ABSTRACT
        This analysis of selected demographic statistics of
Middlesex Community College (MxCC) graduates is intended for future
academic advising, curriculum planning, and decision making. This
demographic profile is comprised of data from studies published
between 1985 and 1989. The study focuses on fundamental demographic
indicators, such as sex, age, and student status, as well as academic
characteristics, such as number of semesters in attendance, grades
earned, and transfer credit accumulated. Major findings of the survey
were as follows: (1) the average age of graduates ranged from 29.1
(1986) to 30.6 (1988), and the percentage of women graduates ranged
from 66.3% (1987) to 73.2% (1989); (2) the General Curriculum degree
and the Business Administration degree were the two programs with the
greatest number of graduates through 1989; (3) in spite of high
course enrollments, the Fine Arts and Commercial Art programs
exhibited relatively few graduates; (4) from 1985 to 1989, there was
a slight increase in the percentage of full-time only graduates
(12.8% to 15.4%) while the percentage of graduates attending MxCC
only part-time remained constant at about 33%; (5) the average
graduate needed 7.5 semesters to complete in 1989 compared to 7.7 in
1985; (6) grade point averages (GPA) of graduates remained constant
throughout the years studies at about 3.0, with female graduates age
25 or older, followed by male graduates 25 or older, having the
highest GPA; (7) a relatively significant and consistent percentage
of graduates used transfer credit (45.2% in 1985 to 51.3% in 1986);
and (8) in any given year, approximately 40-50% of new students were
placed into remedial English courses, yet usually less than 10% of
new students took these courses. (JMC)

A FIVE YEAR STUDY OF SELECTED DEMOGRAPHICS OF MIDDLESEX

COMMUNITY COLLEGE GRADUATES

1985-1989

February 1990

John H. Coggins

Academic Dean

Terry Muzeroll

Math Lab Coordinator

Middlesex Community College

100 Training Hill Road

Middlesex, CT 06457

Introduction

For the past four years, an analysis of selected demographics of Middlesex Community College graduates has been published.

Coggins, Krevisky, Muzeroll. "Everything You Ever Wanted to Know About the MxCC Class of '85 (and more)." February, 1986.

Muzeroll, Krevisky, Coggins. "Why 1986 Minus 1985 Does Not Equal One: A Comparison of Selected Demographics of the 1986 and 1985 Graduates of MxCC." December, 1986.

Muzeroll, Coggins. "Selected Demographics of the 1987 Graduates of Middlesex Community College." December, 1987

Muzeroll. "Our Graduates: More than a Product - Class of 1988." September, 1988.

The original intent of these studies was to provide a sense of who our graduates are. It was also assumed that the information would be useful for future academic advising, curriculum planning, and decision making. What the past four studies have shown is a remarkable consistency in much of the information. Some trends can be noted but, in general, the indication is that change occurs slowly. This will be the last study for a while. It is the opinion of the authors that a study every five years will be sufficient to document shifts in the demographics of students, now that this five-year baseline has been established.

Discussion of Data

In 1985, the average age of graduates was 29.5 and 70.8% were women. Table 1 shows in 1989, the average age was 30.2 and 73.2% were women.

The average age has ranged from 29.1 (1986) to 30.6 (1988), and the percentage of women graduates from 66.3% (1987) to the 1989 figure of 73.2%. These figures parallel our entire student body. No trend is evident in gender or age of graduates. During the five year span the number of graduates has ranged from 284 (1985) to 246 (1987). It might be reasonable to expect to be close to the upper figure in the near future, given recent enrollment increases.

The General and Business Administration degrees continue to be the two programs with by far the greatest number of graduates. In 1985, these were followed by Marketing, Information Systems, and Executive Secretarial, while in 1989, Broadcast Communications, Human Services, Radiology and Accounting had moved into the runnerup spots. Of these, only Broadcast Communications represents a significant increase from 1985 (when the program was CATV), more than doubling the number of graduates.

