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### **ABSTRACT**

A report of the status of those Montgomery Community College students who received their Associate Arts degree in 1970 is presented. This report is a facet of a 10-year follow-up program of Montgomery College graduates. In 1970 the majority of Montgomery Community College graduates who continued their education transferred to the University of Maryland. However, a large number of students transferred to schools in 22 states or U. S. territories, and two countries. Montgomery County Public Schools were the source of over two-thirds of all the graduates. The remainder were either non-residents or immigrants. The typical career-oriented graduate was 21 years old, earned a cumulative grade point average of 2.68, and was employed within four months after graduation. His counterpart was transfer-oriented, 22 years old when he graduated, earned a grade point average of 2.60, and enrolled full-time in a four-year institution the fall after graduating from Montgomery. It appears that the College does not provide effective placement services for graduates; however, students are able to secure jobs through other means and job satisfaction was indicated by a majority employed. The mission of the College is often described in terms of "transfer" and "career." From the results of this study it appears that those graduates who plan to transfer are able to enroll in the college or university of their choice with a minimum of credit loss. At the same time career-oriented students either have a job at the time they receive their Associate Arts degree or obtain employment soon after graduation. The study suggests that there are perhaps some services which could be provided by the College in the area of graduate placement. (Author/CK)



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### FOREWORD

The most important person in the community college is the student. What happens to the young man or woman while in college, and even after graduation, must be of primary concern to all who are involved in the educational process. The success of the institution can best be measured by the success of the student.

To ascertain the effectiveness of the college program, there must be "follow-up" - from the day the student enters the institution until, and even after, he gains employment or transfers to another institution. Simply defined, follow-up is a process by which an educational institution seeks to determine how effectively it is meeting the needs of those it serves. Introspective by nature, it determines how well the stated objectives of the college are being achieved.

Thomas J. O'Connor

American Association of Junior Colleges



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### INTRODUCTION

Follow-up studies are a vital part of an institution's attempt to understand itself in terms of output. To that end this paper is a report of the status of those Montgomery Community College students who received their Associate Arts degree in 1970 and is one facet of an ongoing system of following all students who enter the College.

The initial concept of a follow-up study became a reality at Montgomery College twelve years ago when the Office of Student Personnel planned a ten-year study of the entering class in the fall of 1960 with the sometimes assistance of interns and outside researchers.

The graduates of that original population who enrolled in transfer programs were followed to the four-year institutions by Higgins who found that in the first semester at the University of Maryland MJC graduates earned grade point averages which had a correlation of .54 with their GPA's at Montgomery. At other schools MJC graduates had a correlation of .81 with their junior college GPA's. We found that Montgomery graduates dropped .49 grade points the first semester and .61 the second semester at the University of Maryland. The students transferring to other schools did not experience this drop in grades. Higgins recommended greater articulation between the College and the University.

In 1967, White<sup>2</sup> surveyed the students who graduated in career programs between 1959-1963. Most of them were living in the metropolitan area. Almost half had gone on for further



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education, mostly to the University of Maryland, where they majored in business administration, electronic technology and industrial technology. Half of those who transferred earned an advanced degree. At the time of the survey, their annual salaries ranged from \$3,600 to \$16,000 with a median of \$7,500. Dental assisting graduates were earning the least, while electronic technology graduates were receiving the highest salaries.

Klimek<sup>3</sup> and his staff looked at the 1960 freshmen who had dropped out by 1963. The researchers found that one-third of the students they studied had been suspended, while the "... greatest proportion merely failed to re-enroll. The largest reported reasons for termination were lack of interest or discontent and financial." They were either employed or in military service. Of the forty-two job categories listed, most of the dropouts were in clerical-type occupations with some in sales. A significant number of the group had been suspended from the College more than once.

The student who transferred to a four-year institution after only one year at Montgomery was the focus of a study in 1962 by Ausejo. 4 It was found that the group dropped .48 grade points their first semester. A correlation of .41 was obtained between their GPA at Montgomery and their GPA at the transfer school.

The students who remained at the College for the second year, but transferred without earning an Associate Arts degree were studied by Clark. She found that grades dropped at the transfer institution. Students with a low "C" at Montgomery tended to fail after transferring.

These two studies were compared with the findings of  ${\rm Higgins}^6$  and the researchers concluded that students who complete the degree requirements of the College stand a better chance when transferring.

In 1963 the students who had been suspended were compared by Jasper with those who had withdrawn voluntarily. She found that students who drop out on their own accord tend to have higher standardized test scores and high school rank than those who leave college because they are suspended. Age and curriculum were not factors differentiating the two groups. Over half of the voluntary dropouts stated personal reasons for withdrawing. This researcher, like Klimek, raised the question of what the College could do to retain those students having the academic ability, but who leave school due to dissatisfaction and discontent. The study also highlighted the number of students who fail in their first attempt at college but then re-enroll demonstrating a real desire to obtain a formal education.

In addition to these internal studies, Reese worked through the Maryland State Department of Education to follow up the graduates of all the two-year colleges in the state between 1959 and 1963. He found that seventeen percent of the Montgomery career curricula graduates went on to college, while eighty-one percent of the transfer curricula graduates actually transferred. Over a third of the students transferring changed their curricula upon transferring. State-wide the transferring students lost an average of 2.62 credits. Fifty-seven percent of the College's

transfer curricula graduates who transferred to four-year institutions actually were awarded baccalaureate degrees. On a state-wide basis the students' grade point average dropped .27 points at the end of their first semester at the higher institutions. However, the students tended to graduate with about the same grade point average as they had at the junior college.

Reese Prepeated his study with the state's 1964 and 1965 junior college graduates. He found that ninety-three percent of Montgomery's transfer-oriented graduates transferred to a four-year institution while state-wide only eighty-two percent transferred. At the same time one-third of the College's career-oriented graduates transferred. In comparison the findings of the current study reveal that sixty-one percent of the transfer-oriented students and twenty-three percent of the career-oriented graduates transferred in 1970. Part of this difference may be due to a change in the definition of which curricula are in fact primarily transfer and which are career. The 1964-65 study also revealed that on the average a student transferring with an Associate Arts degree could expect to have his grade point average drop 0.39 quality points during his first semester at the four-year institution.

White 10 surveyed eighty-four of the eighty-six 1964 career graduates and found that forty-eight percent had transferred. This was substantially higher than what Reese had found. At the same time forty-nine percent were employed. The rest were either in the armed forces or housewives. The study supported the idea that the General



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Education curriculum was in fact a transfer curriculum.

Flax 11 compared one hundred Montgomery and Prince George's graduates who transferred to the University of Maryland with a randomly selected group of one hundred seniors who had entered the University as freshmen. He found that the transfer students earned lower grades their first semester at the University but as seniors earned higher grades than did the native students. However, more time was required by the transferring students to earn a baccalaureate. The current study supports this latter finding inasmuch as the average Montgomery graduate earns his Associate Arts in two and one half years putting him one semester behind the native university student at the time of transfer.

White 12 reported that of the students who graduated from Montgomery in 1966 eighty-one percent transferred. A year later he found that only seventy percent of the 1967 graduating class transferred. 13 The current study found that sixty-nine percent of the 1970 graduates continued their education which is almost identical with White's findings for 1967.

Other studies of the follow-up nature include one conducted by McCashin<sup>14</sup> of students who were suspended and subsequently reenrolled at the College. He found that forty-two percent of these students were successful once they were readmitted to the College. Osborne<sup>15</sup> surveyed the students who were enrolled in the fall of 1967 but who did not return for the spring semester of 1968. He found that half of the former students were working full-time and that one-fifth were attending college full-time. The reasons they



did not continue at Montgomery included: financial (13.1%), academic (14.8%), transfer (18.3%), military service (7.3%), marriage (5.0%), change in career goals (14.3%) and other (27.2%). In 1966 White 16 found that of a sample of sophomores some eighty-two percent planned to transfer to a four-year institution.

In 1971 White 17 followed up the full-time freshmen of 1969 and analyzed the association of certain individual student factors and characteristics of the campus environment with patterns of persistence, transfer, and voluntary non-persistence. He found that sixty-three percent of the full-time students continued into the fall of 1970, eight percent transferred, fifteen percent voluntarily with-drew, and fourteen percent were academically suspended during their first year at Montgomery.

These numerous studies suggest a pattern of behavior on the part of the students at Montgomery. For the most part these findings agree with similar studies conducted by community college researchers across the country suggesting that the Montgomery student is not unlike his counterpart at other colleges. Because the research design, sample, and definition of terms varied with most of the studies discussed here, very little attempt has been made to compare specific findings with the results of the current study. Comparative data collected over a period of time will be one of the major goals of future follow—up studies.

The Placement Office and the Office of Institutional Research designed the present follow-up of the 1970 graduates to discover the

status of students four months after graduation. The focus was on where the graduates were studying, and if working, did they secure their employment with the assistance of the Placement Office.

A summary of the findings is presented on Figure 1.

