alternates to term papers to foster learning.
- o Publish lists of the one week courses offered, when, where and cost.

In my case I can take a week off easier than I can attend courses every other weekend. I don't usually know if I can take time to go until after the registration cut off date. This factor alone has prevented me from taking at least one or two courses last year.

Am trying to finish classwork at different universities and transfer these courses back to CMU to finish the Degree Program. (Without much success, however). Administrative support at Rickenbacker campus has been of no help.

I'd like to comment on the best part of CMU - the ability to accrue credits in weekend study, not dragging it out over several months, and to do so at relatively moderate cost, is far too important, beneficial and motivating an ability to overlook or ever change. It's probably the only way myself and many others can ever hope to attend grad school. I think CMU and the opportunity it offers is fantastic and should be more commonly available. I think my only criticisms of the program, or problems with it, are already noted, I hope in the near future to take advantage of the program again.

- o As an accountant, I would have preferred having more graduate accounting courses available.

### Continuing Students

Develop a better system for Experiential Learning Credit. Make course work more challenging. Many classes at graduate level were less involved than undergrad courses. I also feel entire requirements for acceptance into program should be reviewed. Many unqualified individuals seemed to be in my classes. I wish CMU would also offer an off-site MBA program.

Personally, the course program fulfills the need and purpose of an advanced degree very satisfactorily.

Please don't send me any more surveys.

The general quality of instructors was very poor. Lack of preparation, and in some cases, knowledge. Attitude of instructors generally poor - "lets get this over with."

Offer more business courses.

Plan and make adjustments for lower student enrollment in courses offered during summer months to alleviate excessive course cancellations. Instruct local staff to notify students of course cancellations and scheduling changes.

I have found Central Michigan to be fantastic! The program was virtually tailored to meet my professional needs. Margaret, the Troy Center Rep., was excellent, competent and always available to answer questions. My advisor, Dr. Ringquist, provided the support, direction and words of wisdom to see me through this challenge. I cannot thank Central enough for this opportunity that they have given me. I am proud to be a CMU graduate. Thanks!!!

Being involved in Personnel Management it is my basic thought that more relevant courses would be offered; collective bargaining, Labor Law, EEOC, Affirmative Action, etc.

Students need more contact with professors and advisors. This was more of a problem at Troy Center than here at Ft. Mac. Perhaps a yearly review with the advisor would be desirable.

It would help if classes were available in areas other than the northern suburbs (such as Detroit, Southfield, Livonia). Program should allow for a student to continue toward an MBA if he or she elects.

Overall, the instructors were very good and knew their coursework, but in some instances there were some instructors that were very hard and demanded too much of students.

Advertise programs of study (both graduate and undergraduate) in local newspapers and regional newspapers. Advise availability of financial aid and give more information concerning financial aid.

1. Lower the cost of tuition and books for students other than VA or whose employer does not finance the studies.
2. Provide financial assistance, as if a regular campus student.
3. A very good, flexible, knowledgeable and beneficial program.

There seems to be concern among some students as to IPCD being on the Degree certificates, and the degree being less important than just indicating CMU. At my age it is of little concern. I've heard this from some of the younger students. I think your program is great, especially for the working student.

Continuing expansion of program to meet changing aspects of today's management needs.

Exposure to instructors and advisers too limited outside of class time and/or appointment time due to their job interests. Creates a high stress level for students due to concentrated course time.

Overall a good program! What's the possibility of a doctorate program sponsored by this same program?

Love the whole thing. Makes school workable for busy people.

Need more business marketing programs offered on a regular basis.

Experiential Learning doesn't give credit for job experience, but have you write up job experience varying degrees of instructor capabilities in course taught.

Offer additional programs at local extensions. I will shortly be obtaining a master's in personnel management but I am now finding out that a mechanical engineering degree would be more beneficial in my career advancement.

