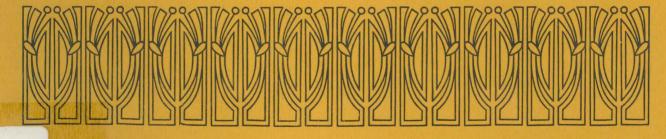


VOCATIONAL EDUCATION SEX EQUITY REPORT

Post-Secondary 1981



LC 1504 .M6 V63 1981

COUNCIL ON THE ECONOMIC STATUS OF WOMEN

LEGISLATIVE REFERENCE LIBRARY STATE OF MINNESOTA

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Introduction

Dramatic changes have taken place in women's employment patterns over the past 20 years. Today, almost two-thirds of all working-age Minnesota women are employed, a figure which includes large numbers of married women with small children at home.

Marital status and parental status have become less significant as predictors of labor force participation, and women are increasingly likely to stay in the work force throughout their adult lives. However, women continue to earn less than men, on the average, and to be concentrated in a small number of low-paying occupations.

The vocational education system has a commitment to meet the needs of this changing labor market. Title II of the federal Education Amendments of 1976 requires vocational schools to work toward overcoming sex bias and sex role stereotyping through positive action. The goal expressed in this law is to prepare students for work which matches their individual interests, abilities, and economic needs, and to eliminate stereotyped expectations based on the student's sex.

Methods of working toward this goal have been varied: assessing the extent of stereotyping, encouraging both male and female students to consider non-traditional occupations, providing supportive or remedial programs when needed, integrating classrooms, and improving employment patterns in the educational institutions themselves. Information about the nature and extent of these changes is needed for evaluation and planning for the future.

In 1978, the Council on the Economic Status of Women contracted with the Minnesota Department of Education to monitor and evaluate progress toward the elimination of sex bias and stereotyping in vocational education programs. The Council is to gather and analyze data on the status of students and staff in Minnesota vocational education, and to make this information available to vocational schools, government agencies, and the public.

The first in a series of reports on this subject was published by the Council in July 1979, and three additional reports have been made since that time. In this, the fifth report, information on area vocational-technical institutes (AVTIs) is presented, including student data for 1979-80 and staff data for 1980-81. In addition, this report analyzes trends in enrollments, budgets, and staff patterns over a three-year period. An appendix summarizes current information for each of the 33 AVTIs statewide.

The three-year statewide analysis shows improvement in almost every area, with dramatic improvement evident in some cases. It is expected that this tangible evidence of change, and the ability to measure changes over a longer period of time, will lead to continued progress in achieving sex equity in the Minnesota vocational system.

Additional copies of this and previous Council reports are available from the Council on the Economic Status of Women, 400SW State Office Building, St. Paul, Minnesota 55155.

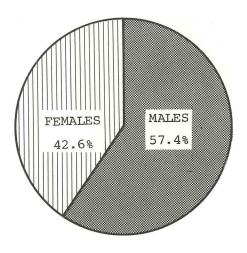
AVTI Enrollments, 1979-80

Male students account for the majority of AVTI enrollments. In 1979-80, the total statewide enrollment of 45,387 consisted of 19,346 female students and 26,041 male students.

Except where otherwise noted, all enrollment data in this report refers to an actual student headcount, a count of all students enrolled in a program at some time during the school year. The usual measure of enrollment, average daily membership (ADM), is not reported by sex.

The vocational education system has the lowest proportion of female students of all Minnesota's post-secondary systems. Information from the Higher Education Coordinating Board shows that in the fall of 1979 women accounted for more than half the students at state universities and community colleges and 45 percent of the students at the University of Minnesota.

AVTI HEADCOUNTS, 1979-80



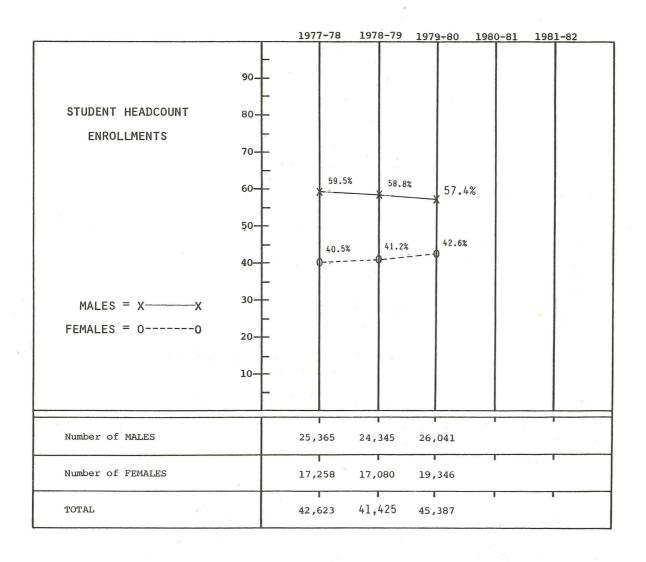
45.387 STUDENTS

Women are the majority of students at five AVTIs: Brainerd, Duluth, East Grand Forks, Eveleth, and Rochester. The remaining twenty-eight AVTIs have female enrollments ranging from 15 percent at Staples to 50 percent at Minneapolis.