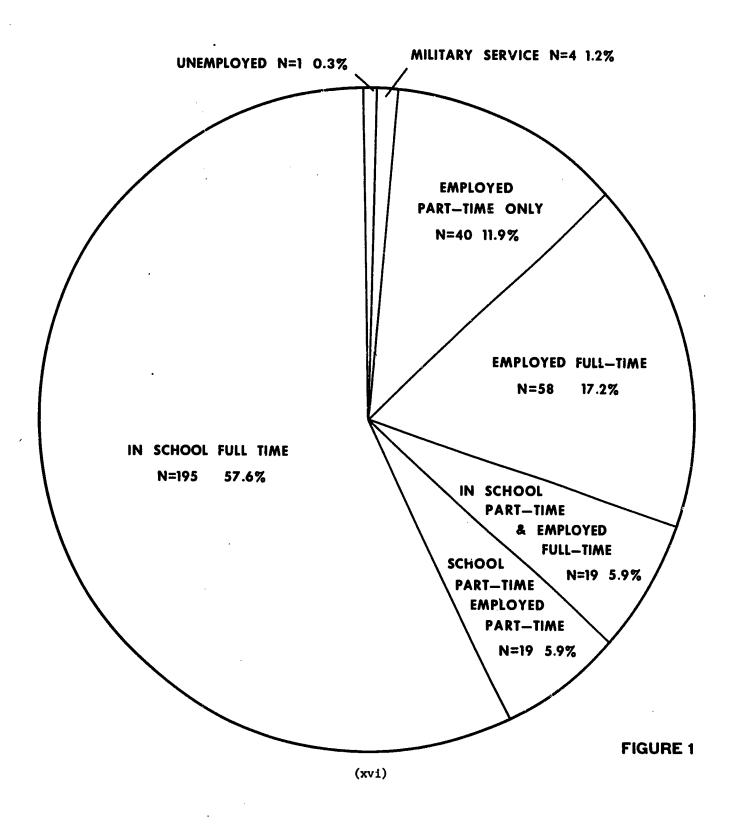
Attempts to secure academic data on transfer students from the University of Maryland have been entirely unsuccessful and we have, therefore, assumed that until the five-year Patterns of Academic Success Study (PASS) being sponsored by the Maryland Council for Higher Education is completed no valid information on the success of Montgomery students at the University will be available.

This graduate follow-up is the first part of an ongoing study of all students who enter Montgomery. The second part is a study of students who leave the College prior to graduation. The data on this group are presently being analyzed. A survey of the employers of Montgomery graduates and a long range (two years) follow-up are also planned.

Robert Gell Director of Institutional Research



# SUMMARY OF STATUS OF 1970 GRADUATING CLASS FOUR MONTHS FOLLOWING GRADUATION





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- <sup>3</sup>Richard Klimek, et al, "The Dropouts: Three Years Later," 1963.
- <sup>4</sup>Placido V. Ausejo, Jr., "A Follow-Up Study of Students Who Transfer After One Year at Montgomery Junior College," 1962.
- <sup>5</sup>Beverly B. Clark, "A Study of Students Transferring Without Earning an Associate of Arts Degree," 1963.
  - 6Higgins, op. cit.
- Janet H. Jasper, "A Study of Student Withdrawals at Montgomery Junior College," 1963.
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- Roger E. Flax, "The Academic Success of Junior College Transfer Students to a State University," 1966.
- 12 James H. White, "A Follow-Up of the Graduates of 1966 of Montgomery Junior College," 1967.
- 13 James H. White, "A Follow-Up Study of the Graduates of 1967," 1968.
- 14 Andrew W. McCashin, "A Descriptive Analysis of Suspended Students Who Re-enrolled In September 1963," 1965.

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- $^{15}\mathrm{D}.$  F. Osborne, "Follow-Up of Fall 1967 Non-Returning MJC Regular Students," 1968.
  - 16 James H. White, "Students' Plans After Graduation," 1966.
- 17 James H. White, <u>Individual and Environmental Factors Associated with Freshman Attrition at a Multi-Campus Community College</u>, (Doctoral Dissertation, George Washington University, Washington, D. C., 1971).

Table II shows a summary of the major categories of destinations for the transfer student. The majority of transfer students remain in the greater metropolitan area, indicating that while Montgomery College fulfills the definition of a local resource its effects are not limited to Montgomery County.

There are some differences in the transfer patterns of graduates from the two campuses. A higher proportion than expected of the University of Maryland transfers come from the Takoma Park campus and a higher proportion than expected of the transfers to the schools in the District of Columbia come from Takoma Park. On the other hand, a higher-than-expected proportion of the transfers to Towson State College and schools outside the greater metropolitan area come from the Rockville campus. 1

Except for these noted discrepancies, the numbers of graduates from each campus attending the various schools are directly proportionate to the numbers graduating from the respective campuses. In fact the overall correlation of school transferred to by campus transferred from is only 0.565. This indicates that 32 percent of the time there is an association between school transferred to and campus of Montgomery College attended.



The Chi square test of independence indicates that the difference in the proportion of graduates from each campus attending the various schools would be found by chance less than 5 times in a thousand.

TABLE 11

4

MAJOR CATEGORIES OF COLLEGES AND UNIVERSITIES ATTENDED

	Number of Graduates Transferring	Percentage of Graduates who Transferred	Percentage of Total Graduates	Number who Transferred from Rockville	Percentage of Rockville Graduates who Transferred	Number who Transferred from Takoma Park	Percentage of Takoma Park Graduates who Transferred
University of Maryland*	135	28	40	85	<b>₹</b> 5	90	
Towson State College	13	v	ব	12	œ	1	-
Other Maryland Colleges	6	4	E	¢	4	ĸ	4
District of Columbia Schools	28	ដ	<b>60</b>	15	10	13	17
Montgomery College Post Graduates	m	ı	-	6	1	1	1
Trade or Industrial Schools	æ	7	æ	ø	4	ĸ	4
U. S. Schools Outside of Maryland and D. C.	. 33	14	70	27	17	9	<b>6</b> 0
Outside of United States	ব		1	æ	71	-	1
Total	234	100	70	156	100	78	100

\*A listing of curriculums which students transferred into at the University of Maryland is included in the Appendix.

### Source High Schools

Over two thirds of the graduates came to the College from secondary schools in Montgomery County. It is obvious from Table III that Montgomery Community College is a gateway to the University of Maryland through which many County high school graduates pass. The students transferring to other colleges and universities tend to come from relatively few high schools in the County.

Table IV gives the source high schools for the career- and transfer-oriented graduates. Obviously some high schools are richer sources of students and thus of graduates than are others. There is little difference between the various County high schools in terms of the proportion of career and transfer graduates.

### Change of Major

It is of considerable interest to note the number of students who change their major once they transfer and begin working on their baccalaureate degree. Over 60 percent of the transferring students changed their curriculum designation. It is understood that students in the general education and liberal arts curriculums would choose a discipline-oriented major at a university since these general curriculums are not always available in four-year institutions. However, it is possible that students who earned their Associate Arts degree in data processing may have been influenced to change to another curriculum upon transferring by the depressed employment situation in the local data processing industry. (See Table V)

### Lost Credits

Graduates were asked to report any credits lost upon transfer.

Table VI indicates how many graduates reported that they lost credit



TABLE 111
EDUCATIONAL PATHWAYS THROUGH MONTGOMERY COLLEGE

TATO	)T	135	13	6	28	æ	6	37	234
		-						•	.2
igh School Not Reported	н	<b>~</b> 7						<b>~1</b>	ç
ereilicate	10	-		-					C.
at of State High Schools	10	11			œ	~		9	32
istrict of Columbia Lgh Schools		∞	1		ν.			<b>m</b> ,	18
ther Maryland County igh Schools		S			7				æ
rince Georges County igh Schools	H	٣		-	-		-		9
lesnuo boo	20	S							25
oly Cross	н	-						2	3
ynthia Warner	c)	-							
ullis Prep	8	-							1
nwoscns	ea						-		
narles E. Woodward	ıs	-							1
այն Միննացո	M	٣	-				-	2	1
neaton	in	17	٣	-	7		2	5	27
brtngbrook	ls	01	cı	-	-			2	16
nerwood	ıs	-		-				3	5
obert I. Peary	Br	9		-	-		-	3	12
роскираль	rs	12	-	7	4	-	-	1	21
chard Montgomery	В	13	-	2		-		3	20
alter Johnson	M.	4	7		7			٦.	∞
atthersburg	c.	-						61	e.
lbert Einstein	v	4			-		-	2	∞
Inston Churchill	M	7						1	m
ouc8ower; Blair	W	12			М			1	91
sthesda-C evy Chase	•8	٣	2					1	9
HIGH SCHOOLS	RECEIVING INSTITUTION	University of Maryland	Towson State College	Other Colleges and Universities in Md.	D. C. Colleges and Universities	Montgomery College, Post Grad	Trade or Industrial Schools	Colleges & Universities Outside Md. & D. C.	Total Graduates Continuing Their Formal Education
эх нэтн	RECEIVING IN	University o	Towson State	Other Colleg Universities	D. C. Colleg Universities	Montgomery C Post Grad	Trade or lnd Schools	Colleges & U Outside Md.	Total Gradua