1

TABLE I

NUMBERS BY PROGRAM, SEX AND AGE OF GRADUATES

Program	Number of Graduates		Avg. Age of Graduates		Number of Women		Avg. Age of Women		Number of Men		Avg. Age of Men	
	1985	1989	1985	1989	1985	1989	1985	1989	1985	1989	1985	1989
Liberal Arts/Science	1	0	32.0	0	1	0	32.0	0	0	0	0	0
Accounting	12	15	28.2	30.1	9	15	28.8	30.1	3	0	26.3	--
Business Administration	53	53	31.0	29.8	37	41	32.0	29.9	16	12	28.8	29.4
Communication Arts	--	1	--	46.0	--	0	--	0	--	1	--	46.0
CATV (Broadcast Comm.)	7	16	21.6	22.5	1	5	21.0	23.2	6	11	21.7	22.2
Drug and Alcohol	1	5	59.0	38.6	1	2	59.0	43.0	0	3	0	35.7
Environmental Science	1	1	20.0	21.0	1	0	20.0	--	0	1	0	21.0
Executive Secretarial (OAC)	18	14	22.4	25.6	18	14	22.4	25.6	0	0	--	--
Fine Arts	0	2	--	61.5	0	1	--	51.0	0	1	--	72.0
Fine Arts: Comm. Art Opt.	4	6	27.0	23.7	2	3	28.0	26.0	2	3	26.0	21.3
General	79	86	32.9	32.0	53	57	33.7	32.7	26	29	31.4	30.6
General: Business Option	11	1	28.1	52.0	10	1	28.8	52.0	1	0	21.0	--
General: Law Enforcement	9	0	36.3	--	0	0	--	--	9	0	36.3	--
Human Services	16	16	29.1	29.3	14	15	29.9	29.5	2	1	24.0	27.0
Information Systems	19	12	32.6	33.7	14	7	34.0	32.6	5	5	28.6	34.0
Legal Secretarial (OAC)	8	9	20.3	23.3	8	9	20.3	23.3	0	0	0	--
Marketing	20	12	25.6	31.0	7	9	21.0	29.1	13	3	28.0	36.7
Medical Secretarial (OAC)	3	3	26.7	22.3	3	3	26.7	22.3	0	0	--	--
Medical Secretarial & Asst.	5	2	23.8	23.0	5	2	23.8	23.0	0	0	--	--
Radiology	15	15	29.6	30.6	13	14	28.2	30.9	2	1	31.0	27.0
CATV Cert. (B.C. Cert.)	2	1	29.5	46.0	1	0	31.0	--	1	1	28.0	46.0
Entrepreneurship Cert.	0	1	--	48.0	0	0	--	--	0	1	--	48.0
W/I Certificate	0	2	--	31.0	0	2	--	31.0	0	0	--	--
TOTAL	284*	273*	29.5	30.2	198*	200	29.2	30.2	86*	73	30.2	30.4

*Numbers include double degrees.

The question concerning why the General Curriculum is the most popular was asked in 1985, and remains unanswered today. The data in this report are descriptions only, but, should MxCC ever hire an institutional researcher, this would be an interesting area to explore. Is the General Curriculum the easiest? the most flexible? the most useful for transfer purposes? the easiest program into which transfer credits can fit? The answer is probably yes to all of these.

Table I also highlights some weaknesses. The environmental science program has been temporarily dropped. The low number of graduates is indicative of the low enrollments which created problems in running the second year science courses. Law Enforcement and the General: Business Option have both been dropped, and the only graduates in these programs are students who were in the pipeline when the programs were eliminated. The Medical Secretary and Assistant program has also been temporarily shelved, and the Medical Secretarial program exhibits some weaknesses in enrollment, as reflected in the number of graduates. Information systems and Marketing, while still healthy programs in terms of enrollment, have shown significant declines in the number of graduates from 1985 to 1989 (36.8% and 40.0%, respectively). The Fine Arts and Commercial Art programs exhibit relatively few graduates, despite healthy course enrollments. Is there an explanation for the apparently low graduation rate of these students?

Table II shows interesting consistency in the student status of graduates from 1985 to 1989. Approximately one-third of our graduates attended Mxcc only part-time. There has been a slight increase in the percentage of full-time only graduates from 1985 (12.8%) to 1989 (15.4%). About half of the 1989 graduates combined full-time and part-time students while earning the degree. This is only slightly less than the figure for 1985 graduates. The percentage of "stop-outs" is virtually the same for 1989 graduates as it was in 1985. This figure has been quite consistent, with the exception of one year (1986, 38.8%; 1987, 28.5%; 1988, 37.4%). The implication here, useful for advising purposes, is that interrupting attendance for a semester, or more, does not necessarily represent failure.

TABLE II
STUDENT STATUS OF GRADUATES

(1985, N=281) (1989, N=273)

	Number		Percent	
	1985	1989	1985	1989
Full-time only	36	42	12.8%	15.4%
Part-time only	94	92	33.5%	33.7%
Full-/Part-time	151	139	53.7%	50.9%
Students who interrupted attendance	105	103	37.4%	37.7%

Table III is a reflection of the part-time or combination part-time/full-time status of most of our students. The average graduate needed 7.5 semesters to complete in 1989 compared to 7.07 in 1985. The figures for the other years have been similar (1986, 6.86; 1987, 6.83; 1980, 7.7). The typical student, starting at Middlesex in the fall of 1989, will not graduate in June, 1991.

TABLE III

AVERAGE NUMBER OF SEMESTERS ATTENDED BY PROGRAM

Program	Average Number of Semesters Attended		Standard Deviation	
	1985	1989	1985	1989
Liberal Arts and Science	5	---	0	---
Accounting	7	8.4	3.72	4.8
Business Administration	8.36	9.0	2.98	3.9
CATV (Broadcast Comm.)	6.71	5.1	2.25	1.6
Communication Arts	---	4.0	---	0.0
Drug and Alcohol	13	7.2	0	2.6
Environmental Science	4	8.0	0	0.0
Executive Secretatial	5.78	5.9	2.86	2.2
Fine Arts	0	14.0	0	2.0
Fine Arts: Commcial Art Opt.	5.25	6.7	.83	3.0
General	7.33	7.0	5.46	3.0
General: Business Option	8.09	12.0	4.44	0.0
General: Law Enforcement	4	---	2.67	---
Human Services	6.94	8.1	2.77	2.9
Information Systems	8.79	7.9	2.09	4.6
Legal Secretarial	4.79	7.9	.97	1.0
Marketing	6.75	9.7	2.09	4.6
Medical Secretarial	5.67	6.3	.47	0.5
Medical Secretarial & Asst.	5.2	8.5	1.47	2.5
Radiologic Technology	6.33	5.7	2.44	2.3
CATV Certificate (Broadcast)	9	4.0	3	0.0
Entrepreneurship Cert.	---	10.0	---	0.0
W/I Proc. Certificate	---	6.0	---	2.0
OVERALL	7.7	7.5	---	3.5