I wish the instructors would send the course outline early enough to give the students, who are full time workers, enough time to prepare for the class. There were usually plenty of pre-course assignments. I also wish Coughar Bookstore had the textbook we need for the class. Their reasoning was "the publisher did not send them the book yet." With the late course outline and late textbook - students do not have much chance. Students usually have to work so much harder (and faster) to get good grades - let's not forget they've got 8-12 hour jobs.

More diversified courses, i.e., there is only one Marketing course.

The program is too watered down. I felt that many of my courses were undergrad level or were allowed to fall to the level of the under-prepared student or to that of the student looking for an easy master's degree. I feel that at some point CMU should screen out those students who are unable or unwilling to perform at the graduate level. This screening is currently done at neither the admissions point (where there is no admissions test) nor during the examination and grading process (where students are allowed to earn satisfactory grades for lackluster performances). I find that your offering of credit for Experiential Learning to be one more example of your dilution of the program. I believe that any experiential learning credits should be in addition to rather than instead of the minimum requirements. I would never recommend the CMU Graduate Program to the serious student, and I personally regret that I ever entered it.

Unable to contact when needed.

The major comment I have is that the Educational Curriculum is poorly regulated, and scheduling is extremely poor for the Denver area.

Explore the possibilities of a Defense Contracts Administration Masters Program. Additionally, implement the VA Advance Funding Procedure. Having to pay "up front" and wait 2-3 months poses a financial hardship on many VA students.

Better control over instructors teaching off campus in regards to knowledge of subject, preparedness, attitude, relationship to students.

In several classes students did not have the necessary prerequisites and thus upheld progress in the class. For the most part, however, this was not true, but where encountered it was aggravating.

Need more advising availability for students.

Some courses were cancelled a week in advance which created problems for me. I think they need more health care.

You need to improve the quality of the teaching staff. Exactly half of the instructors I had were not qualified to teach on the graduate level.

In the past three years that I have been involved with CMU, I have been impressed to find that you are continually upgrading the quality of the program. My only comment would be to continue to evaluate and improve the program.

In some cases the books required in the class are of little value in learning the material put forward by the instructor. Possibly a more careful selection of books!

Experiential learning is a joke!! I applied - was turned down without a detailed explanation. I appealed and didn't even get a reply. Waste of money, time and effort. I believe that an active businessman of my caliber, with over three years' experience after BA degree, plus 28 years in the military deserved at least six credits. I even wrote to the President of the University, but he didn't have the decency to reply.

The availability of Experiential credits was never explained to me. When I finally realized it was possible to receive, it was too late according to the time limits set. This should be explained during initial enrollment.

I've had two excellent instructors; one in particular went on to teach at Harvard, but I also had some poor instructors who expected the world when they were poorly prepared for the class themselves.

Stress importance of advising and course levels before student enrolls.

I am very disappointed, as well as many other students, because the University does not think enough of this program to bestow graduation honors based on scholastic achievement.

There are too many general management courses required and they all cover basically the same material. Many courses, such as Quantitative Decision Making, need to be expanded into two semesters. The

overall course should be expanded into 40 hours instead of 30 because you just cannot get everything you need in 10 courses even in a MA degree plan.

Improved financial assistance.

I feel that the office personnel at the Troy center should be trained and more helpful. The costs we pay in tuition should afford us capable office administrators.

Most of the students that I have made contact with during the last four years don't like the new quantitative courses that now are required. I believe most of the major programs push it too much.

I'm completely satisfied with the program and plan to graduate before the end of this year. Two more courses!

Screen instructors with more care.

I enjoyed attending classes with my co-workers from Ford. I learned about the company from people who had practical experience. Instructors recognized that experience and generally utilized it effectively. I would have completed my degree except I accepted a position with Mobil and relocated. I intend to complete my last 2 classes at a local college when I'm a little more settled.

In most classes a passing grade "B" was given to any student that came to class. I personally know of students with 70% test scores receiving "B". I for one would not rate this program very high as the student need not apply himself to pass.