TABLE IV SOURCES OF GRADUATES BY CAREER AND TRANSFER ORIENTATION

		Percent of		Percent of		Percent of	H
County	Career	Career	Transfer	Transfer	Total	Total	
	Graduates	Graduates	Graduates	Graduates	Graduates	Graduates	ı
Bethesda-Chevy Chase	0	0.0	11	4.6	11	3.3	1
Montgomery Blair	7	4.1	54	10.0	28	8.3	
Winston Churchill	0	0.0	7	1.7	7	1.2	
Damascus	-	1.0	1	9.0	2	9.0	
Albert Einstein	9	6.2	9	2.5	12	3.6	
Gaithersburg	1	1.0	7	1.7	\$	1.5	
Walter Johnson	7	4.1	6	3.8	13	3.9	
Richard Montgomery	9	6.2	23	9.6	29	8.6	
Northwood	9	6.2	22	9.2	28	8.3	
Robert E. Peary	2	5.2	11	9.4	16	4.7	
Sherwood	2	2.1	7	1.7	9	1.8	
Springbrook	3	3.0	15	6.3	18	5.3	
Wheaton	11	11.3	23	9.6	34	10.1	
Walt Whitman	3	3.0	5	2.1	, <del>c</del>	2.4	
Charles W. Woodward	2	2.1	0	0.0	7	9.0	
Bullis Preparatory	S	0.0	1	7.0	1	0.3	
Harker Preparatory	1	1.0	0	0.0	1	0.3	
Holton Arms	2	2.1	0	0.0	2	9.0	
Cynthia Warner	0	0.0	1	7.0	.,	0.3	
Holy Cross	2	2.1	٣	1.0	S	1.5	
Holy Names	7	4.1	7	7.0	2	1.5	
Good Counsel	0	0.0	5	2.1	2	1.5	
Out of County High Schools Prince George's County	\$	5.2	4	1.7	6	2.7	
Other Maryland High Schools	2	2.1	۷.	2.9	6	2.7	
D. C. High Schools	2	5.2	19	7.9	24	7.1	
Other States	18	18.6	30	12.5	80 17	14.0	
General Equivalency	0	0.0	61	₩.	61	9.0	
Not Reported	. 7	4.1	S	2.1	6	2.7	7
Totals	97	100.0	240	100.0	337	100.0	
							ı

TABLE V

GRADUATES CHANGING CURRICULUM UPON TRANSFER
TO ANOTHER INSTITUTION

		Total No.	No. Who Change	d
	o. Who	Who	Curriculums	
Curriculum at MC Gr	aduated	Transferred	Upon Transfer	
Art-Cultural	11	6	2	33
Business Administration	43	27	11	41
Data Processing	29	15	13	87
Dental Assisting	10	1	1	100
Dental Lab. Technology	None	None	0	-
Education, Elementary	13 .	11	0	-
Education, Secondary	19	10	7	70
Education, Other	10	6	2	33
Electronic Technology	16	6	1	17
Engineering	22	6	0	_
Engineering Aide	1	None	0	_
Fire Science	1	1	1	100
General Business	10	2	2	100
General Education	166	95	81	85
Liberal Arts	38	23	13	56
Medical Lab. Technician	None	None	0	_
Music-Cultural	1	1	1	100
Medical Technology	2	1	· 1	100
Nursing	18	None	0	_
Criminal Justice	4	1	ĺ	100
Pre-Dentistry	1		ī	100
Pre-Law	1	· 1	ī	100
Pre-Medicine	2	2	2	100
Pre-Optometry	None	None	0	_
Pre-Pharmacy	None	None	Ö	_
Radiation Science	5	2	2	100
Radiologic (X-Ray) Technology	_	None	0	_
Secretarial	25	2	ĭ	50
Printing Technology	12	5	0	_
Advertising Art	19	None	Ö	_
Information Not Given		9	. 0	-
	479	234	144	61.5



and the number of credits they lost. The list is not comprehensive as some graduates reported being unaware of whether or not they had lost credit or if they had, how many credits were lost. While most graduates reported the number of credits lost, a few also reported the course in which the credit was lost.

The number of credits lost in proportion to the number of students transferring was tested for significance (excluding trade and technical schools). It was found that the proportion of credits lost per student affected was higher at the University of Maryland than would be expected based on the total sample and that the proportion of credits lost per student affected was lower at schools within the District of Columbia than would be expected based on the total sample. From the experiences of the Class of '70, it appears that there are substantial differences in the acceptability of Montgomery College credits at various receiving institutions. (See

### Residence

The graduates of Montgomery College transfer to a wide range of schools. Similarly the College draws from a number of sources. Of the graduates of the Class of '70, 14 percent had graduated from high schools outside of Maryland or the District of Columbia. This was larger than the number of graduates who had graduated from the high schools in any one Maryland county. The source high schools of the Class of '70 were located as indicated in Table VII.



<sup>&</sup>lt;sup>1</sup>Chi-square test; obtained  $X^2 = 9.70$  exceeds expected  $X^2$  a probability occurrence of two and a half times per hundred trials.

# TABLE VI CREDITS LOST AT TRANSFER

University of Maryland	No. of Students Affected74 No. of Credits*484 cre	
Other Schools in Maryland	No. of Students Affected19 No. of Credits*109 cre hou	
District of Columbia	No. of Students Affected11 No. of Credits*36 cre hou	
Schools Outside of Md., D.C. Area	No. of Students Affected38 No. of Credits*179 cre hou	
Trade and Technical Schools including Military Academies	No. of Students Affected2 No. of Credits*"all"	
Total No. of Students Losing Credi	• • • • • • • • • • • • • • • •	144
No. of Credits Lost**		808 (plu
* Number of credits lost does not	ccurately reflect the situation b	ecause

<sup>\*</sup> Number of credits lost does not accurately reflect the situation because some of those students who reported a loss of credits were unable to state the exact number of credits or what courses were not accepted.

# TABLE VII SOURCE OF GRADUATES

Total	337	100.0%
High School Not Reported	9	2.7%
General Educational Diploma	2	0.6%
Other States	48	14.2%
District of Columbia	24	7.1%
Other Maryland Counties	9	2.7%
Prince George's County	9	2.7%
Montgomery County	236	70.0%



<sup>\*\*</sup>Based on the per hour County resident tuition charge--this represents a total loss of more than \$12,120 to the students.

It was not possible to determine from the available data when migration into Montgomery County occurred with respect to those who graduated from high schools outside the County. Older students who work in the area and come back to school to complete interrupted educational plans are an important part of the graduating class. These students represent a reservoir of educational demand for which little information is available.

Each fall, 5 percent of the first-time matriculated students claim residence outside the County. Continuing students who claim residence outside the County are approximately 4 percent of all returning matriculated students each fall. Ninety-one graduates (28%) had graduated from high schools outside Montgomery County. Assuming 5 percent of the Class of '70 resided outside the County then 23 percent must have immigrated after their high school graduation. Tangentially it can be seen from Table X that 20 percent of the graduates were over the age of 25 years at graduation.

If the normal proportion of out-of-County residents is 5 percent, then the observed proportion of 28 percent out-of-County high school graduates is highly unlikely to be due to causes other than migration into Montgomery County. A random fluctuation of non-County resident enrollment of that magnitude would have a likelihood of occurrence of less than one in a thousand.

This indicates that a substantial part of Montgomery College's service went to County residents who were not graduates of the County School System.



### The Typical Graduate

The graduates are compared in Table VIII with respect to a number of characteristics of these students' tenure at Montgomery College. There is a remarkable consistency with respect to graduates from the County high schools. Utilizing the most frequent responses from the several categories it is possible to construct a hypothetical "typical graduate."

The "typical career program graduate" is 21 years old at graduation, earned a grade point average of 2.68, and was employed within 4 months after graduation. This hypothetical "typical career graduate" graduated from Wheaton High School or from a high school out of state. He studied at the College for 5 semesters, graduated in the same curriculum in which he started and was never on academic probation nor was he ever suspended.

The "typical transfer program graduate" was 22 years old at graduation, earned a grade point average of 2.60 and was enrolled in another school full-time within 4 months after graduation. This "typical transfer graduate" graduated from Montgomery-Blair or an out-of-state high school, took 5 semesters to graduate, changed his curriculum once before graduation and was never on academic probation or suspended.

Table IX summarizes the distribution of academic characteristics of the career-oriented and transfer-oriented graduates. The central parameter from each of these distributions was used to generate the hypothetical typical career and transfer graduates.