Table IV shows that the average Q.P.A. of graduates has remained about the same in 1989 as it was in 1985. The other three years are quite consistent as well, (1986, 2.996; 1987, 3.012; 1988, 3.020). In all five years female graduates age 25 and older have had the highest Q.P.A. The average Q.P.A. after 12 credits continues to show a moderately strong positive correlation with final Q.P.A. for graduates.

7

The trend has been downward for the percentage of graduates who have withdrawn from a course, although the figure still remains a significant portion of the graduating class (1985, 53.0% 1989, 42.9%). The trend for graduates with Incomplete grades has been up, although this represents a much smaller percentage of graduates.

TABLE IV

GRADES OF GRADUATES

	(1989, N = 281)	(1989, N = 273)
	1985	1989
Average Q.P.A.	3.021	3.073
Median Q.P.A.	3.064	3.088
Variance	.321	.295
Standard Deviation	.566	.543
Range	2.001-4.00 (1.999)	2.000-4.000 (2.000)

	Q.P.A. All Students		Q.P.A. Males		Q.P.A. Females	
	1985	1989	1985	1989	1985	1989
Under age 25	2.694	2.878	2.657	2.906	2.704	2.852
Age 25 and up	3.268	3.236	3.064	3.164	3.365	3.272

Number of Graduates With W Grades (%)	Of those Avg. Number of Courses With W Grades	Number of Graduates with I Grades (%)	Of Those Avg. Number of courses With I Grades
1985 159 (53.0%)	2.7	18 (6.4%)	1.2
1989 117 (42.9%)	2.4	26 (9.5%)	1.5

Average Q.P.A. After 12 Credits	% Change to Final Q.P.A.	Correlation Q.P.A. After 12 Credits: Final Q.P.A.
1985 2.969	1.75%	$r = .875$
1989 2.964	3.68%	$r = .780$

8

Table V indicates that a significant number of graduates used transfer credit. That percentage has been relatively consistent over the five years (1985, 45.2%; 1986, 51.3%; 1987, 47.2%; 1988, 48.9%; 1989, 50.9%) The average number of transfer credits used by these graduates has ranged from 27.4(1986) to 32.1 (1987).

TABLE V

USE OF TRANSFER CREDIT BY GRADUATES

	1985	1989
Number of graduates using transfer credits	127(45.2%)	139(50.9%)
Average number of transfer credits used by graduates (of those transfer credit)	31.0	27.5
Average age of those using transfer credit	34.5	31.8
Average number of MxCC credits used by graduates (all graduates)	51.4	51.6

Table VI presents what is arguably the most disturbing of the statistics presented on graduates. In any given year, probably 40%-50% of new students place into remedial English courses, yet much smaller percentages of graduates (usually less than 10%) have taken these courses. Does this imply that placement into a remedial English course is a predictor of decreased liklihood of graduation? What do the numbers showing that successful graduates who have had remedial. English are much younger than the average graduate mean? The answers to these questions are beyond the scope of this descriptive study.

TABLE VI
GRADUATES WHO TOOK REMEDIAL COURSES

	Number Who Had Eng. 98 (%)	Avg. Age	Number Who Had Eng. 99 (%)	Avg. Age	Number Who Had Math 99 (%)	Avg. Age	Number Who Had All Three/(%)	Number Who Had Eng. 99 and Math 99/(%)
1985	29 (10.3%)	22.8	27 (9.6%)	23.4	96 (34.2%)	30.2	6 (2.1%)	8 (2.9%)
1989	27 (9.9%)	24.2	26 (9.5%)	24.8	93* (34.1%)	31.7	7 (2.6%)	9* (3.3%)

*For 1989, Math 98 or Math 101 figures were used.

Conclusion

It is impossible, of course, to speak of the "average" graduate. Each is unique in his/her way. So, while boiling individual demographic information and academic records down to averages and percentages does some disservice to the individual, we believe that there is some usefulness in looking at these records. We can now point to data on stop-out and course withdrawal when reassuring advisees that these things do not mean an end to the goal of an associate's degree. We can now characterize our graduates in certain demographic ways about which we had no knowledge five years ago. We can observe trends in program enrollments, and use this for our strategic planning. We can raise questions, such as the issue of whether students who take remedial English are less likely to graduate. In the long run, perhaps the most valuable contribution of these small studies will be the questions that are raised for future institutional researchers to explore. As was noted in the Introduction, this concludes the five year baseline study of graduate demographics.