The program is too easy. It has a poor reputation among my contacts. At no point does the program do adequate screening (no entrance exam, allowing students to fill curriculum with floater courses, generally light work loads, classes scheduled for long hours which are not adhered to, easy grading). I am completing my program in one week and unfortunately I feel as though I must defend or even be ashamed of the Central IPCD Program. I am glad that I have completed my degree, but I am sorry I chose to earn it in the IPCD program. Please upgrade the program-for Central Michigan's name!

I work 60-70 hours a week as an Administrative Manager - one week (intensive) courses have been ideal for me.

Too many surveys such as this.

The mailout information regarding the program has been much better the past 12-18 mo. than previously (Newsletter). Keep up the contact.

Basically a good program. Need to let it be known to students who have not finished their program that they still can; such as myself. I was laid off from Ford and still do not know if I can finish.

My only comment/criticism is that I found during the period of each class too much material covered for the scheduled 8/10 weeks. Quality of learning suffered trying to cover quantity of information; researched, written and discussed. Generally, the program does meet my particular need.

Paperwork confusion frustrating; have been trying to affect a name change for over one year; advising info not enough (i.e., what to have available when in conference); course registration seems to snafu easily.

Lower the price - you have little overhead costs!!

During the three years I attended CMU the quality of the instruction increased. The university should continue this trend to enhance the reputation of this program.

Offer M.B.A. program.

The administrative help was uniformed and not totally cooperative. To get a refund for a class dropped it took an inordinate amount of time. The University even mistakenly paid me twice.

Advisor to see students more often.

Quicker grade response - still waiting final grade and diploma from Mt. Pleasant 6/9/81.

Need to coordinate education majors better. They are in the minority and don't get necessary courses due to core group concept.

Only in the context of needing to know the accreditation of CMU extension in respect to finding employment in the business section.

The program is fantastic in the respect it is geared for the working individual. A professional who desires to further himself/herself educationally has a difficult time using a university's standard channel. Please continue this program with it's current emphasis. Would it be possible to develop a doctorate program along the same lines?

Explore the possibilities of a Defense Contracts Administration Masters Program. Additionally, implement the VA advance funding procedure. Having to pay "up front" and wait 2-3 months poses a financial hardship on many VA students.

Try to "beef up" program - courses are too easy. Get advisor who works - never heard from mine - even after five letters.

I still intend to enroll for EL but the package was so overwhelming and no assistance and guidance has been available. I'm hoping earning a few EL credits will help me to finish by December. A sample completed package would be a help.

While both of my advisors were "pleasant" - I could have (and in fact did) map out my entire program. They simply approved it. I felt these required appointments were a waste of time. I felt all course work was easy (like undergrad level). I had anticipated more difficult coursework; I think it should be more difficult for graduate credit.

I work in Springfield. To use CMU facilities, to pay tuition, etc., I always had to take off work, drive to Area B, then return to Springfield. This was a tremendous waste of my time and car expense. Why can't tuition be mailed in with full payment? Why can't the CMU office library be open until 8:00 PM - it seems these areas are not really there to serve students, even though theoretically they are. Thanks and good luck!

Keep it relevant to what the real world is like.

Cut down/drop the "term paper" and "team presentation" concepts. Force the teachers to teach and cut down on the "case" efforts. These are not always good. Also require attendance at the classes. At least three weekends.

I think its a great program, and I thank CMU for making available the opportunity here in Columbus. It provides a needed service for working adults.

Flint coordinator should be more patient and devote more time to student's problems.

Follow-up on students (like me) who apparently stopped pursuing a degree; offer financial aid; extend experiential learning application period. Good luck!

- 1) CMU should invest some \$ in auditing of classes by academically qualified personnel and stop practice of asking students to rate instructors. It is an unseemly and inappropriate practice.
- 2) Screaming liberal bureaucrats moonlighting as instructors are hard on grads. Diversity of views results in diversity of grades rather than discussion, illumination and education. I resent having to pay for indoctrination and CMU should resent it as well.

Need more advising availability for students.

Tuition assistance availability.



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