TABLE VIII CHARACTERISTICS OF GRADUATES

1

			Average	Range			CON	CONTINUING EDUCATION	ATION
Source High School	Number of Graduates Contributed	Percent Career Oriented	of College G.P.A. at Graduation	of College G.P.A. at Graduation	Median Age at Graduation	Range of Age at Graduation	Not in School	In School F.T.	In School P.T.
Bethesda-Chevy Chase	п	   	2.43	2.0-4.0	23	20-32	5	7	2
Montgomery Blair	28	14	2.53	2.0-3.5	22	20-29	12	13	3
Winston Churchill	4	1	2.53	2.1-3.1	20	20-22	1	m	0
Albert Einstein	12	20	2,39	2.0-3.1	21	20-24	4	7	1
Gaithersburg	\$	20	2.72	2.1-3.6	21	20-23	2	m	0
Walter Johnson	13	31	2.51	2.0-3.7	21	19-25	2	80	0
Richard Montgomery	29	21	2.60	2.0-3.6	21	19-27	10	18	1
Northwood	28	21	2.62	2.0-3.6	21	19-27	7	19	2
Robert E. Peary	16	31	2.76	2.0-3.8	21	20-23	4		7
Sherwood	9	33	2.58	2.2-3.3	21	20-28	-	m	2
Springbrook	18	17	2.55	2.0-3.4	21	19–24	E.	13	2
Wheaton	34	32	2.66	2.0-3.8	2.1	20-29	7	23	7
Walt Whitman	80	37	2.45	2.0-3.1	21	20-25	1	9	. •
Charles H. Woodward	2	100	2.75	2.5-3.0	20		1	1	c
Damascus	2	20	2.85	2.8-2.9	1	19-20	1	1	0
Bullis Prep.	7	ł	2.80		21	:	0	1	0
Herker Prep.	7	1	2.00	!	22.		7	0	0
Holton Arms	2	1	3.50	3.2-3.8	;	28-42	2	0	0
Cynthia Warner	7	1	3.30	!	22		0	-	0
Holy Cross	2	1	3.04	2.4-3.5	20	!	2	7	7
Holy Names	s	1	2.43	2.0-2.8	20	20-21	4	-	0
Good Counsel	5	ł	2.74	2.5-2.9	23	20-24	0	5	0
Prince Georges Co.	6	56	2.69	2.0-3.7	23	21-31		2	
Other Maryland Counties	6	22	2.68	2.0-2.9	26	20-28	3	9	0
District of Columbia	24	21	2.69	2.1-3.6	23	20-50	٠	14	5
Out of State High Schools	87	37	2.65	2.0-3.6	26	20-50	16	22	10
G.E.D. Certificate	2	1	2.75	2.7-2.8	;	26-31	0	2	0
High School Not Reported	6	33	2.70	2.0-3.8	26	20-38	3	7	2
Total	337						:03	961	38

13

27

TABLE 1X

ACADENIC CHARACTERISTICS OF CAREER AND TRANSFER ORIENTED STUDENTS

	Age at Graduation	Number cf for		Semesters Needed Graduation	Number of Curriculums Attempted in Course of Enrollment	r of Curri ted in Cou Enrollment	culums rse of	Number (	of Eni	Number of Probations in Course of Enrollment	Number of Suspensions in Course of Enrollment	umber of Suspensions Course of Enrollment	nsions i oliment
	Median Category: 21 years	8 6 7	433	2% 3% 42%	21 60	69 22 5	71% 23% 5%	0 - 7	78 6 8	80% 77 82	0 1 2 2	95	987 27
CAREER ORIENTED STUDENTS	Range: 19-42 years	N 9 N 80 6	118 23 5 0 5	193 247 52 52	4 no info.:	1	12	E 4	\$ 0	%	m <b>4</b>	0 0	
		Median Category:	5 Sem	Semestr:s	Median Category: 1 Curriculum	1 Curr	iculum	Median Category	7: 0 Pr	Median Category: O Probations	Median Category: O Suspensions	lsnS O :	pension
•	Median Category: 22 years	N m <	7 7 8	22 22 22 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	- 67 6	116 100	48% 42% 09%	0 1	180	75% 10%	0	224 14	93z 6z 11
TRANSFER ORIENTED STUDENTS	Range: 19-50 years	3 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10	52 49 19 6	222 202 87 277 277	o info.:	0	17,	4 M 4	0 2 2 2	: K 6	1 C 4	100	4
		Median Category:	5 Sem	5 Semesters	Median Category: 2 Curriculums	2 Curr	iculums	Median Category	.: 0 Pr	Median Category: () Probations	Median Gategory: O Suspensions	sns O :	pension

The hypothetical typical student, useful though he may be, does not give an indication of the wide range of ages spanned by the Montgomery College graduate. Table X gives the distribution of ages of the students at graduation. In Montgomery County 37 percent of that portion of the population old enough to attend college is in the 45 to 65 age group. This age bracket represents 1 percent of the Montgomery Community College graduates. This is one area where some expansion could be anticipated as the College grows to more completely mirror the community. The proportional representation of the mature citizens enrolled at the College is larger when the "special student" category is considered. These persons who are able to complete their educational plans as "special students" are naturally not reflected in the graduate statistics.

### Grade Distributions

Figure 2 shows in histogram the grade distributions of the career-and transfer-oriented graduates. Statistically the two distributions are identical. There is no difference between grades earned by career-oriented and transfer-oriented graduates which cannot be explained by chance variations.

### Time Spent at Montgomery College

Table XI is a cumulative distribution of the time spent at Montgomery College prior to graduation. The majority of graduates (58%) took longer than two years to complete their degree requirements. No difference was found between career—and transfer—oriented



TABLE X

AGES OF GRADUATES

ears C	areer	Transfer	Total Number	Percent*	Cumulative Number	Cumulativ Percent
19	2	3	5	1	5	1
20	28	58	86	25	91	27
21	18	54	72	21	163	48
22	14	32	46	14	209	62
23	9	18	27	8	236	70
24	5	14	19	6	255	76
25	3	11	14	4	269	80
26	1	11	12	4	281	<b>63</b>
27	1	9	10	3	291	86
28	4	7	11	3	302	90
29	2	4	6	2	308	91
30	1	3	4	1	312	93
31	3	3	6	2	318	94
32	1	1	2	1	320	95
35	1	2	3	1	323	96
36	1	0	1	-	324	96
37	0	1	1	-	325	96
38	0	2	2	1	327	97
39	0	1	1	-	328	97
42	2	0	2	1	330	98
43	0	1	1	-	331	98
44	0	1	1	-	332	99
48	0	1	1	-	333	99
50	0	2	2	1	335	99
Age not reporte		1	2	1	337	100
Totals	97	240	337	100		

<sup>\*</sup> Percentages rounded to nearest integer, values less than one not shown.



FIGURE 2

# CUMULATIVE GRADE POINT AVERAGE

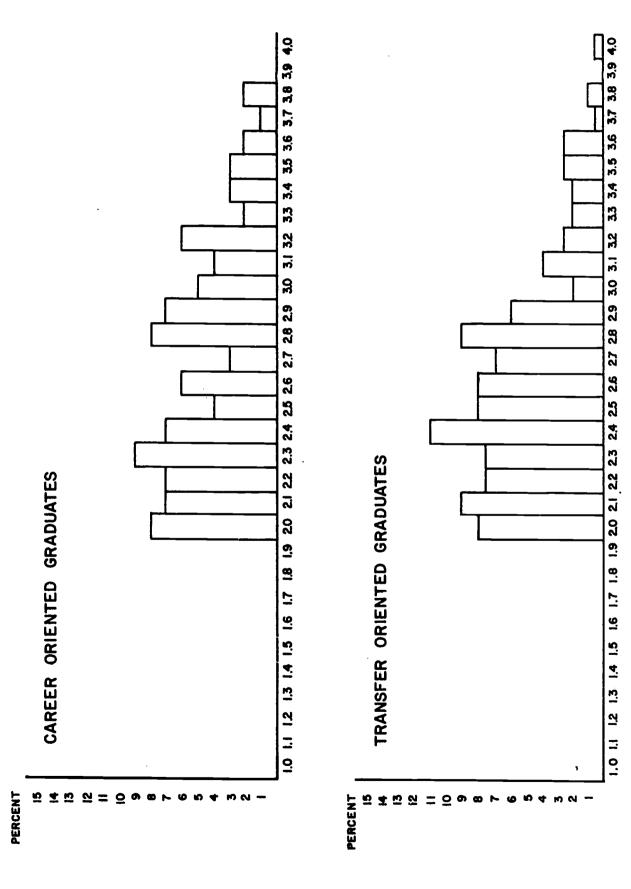




TABLE XI

CUMULATIVE DISTRIBUTION OF TIME SPENT AT MONTGOMERY PRIOR TO GRADUATION

Years Needed	Career Students	Percent	Transfer Students	Percent	Total	Percent
One or less	2	2	4	2	6	2
Two or less	46	47	96	40	142	42
Three or less	87	90	197	82	284	84
Four or less	92	95	222	93	314	93
More than four	97	100	240	100	337	100

TABLE XII

GRADE POINT AVERAGE OF GRADUATES BY
CONTINUED SCHOOLING

G.P.A.	In School Full Time	Not in School	In School Part Time
2.0 - 2.4	78	49	17
2.5 - 2.9	76	29	15
3.0 - 3.4	31	15	3
3.5 - 3.9	10	9	4
4.0		1	
Totals	195	103	39



graduates with regard to the length of time spent at the College prior to graduation. This is a reflection of the part-time status of community college students who hold jobs in the community while earning their Associate Arts degree.

### Continuing Education and Grades

The correlation between grade point average and continued schooling is 0.142 indicating a negligible relationship between the two scales. While it would seem of interest that the relationship between grades and employment is stronger than the relationship between grades and continued schooling, neither correlation is large enough to be meaningful. Thus, the reasons for a graduate continuing his education or getting a job do not depend on the grades he earned at Montgomery College. (See Table XII)

### Employment

The majority of the transfer-oriented graduates do transfer. The majority of the career-oriented graduates find employment after graduation. In fact, the probability of any Montgomery College graduate being employed full-time within four months after graduation is 24 in a hundred. But if he is a graduate of a career curriculum the probability of his finding full-time employment within the four-month time frame is 58 in a hundred.

Graduates who found employment in Montgomery County formed the majority (56%) of the employed graduates. Forty-one percent of the graduates had found employment at the time of the survey. (See Table XIII)

Of those who had chosen to work, 49 percent were graduates of



TABLE XIII

EMPLOYMENT BY GEOGRAPHICAL AREA

	Number of Jobs	Percent of Working Graduates
Montgomery County	77	56
Prince George's County	6	4 -
Other Maryland Counties	2	1
Virginia	7	5
District of Columbia	42	30
Other States	6	4
Total Jobs	140	
Armed Forces	4	
Total	144	

TABLE XIV

GRADE POINT AVERAGE OF GRADUATES BY EMPLOYMENT

G.P.A.	Not Employed	Employed Full-Time	Employed Part-Time
2.0 - 2.4	78	59	7
2.5 - 2.9	76	40	ń
3.0 - 3.4	35	9	5
3.5 - 3.9	11	9	1
4.0			1
Totals	200	117	20



21

career curriculums and 51 percent were graduates of transfer curriculums. Sixty-nine percent of the career graduates and 29 percent of the transfer graduates chose to work rather than to continue their formal education.

A larger percentage of Takoma Park graduates is concurrently working and in school than are Rockville graduates. This may reflect differences in the financial status of students on the different campuses or differences in age and state of independence.

The correlation between grade point average and employment categories is 0.208, indicating weak practical relationship between the two scales. (See Table XIV)

Table XV presents some of the characteristics of employed students by age group. The increase in annual salary with increasing age is quite striking. However, the majority of the employed graduates (71%) are earning 5 to 7 thousand dollars and have less than one year's experience in that type of job. The diversity of age and experience makes more difficult the job of planning career programs which will be relevant and challenging for all the different types of students who enroll at Montgomery.

Table XVI is a corollary to an earlier chart of continuing education by source high school and shows sources of employed graduates. The percentage of full-time employed Montgomery College graduates from any given high school converges on 40 percent. There are insufficient numbers of students from the private and parochial schools to allow determination of any differences in the proportion of graduates of both the private and parochial school and graduates of



TABLE XV

EMPLOYED STUDENTS BY AGE AT GRADUATION

Vears	Employed Full-Time Part-Time	Number of Students	Most Frequent Annual Salary Range	Average Number of Years Prior Experience at Graduation	Percentage of Employed in Age Group	Percentage of Age Group Employed
19-24	F.T.	<b>8</b>	\$ 5,000- 7,000	l or less	7.1	38
	P. T.	5				
25-29	F.T.	16	\$ 5,000- 7,000	2-1/2	17	6.9
	P.T.	7				
30-34	F.T.	7	\$ 7,330-10,000	4-1/4	ş	58
	.T.	-				
35-39	F.T.	т	\$ 7,000-10,000	4-1/2	7	63
	P.T.	CI				
70-77	F.T.	cı	\$ 6,000-8,500	more than 5	_	90
	P.T.	0				
45 and older	F.T.	-	\$10,000-13,000	more than 5	less than I	33
	P.T.	0				
Age Unknown	F. T.	-	\$19,000-13,000	less than 1	less than !	;
	P.T.	(7				
Totais	F.1.	* : 1 : 2			t *	

TABLE XVI

EMPLOYMENT BY SOURCE HIGH SCHOOL

High School	No. in M. C. Graduating Class	Not Employed	Employed Full Time	Employed Part Time
Bethesda-Chevy Chase	11	4	5	2
Montgomery Blair	28	14	13	1
Winston Churchill	4	3	0	1
Albert Einstein	12	7	5	0
Gaithersburg	5	4	1	0
Walter Johnson	13	8	5	0
Richard Montgomery	29	17	9	3
Northwood	28	19	9	0
Robert E. Peary	16	12	4	0
Sherwood	6	4	2	0
Springbrook	18	14	3	1
Wheaton	34	24	7	3
Walt Whitman	8	6	2	0
Charles H. Woodward	2	1	1	0
<b>Namascus</b>	2	0	2	0
Bullis Preparatory	1	1	0	0
Harker Preparatory	1	0	1	0
Holton Arms	2	0	1	1
Cynthia Warner	1	1	0	0
Holy Cross	5	1	4	0
Holy Names	5	1	4	0
Good Counsel	5	4	1	0
Prince George's County	y 9	4	4	1
Other Maryland Counti	es 9	6	3	0
District of Columbia	24	14	10	0
Out of State	48	23	19	6
G. E. D.	2	2	0	0
Unknown	9	6	3	0
Total	337	200	118	19

Montgomery County Public Schools who find full-time employment immediately after completion of their Associate Arts degree.

Relationship of Employment to Studies

The majority of the employed career curriculum graduates indicated that they were employed in a field related to their studies.

Transfer curriculum graduates indicated that the majority of the employed were not working in an area related to their Montgomery

College studies. This may have been partly a matter of interpretation. What, for example, is employment "in the field" of general studies?

The following cross-break shows the percentages in the respective dichotomies:

TABLE XVII

PERCENT OF GRADUATES EMPLOYED IN THEIR FIELD OF STUDY

	Transfer	Career
in Field	34%	85%
Not in Field	66%	15%

The correlation between the categories of career-transfer and in-field and not-in-field employment is a positive .513 indicating definite association between career curriculum graduates and employment in field, and between transfer curriculum graduates and employment not in the field of their Montgomery College studies. 1



 $<sup>^{1}\</sup>text{X}^{2}$  test of distribution gives a probability of error of less than one in a hundred.

This, of course, applies to those graduates of transfer curriculums who found employment after receiving their Associate Arts degree. Those who continue their education may show a different pattern.

Graduates not employed in their field of studies were asked to indicate why they were not. There were too few responses from the career curriculum graduates to indicate any pattern. The most frequent response of the transfer curriculum graduates was "further education needed" (42%).

Table XVIII shows the categories provided and the percentage of employed graduates out of field who checked each:

TABLE XVIII
WHY GRADUATES ARE EMPLOYED OUT OF
THEIR FIELD OF STUDY

	Total	100%
(5)	Other reason, not specified	27%
(4)	Further education needed	42%
(3)	Military service interfered	13%
(2)	No position available	13%
(1)	Salary too low	5%



#### Earning Power

The graduates were asked to indicate in which of seven annual salary ranges they were, without considering overtime. The categories were:

- (1) under \$4,000
- (4) \$ 7,000 \$10,000
- (2) \$4,000 \$5,000
- (5) \$10,000 \$13,000
- (3) \$5,000 \$7,000
- (6) \$13,000 \$17,000
- (7) over \$17,000

The most variability in earnings was shown by Art Advertising, Electronic Technology, and Printing Technology. The most consistency of earnings was shown by the Nursing graduates. Eleven of thirteen Nursing graduates are earning between 7 and 10 thousand dollars. The highest average annual salary was reported by General Business graduates. This high average is spurious as it reflects only two graduates reporting unusually high annual salaries. See Table XIX for complete breakdown of salary ranges by Career Curriculums.

The relationship between reported salary and cumulative grade point average for graduates is quite low. The correlation obtained from Table XX was .0226, or to put it another way, knowledge of a graduate's grade point average will allow accurate prediction of salary only five times in ten thousand trials.

However, the correlation between reported salary and reported years of experience in the field of employment is moderate (correlation = .428). It thus appears that immediately after graduation, the relationship is stronger between experience and earnings than between grades and earnings. (See Tables XXI and XXII)



TABLE XIX

CAREER CURRICULUM - EMPLOYED 1970 GRADUATES
ANNUAL EARNINGS

	Most Frequent Salary Range Reported	Average Reported Yearly Salary	Range of Reported Yearly Salary
Art Advertising	under \$4,000-\$5,000	\$ 5,800	under \$4,000- \$17,000
Electronic Data Processing	\$5,000-\$ 7,000	\$ 6,890	\$5,000-\$13,000
Dental Assisting	\$5,000-\$ 7,000	\$ 5,380	\$4,000-\$ 7,000
Electronic Technology	\$5,000-\$ 7,000	\$ 6,050	under \$4,000- \$17,000
General Business	\$7,000-\$10,000	\$10,700	\$7,000-\$17,000
Nursing	\$7,000-\$10,000	\$ 7,880	\$4,000-\$10,000
Printing Technology	None	\$ 6,050	under \$4,000- \$17,000
Radiation Science	e \$5,000-\$ 7,000	\$ 6,050	\$5,000-\$ 7,000
Secretarial (specialized)	\$5,000-\$ 7,000	\$ 6,050	under \$4,000- \$10,000
Secretarial (certificate	\$5,000-\$ 7,000	\$ 5,800	\$4,000-\$ 7,000

TABLE XX

REPORTED SALARY OF GRADUATES BY CUMULATIVE GRADE POINT AVERAGE

G.P.A.	\$4,000	\$5,000	7,000	10,000	13,000	17,000
2.0 - 2.4	9	7	26	19	5	2
2.5 - 2.9	6	6	15	12	1	5
3.0 - 3.4	3	4	4	2		1
3.5 - 3.9		1	7	3		
4.0	1 ·					
Totals	19	18	52	36	6	8

TABLE XXI

REPORTED SALARY OF GRADUATES BY YEARS EXPERIENCE
IN EMPLOYMENT FIELD

					•	
Experience in Years	Under \$4,000	\$4,000- \$5,000	\$5,000- \$7,000	\$7,000- \$10,000	\$10,000- \$13,000	\$13,000 \$17,000
Less than one	12	12	31	20	1	2
One	3	2	7	2		
Two	4	3	8	2		
Three		1	2	2		
Four			3	3		
Five				3	1	
More than five			1	4	4	6
Totals	19	18	52	36	6 ·	8
						_



TABLE XXII

YEARS OF EXPERIENCE IN CURRENT FIELD OF EMPLOYMENT AND CURRICULUM

Length of		eer	Tran	sfer	To	tal
Experience	#	<b>%</b> 	# #	<b>%</b> 	#	<b>%</b>
Less than one year	40	60	36	52	76	55
One Year	9	13	5	7	14	. 10
Two Years	9	13	8	11	17	12
Three Years	<b>, 2</b>	3	2	3	4	3
Four Years	2	3	3	4	5	4
Five Years	2	3	3	4	5	4
More than five years	3	5	13	19	16	12
Total*	67	100	70	100	137	100

<sup>\*</sup> Includes 3 respondents who are employed in two jobs each.



#### **Placement**

The graduates were asked how they had obtained their present position. Six specified categories were given plus one additional open-ended choice. The open-ended choice was the most frequently checked category. This indicates that the question was not properly formulated to cover all likely interpretations. The most common response was, "I just walked in and applied." Perhaps several questions should have been asked regarding useful sources of information, useful help in handling interviews and paperwork, etc., which would more accurately determine the contribution of the Placement Office.

Percentages of students indicating how they obtained their jobs are shown on Table XXIII. There is a statistically significant difference in the way the career curriculum graduates and the transfer curriculum graduates reported obtaining their jobs.

For career curriculum graduates their college instructors are quite important but not for transfer curriculum graduates.

Newspaper ads and family or friends are more important to the latter group in finding jobs.

In light of the small number of students claiming placement through the College Placement Office, an attempt might be made to interview current students to determine their concept of the function and services of this office. At present the Office appears to serve, primarily, the student looking for part-time work during the school year.

### Job Satisfaction

Table XXIV indicates the levels of agreement with five statements regarding job satisfaction. The distribution of responses from



TABLE XXIII

PLACEMENT MEANS BY WHICH GRADUATES OBTAINED THEIR PRESENT POSITION

Career Curr. Students	Percent Career Employed	Transfer Curr. Students	Percent Transfer Employed	Total Employed*	Percent Total Employed
1	1	1	1.0	2	1.0
9	12	0	0.0	9	6.0
3	4	4	5 <b>.5</b>	7	4.5
3	4	4	5.5	7	4.5
7	10	15	21.0	22	15.0
17	23	23	32.0	40	28.0
34	46	25	35.0	59	41.0
74	100	72	100.0	146	100.0
	1 9 3 7 17	Students     Employed       1     1       9     12       3     4       7     10       17     23       34     46	Students         Employed         Students           1         1         1           9         12         0           3         4         4           7         10         15           17         23         23           34         46         25	Students         Employed         Students         Employed           1         1         1.0           9         12         0         0.0           3         4         4         5.5           7         10         15         21.0           17         23         23         32.0           34         46         25         35.0	Students         Employed         Students         Employed         Employed*           1         1         1.0         2           9         12         0         0.0         9           3         4         4         5.5         7           7         10         15         21.0         22           17         23         23         32.0         40           34         46         25         35.0         59

<sup>\*</sup> Note: Figures include 9 multiple responses, students who either had more than one job, located by different means, or who claimed more than one source for their present job.

TABLE XXIV

RATING OF JOB SATISFACTION

	Strong] Career	Strongly Agree Career Transfer	Ag	Agree Career Transfer	Dis Career	Disagrec Career Transfer	Strongly Career	Strongly Disagree Career Transfer
You enjoy your job	217	297	452	727	% <b>80</b>	6	0	22%
Salary is adequate	25%	32%	52%	<b>267</b>	16%	791	7.2	32
There is opportunity for advancement in salary	32%	362	767	757	13%	183	29	27
You feel your preparation at M. C. was adequate**	35%	22%	295	52%		<b>28</b>	€: •7	18%
Number of respondents:	Career = 74 Transfer = 72	<b>3</b> 0						

\*\* Chi-square test gives probability of error of less than one in a hundred that the graduates of the two curriculums feel differently about their preparation.

graduates of the career curriculums and from the transfer curriculums were similar with two exceptions. Transfer students were less positive in their ratings of every question except adequacy of salary. On this question the transfer students indicated stronger agreement with the statement that salary is adequate than did the career curriculum graduates. On the other hand, graduates of the career curriculums are far more positive than are graduates of the transfer curriculums in their agreement with the statement that their preparation at Montgomery College was adequate. 1

A condensed form of the data on Table XXIV is given on Table XXV. This expresses the four point rating scale as a single numerical value with sign to indicate if the attitude represented is positive or negative.

### Summary

If there is one word which sums up the Montgomery College graduate, it is diversity. The College draws them from a wide variety of sources, with a diversity of ages, backgrounds, and goals and transfers them on to many different roles of work and study. The value added by Montgomery College in this process can only be hinted at by such indicators as job satisfaction, earning power, and success rates in colleges and universities.



 $<sup>^{1}\</sup>mathrm{X}^{2}$  test of distribution gives a probability of error of less than one in a hundred.

TABLE XXV INDEX OF JOB SATISFACTION

Career Curriculum Graduates	Transfer Curriculum Graduates
+ 84	+ 78
+ 54	. + 62
+ 62	+ 57
+ 40	+ 36
+ 82	+ 47
	+ 84 + 54 + 62 + 40

In 1970 the majority of Montgomery Community College graduates who continued their education transferred to the University of Maryland; however, forty-four other institutions also received MC graduates. These students transferred to schools in twenty-two states or U. S. territories, and two countries. Excluding students who were in General Education or Liberal Arts curriculums at the College, about one-third changed their major upon transferring. Graduates who transferred to the University of Maryland were more likely to lose credits than those who transferred to other schools.

Montgomery County Public Schools were the source of over two-thirds of all the graduates. The remainder were either non-residents or immigrants. Certain high schools within the County tend to send particular types of students to the College. For example, a "career"-oriented student is more likely to have graduated from Wheaton while a "transfer"-oriented student probably graduated from Montgomery Blair.

The typical career-oriented graduate was twenty-one years old, earned a cumulative grade point average of 2.68, and was employed within four months after graduation. His counterpart was transfer-oriented, twenty-two years old when he graduated, earned a grade point average of 2.60, and enrolled full-time in a four-year institution the fall after graduating from Montgomery. On the average, students complete the requirements for their Associate Arts degree in two and one half years, or five semesters.

What a graduate does after graduation does not appear to



be strongly related to his grades. Whether or not he transfers, or how much he earns if he works, does not seem to depend on his academic record at the College. In the work situation experience is a good indicator of earnings within any one field. Nurses tend to earn the highest salaries. The majority of working graduates was employed in Montgomery County; however, no one employer hired more than three graduates. A majority of the employed career-oriented graduates was working in a field related to their studies at the College. Graduates who were working in a field unrelated to their studies indicated that the reason was because further education was needed.

It appears that the College does not provide effective placement services for graduates; however, students are able to secure jobs through other means.

Job satisfaction was indicated by a majority of the employed graduates and most felt that the program at Montgomery adequately prepared them for their job.

#### Conclusions

One can conclude from this study that the College serves a wide cross section of the County's population. Students come from every public secondary school and almost every private and parochial school in the County.

While the College attracts primarily the 18 to 24 age group the graduating class spans a wide age range indicating a service to every sector of the community. It has been suggested that the over-25 segment of the County's population represents a potential of unmet needs.



The mission of the College is often described in terms of "transfer" and "career." From the results of this study it appears that those graduates who plan to transfer are able to enroll in the college or university of their choice with a minimum of credit loss. At the same time career-oriented students either have a job at the time they receive their Associate Arts degree or obtain employment soon after graduation. This happens through little apparent placement assistance on the part of the College. The study suggests that there are perhaps some services which could be provided by the College in the area of graduate placement.

Regardless of how graduates found their jobs there appeared to be a high level of job satisfaction. The curriculums of the College received high marks in terms of adequately preparing the graduates for their work.

Future studies will look at the progress of the College's graduate at the transfer institution and on the job from the employer's point of view.



APPENDIX

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# APPENDIX I

LIST OF EMPLOYERS OF GRADUATES

OF CLASS OF '7C

# Prepared by

Carol Blimline, Director of Placement Rockville Campus

and

Mike Meade, Director of Placement Takoma Park Campus



#### ROCKVILLE CAMPUS

Employer

Job Title

AFRRI - NNMC

Bethesda, Maryland 20014

Physical Science Aide

American Physiological Society

9650 Rockville Pike Bethesda, Maryland

Clerk-Typist

Army Topographic Command

6500 Brooks Lane Washington, D. C. Teller in Credit Union

Austron, Inc. 621 Lofstrand Lane Rockville, Maryland Electrical Technician (part-time at University

of Maryland)

Autotronics Services Company

4957 Bethesda Avenue

Bethesda, Maryland 20014

Accountant and Manager

Bechtel, Inc. Shady Grove Road

Gaithersburg, Maryland

Assistant Draftsman (part-time at University

of Maryland)

Biodynamics Research Corp., Inc.

6010 Executive Boulevard Rockville, Maryland

Secretary

Blomquist, C. W. & Co., Inc.

10802 Connecticut Avenue

Kensington, Maryland

Mortgage Loan Closer

Boatman & Magnani, Inc.

5012 Buchanan Street Hyattsville, Maryland

20781

Manager-Bookkeeper

Bureau of Printing & Engraving

14th and C Streets Washington, D. C.

Apprentice

Capital Inspection & Recharge Service

1110 Taft Street

Rockville, Maryland

Bookkeeper



Central Intelligence Agency Washington, D. C.

Computer Operator

Chesapeake & Potomac Telephone Co. of Maryland
Wheaton Plaza Office Building South

Service Representative

Wheaton Plaza Office Building, South Wheaton, Maryland

Chesapeake & Potomac Telephone Co. Rockville Pike

Traffic Operator

Rockville, Maryland
City of Takoma Park

Treasurer's Office
Takoma Park, Maryland

Bookkeeper-Secretary

Computer Audit Corporation 1320 Fenwick Lane

Silver Spring, Maryland 20910

Secretary

Control Data Corporation Rockville Pike Rockville, Maryland

Secretary

Curtis Circulating Company 841 Chestnut Street Philadelphia, Pennsylvania

Book Field Manager

Department of Army Harry Diamond Lab. Washington, D. C.

Electronic Division Technician

Department of Health, Education, and Welfare 1901 Chapman Avenue Rockville, Maryland

Clerk-Stenographer

Department of Interior Geological Survey Computer 18th and C Streets, N.W. Washington, D. C.

Computer Aide

D. C. Air National Guard

DiMisa, Dr. Joseph M., D.D.S. 5239 Western Avenue, N.W. Washington, D. C.

Dental Assistant

Donahoe Construction Company 2139 Wisconsin Avenue Washington, D. C.

Programmer-Operator

Eastern Air Lines, Inc. Miami Springs, Florida

Stewardess

ESSA 6001 Executive Boulevard Rockville, Maryland Secretary

Fairchild Hiller Corporation Fairchild Drive Germantown, Maryland

Receptionist

Federal National Mortgage Assoc. 1133 15th Street, N.W. Washington, D. C.

Mortgage Clerk

Film Center 915 12th Street, N.W. Washington, D. C. 20005

Electronic Repairman

Flores, Dr. Dina E. S. West Edmonston Drive Rockville, Maryland 20852

Medical Assistant

Flow Laboratories 1610 Chapman Avenue Rockville, Maryland Senior Technician (Part-time at University of Maryland)

Fulford's T.V. Service 7626 Old Georgetown Road Bethesda, Maryland

T.V. Repairman

Bakery Manager

Giant Food, Inc.
Gaithersburg, Maryland

Giant Food, Inc. Aspen Hill Super Giant Rockville, Maryland Cashier

HEW - Food and Drug Administration Parklawn Building Rockville, Maryland 20852

Clerk-Stenographer

Holy Cross Hospital 1500 Forest Glen Road Silver Spring, Maryland 20902

Registered Nurse

Impact, Inc. 115 Hillwood Drive Falls Church, Virginia 22046 Designer's Assistant (Artist)

Jacqueline Gleason DHEW, PHS, DHRS, HMSB 5600 Fisher's Lane Rockville, Maryland 20852

Clerk-Stenographer

JEANCO AMWAY DISTRIBUTOR 529 Carrollton Drive Frederick, Maryland 21701 Owner - Distributorship of Home Care Products to Customers

Judd & Detweiler 1500 Eckington Place, N.E. Washington, D. C. 20002 Night Production Manager (Printing Co.)

King's American Service 5532 Connecticut Avenue Washington, D. C.

Shift Manager at one plant and light mechanical work at both

Kinna American Service 8101 Wisconsin Avenue Bethesda, Maryland

Korvette, E. J. Co. Rockville Pike Rockville, Maryland

Cashier (Temporary)
Returning to Maryland in
January

Lybrand, Ross Bros. & Montgomery Richmond, Virginia

Accountant Intern Also attends University of Richmond

Mansfield, Senator Mike Washington, D. C.

Clerical Assistant (Temporary) Starting to Seton Hill in January

Marriott Corporation Bethesda Hot Shoppes East-West & Wisconsin Bethesda, Maryland Waiter, Relief Host and Cashier

Marriott Corporation River Road Washington, D. C.

Clerk - Finance Department

Marriott Corporation 5161 River Road Bethesda, Maryland Senior Accounting Clerk

Maryland National Bank 8730 Georgia Avenue Silver Spring, Maryland Secretary

Montgomery College Rockville, Maryland

Lab Technician III-Trainee

Montgomery College Rockville, Maryland Programmer (Computer)

Montgomery College Rockville, Maryland

Secretary

Montgomery College Bookstore 51 Mannakee Street Rockville, Maryland

General Clerk II

Drs. Montgomery & Kenner Bethesda, Maryland

Medical Secretary, (Part-time at University of Maryland)

McCurdy, P. C. Plumbing & Heating 10417 Armory Avenue Kensington, Maryland

Apprentice Plumber

Nabisco, Inc. Randolph Place, N.E. Washington, D. C. Student Salesman (attends University of Maryland)

National Automobile Dealer's Assoc. 2000 K Street, N.W. Washington, D. C.

Management Analyst

National Institutes of Health Bethesda, Maryland 20014

Clerk Typist

National Institutes of Health Bethesda, Maryland

Secretary

Dr. Pappas 1415 Medical Towers Houston, Texas

Dental Assistant

Poch Hardware Co. Potomac, Maryland

Management Trainee

Potomac Electric Power Co. Was' ington, D. C.

Programmer Analyst (full-time) (part-time at University of Maryland)

Prince George's County, Maryland Board of Education Teacher - Computer Programmer

Psychiatric Institute of America 1776 K Street Washington, D. C. File Clerk and Xerox

Mr. R. Robison
Box 1128
Rockville, Maryland 20858

Box Office Staff

Safeway Stores, Inc. Baltimore Boulevard College Park, Maryland Clerk

Sandy's Ltd. #2 Hilton Rainbow Tower Honolulu, Hawaii

Sales Clerk (attends University of Hawaii)

Sears, Roebuck & Co. Bethesda, Maryland

Paste-up Artist

Self Employed (Gerald E. Haggerty)
4411 Colfax Street
Kensington, Maryland

Furniture refinisher

Sligo Junior High School Silver Spring, Maryland

Special Education Aide

Takoma Park Police Department 8 Columbia Avenue Takoma Park, Maryland 20012 Policeman

Treasury Department Washington, D. C. 20020

Secretary

United Church Directories Galion, Ohio

Photographer

United States Army Fort Lee, Virginia

Army Photographer

United States Air Force Seymour Johnson Air Force Base Illustrator

Video Engineering Co., Inc. Riggs Road & First Place, N.E. Washington, D. C. 20011 Secretary-Receptionist

Vitro Laboratories 14000 Georgia Avenue Silver Spring, Maryland

Woodmont Country Club Rockville Pike Rockville, Maryland

Woolworth, F. W. Co. 7101 Democracy Boulevard Bethesda, Maryland

Woolworth, F. W. Co. Montgomery Mall Bethesda, Maryland Clerk Typist

Grounds man - Disease control in turf and grass

Department Head - Music Dept. (going to University of Baltimore in January)

Waiter at snack bar

#### TAKOMA PARK CAMPUS

Addressograph-Multigraph Corp. Washington, D. C.

Office Clerk

AMECON Division of Litton Industries

College Park, Maryland

Electrical Engineer

AOPA Printing

Bethesda, Maryland

Production Manager

Arent, Fox, Kintner, Plotkin & Kahn

1815 H Street, N.W. Washington, D. C.

Legal Secretary

Art Shop (The) 8209 Georgia Avenue

Silver Spring, Maryland

Bookkeeper

Brown University

Providence, Rhode Island

Programmer

Bureau of Prisons

Washington, D. C.

Social Science Research Analyst

Center for Handicapped-Cerebral Palsy

Montgomery County

Teacher's Aide

Chesapeake and Potomac Telephone Co.

Frameman

Children's Hospital

Washington, D. C.

Nurse

Department of Army

Harry Diamond Laboratory

Connecticut Ave. at Van Ness St., N. W.

Washington, D. C.

Machinist

Diebold, Inc.

Washington, D. C.

Service Representative (E'I')

Drug Fair Corporation

Bren Mar Drive

Alexandria, Virginia

Assistant Manager

## Takoma Park Campus

ESSA Weather Bureau Silver Spring, Maryland

Executive Secretary

Fairfax Hospital Virginia

Nurse

Fawley, D. W., Jr., D.D.S.

Dental Assistant

Film Center (The) 915 12th Street, N.W. Washington, D. C. Electronic Technician

GAIO Associates, Ltd. Washington, D. C.

Administrative Assistant-Secretary

GEICO Western Avenue

Customer Service Specialist

Chevy Chase, Maryland
Guy Stuart Motors
Silver Spring, Maryland

Car Salesman

Hecht Company Bethesda, Maryland

Sales Clerk Interior Decorator

Heim & Law, Drs. 4633 41st Street, N.W. Washington, D. C.

Dental Assistant

Holy Cross Hospital Silver Spring, Maryland

Nurse (3)

IBM 1120 Connecticut Avenue Washington, D. C

Senior Administrative Analyst

Janus Theaters, Inc.

Theater Manager

Kensington Shell Service Connecticut Ayenue Kensington, Maryland

Clerk

LeBlanc, Dr. Theodore, D.D.S. Bethesda, Maryland

Dental Assistant

#### Takoma Park Campus

Madison National Bank Washington, D. C.

Teller, Bookkeeper

Maryland National Capital Park & Planning Commission 8787 Georgia Avenue Silver Spring, Maryland

Accountant

Metromedia, Inc. WTTG Washington, D. C.

**Executive Secretary** 

Microbiological Associates 4733 Bethesda Avenue Bethesda, Maryland

**Executive Secretary** 

Mills, Petticord & Mills 1720 Eye Street, N.W. Washington, D. C.

Secretary

Miller, Henry A., D.D.S.

Dental Assistant

Montgomery County Department of Public Works

Highway Engineer

Montgomery County Public Schools

Secretary

NASA Goddard Space Flight Center Greenbelt, Maryland

Scheduler of Space Craft Electronics Technician

NIH Bethesda, Maryland Nurse Secretary

People's Court of Montgomery County Rockville, Maryland

Judicial Clerk (Executive Secretary)

Potomac Temporaries

Secretary

Private Business

Steamfitter (Air Conditioning

Mechanic)

Safeway Stores, Inc.

Clerk

Sayin Corp.

Sales

Scuderi, Victor F., Inc. Rockville, Maryland

Electrician

Sears Auto Parts Bethesda, Maryland

Auto Parts man Security Guard

#### Takoma Park Campus

Serra Memorial Hospital San Fernando Road Sun Valley, California Nurse

Shea and Gardner 734 15th Street, N.W. Washington, D. C.

Legal Secretary

Sibley Memorial Hospital

Nurse

Singer Link Division Silver Spring, Maryland Test Engineer (ET)

Skellchock, Dr. Joseph, D.D.S. Silver Spring, Maryland

Dental Assistant

Social Security Administration Washington, D. C.

Counselor-Adviser

Suburban Hospital Bethesda, Maryland

Nurse

Suburban Trust Company Hyattsville, Maryland

Administrative Trainee (Branch Manager Training)

United Airlines National Airport

Ticket & Sales Agent

U. S. Air Force Air National Guard

Radio Service Specialist

U. S. Armed Forces

Air Force - 2 National Guard - 1

U. S. Army Engineer Group Ft. Belvoir, Virginia

Instructor, Health Physics Department

U. S. Postal Service Washington, D. C.

Contract Administrator

U. S. Tax Court Washington, D. C.

Legal Secretary

Van Arkel & Kaiser 1828 L Street, N.W. Washington, D. C. Receptionist

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# Takoma Park Campus

Vitro Laboratory 14000 Georgia Avenue Silver Spring, Maryland

Systems Engineer

Worrell, Dr. W. H., D.D.S.

Dental Assistant



# APPENDIX II

EMPLOYMENT AND EDUCATION FOLLOW-UP STUDY QUESTIONNAIRE





A two year public community college

ROCKVILLE, MARYLAND 20850 (301) 762-7400

### EMPLOYMENT AND EDUCATION FOLLOW-UP STUDY

(Conducted by the Montgomery College Placement Office)

Please complete the following questionnaire as accurately as possible.

### QUESTIONNAIRE

Last 1	Name	First Name	Middle Name	Date	11-31
EDUCATION	N AFTER MONTGOMER	Y COLLEGE			
If you as	re attending a sci name of the scho	hool, college o	or university since Mo ciculum in which you s	ontgomery College are enrolled.	•
NAM	E OF SCHOOL		(1) Full-Time	Part-Time	32 33
CUR	RICULUM		<del></del>		34-35
If you a	re now in school QUESTIONNAIRE.	on a full-time	basis, YOU NEED NOT I	TILL OUT THE REMA	INDER
If you a	re working full-t stionnaire.	ime and/or atte	ending school part-time	me, please comple	te
EMPLOYME	<u>NT</u>		Full-Time	Part-Time	36
1.	Name and address	of present em	<b>\-</b> /	(2)	
					-
2.	The title of you	ır job:			- _ 37 <b>-</b> 38
•	List your most i	important job d	uties:		_
		•	<del>.</del>		-
	<del></del>	<del></del>		<u> </u>	-
	<del></del>		<del></del>		-



	nt and Education p Study ~ cont.		Page 2
3.	Using the code below, overtime?	what is your current annual salary without	39
	<u>Under \$4,000</u>	(1)	
	\$ 4,000 - 5,000	(2)	
	\$ 5,100 - 7,000	(3)	
	\$ 7,100 - 10,000	(4)	
	\$10,100 - 13,000	(5)	
	\$13,100 - 17,000	(6)	
	Over \$17,000	(7)	
4.	How many years of expe of work?	rience do you have in your present line	40
	less than one	(1)	
	one	(2)	
	two	(3)	
	three	(4)	
	four	(5)	
	five	(6)	
	more than five	(7)	
5.	Are you now employed in Montgomery College?	n a field related to your studies at	41
	yes(1)		
	no (2)		
6.	If "no", why not? (che	eck most important reason only)	42
	salary too low	(1)	
	no position avai	lable (2)	
	Military service	has interfered (3)	
	further education	n is needed (4)	
	other (please spe	ecify) (5)	

Employment	and	Edu	J¢	tion
Follow-up	Study	7 -	С	ont.

Page 3

Private Employment Ser  Public Employment Ser  Newspaper or Magazine  Family or Friend (6)	vice (4) Advertis <b>e</b> m		_	ade Park Campus
Other (please specify	) (7)	· · ·		
lease rate your satisfacti	on with you	r job and	your prepa	ration.
	Strongly Agree	Agree	Disagree	Strongly Disagree
ou enjoy your job.				
alary is adequate.				
here is opportunity for dvancement in salary.				
here is opportunity for dvancement in positions.				
ou feel your preparation t MC was adequate.				
comments: Please include s College's progra	(1) uggestions m.	(2)	(3) ving Montgo	(4)

THANK YOU FOR YOUR COOPERATION.



#### INSTITUTIONAL RESEARCH REPORTS

#### of the

### Office of Institutional Research

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  College, James H. White, Ed.D., June 1971, pp. 27.

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- Career Patterns: A Descriptive Analysis of Vocational-Technical

  Education at Montgomery College 1970, Joan F. Faber, August 1970,
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- Freshman Profiles: Entering Freshmen Fall 1969, Robert L. Gell, April 1970, pp. 46.
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- Grades, Scores, Predictions, A Study of the Efficiency of High
  School Grades and College Test Scores in Predicting Academic
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  pp. 43. ERIC Number ED 052-782
- Medical Office Assistant Need Survey, (A study to determine the interest and need for developing a Medical Office Assistant Program at Montgomery Community College.) Catherine Scott and Ann Munson, January 1972, pp. 16.

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