AVTI Enrollment Trends

Total enrollment in Minnesota's AVTIs decreased slightly from 1977-78 to 1978-79, and increased substantially from 1978-79 to 1979-80. There was a net increase over the three-year period of almost 3,000 students.

Women account for a slowly increasing proportion of students enrolled in AVTIs, from 40.5 percent of the student population in the 1977-78 school year to 42.6 percent of the student population in the 1979-80 school year.



Enrollment by Curriculum Area, 1979-80

The chart below shows the distribution of male and female students in the seven AVTI curriculum areas or program clusters. Almost half of all students are enrolled in trade-industrial programs, while less than 2 percent are participating in home economics programs.

Equal numbers of male and female students are found only in the distribution program area. About two-thirds of female students are enrolled in programs leading to health care and office occupations, while more than three-fourths of all male students are enrolled in technical or trade-industrial programs.

AVTI HEADCOUNT BY CURRICULUM AREA, 1979-80

	MALES FEMALES	
AGRICULTURE	*****	5%
DISTRIBUTION		7%
HEALTH		12%
HOME ECONOMICS	$\mathring{\mathbb{W}}$	2%
OFFICE		21%
TECHNICAL	*********	9%
TRADE &	*************************************	44%
INDUSTRIAL		·

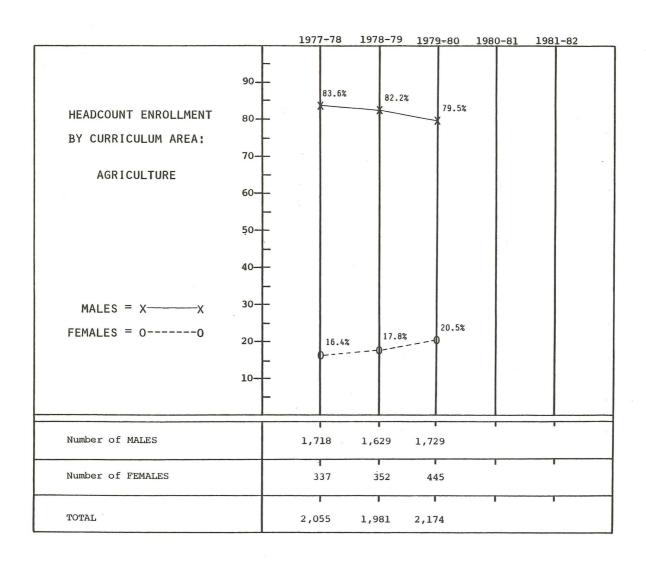
Each figure represents approximately 1% of total enrollment, or 454 students.

Statewide patterns shown below do not illustrate the full extent of segregation by sex in program areas. For example, even the few male students enrolled in office programs are concentrated in specific courses -- two-thirds of male office students are enrolled in accounting or computer programming courses. In the trade-industrial program, about half of all female students are enrolled in cosmetology, food preparation, or graphic arts.

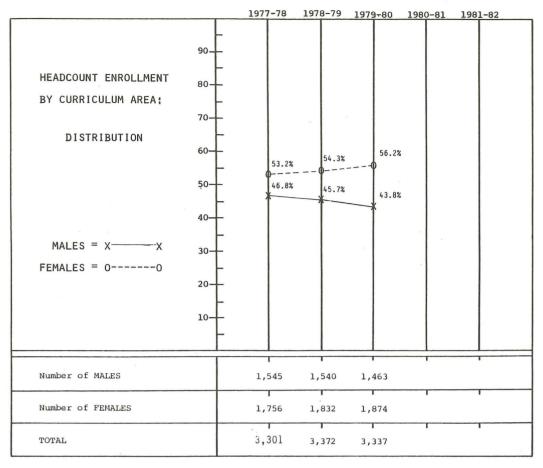
Enrollment by Curriculum Area - Trends

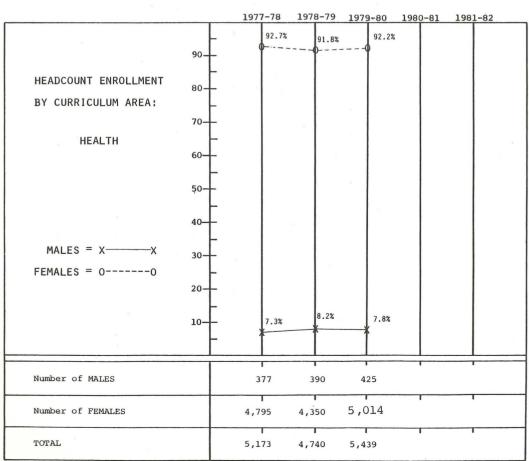
Overall, there were few changes in the patterns of male and female enrollments by program over the past three years. Male students have not increased their enrollments in the programs which have been female-dominated -- health, home economics, and office programs.

However, women have made steady and significant gains in their enrollments in programs which have been male-dominated -- agriculture, technical, and trade-industrial programs. Although the number of male students in technical and trade-industrial programs increased by 567 over the three-year period, the number of female students in these programs increased by 1,015, almost twice that number.

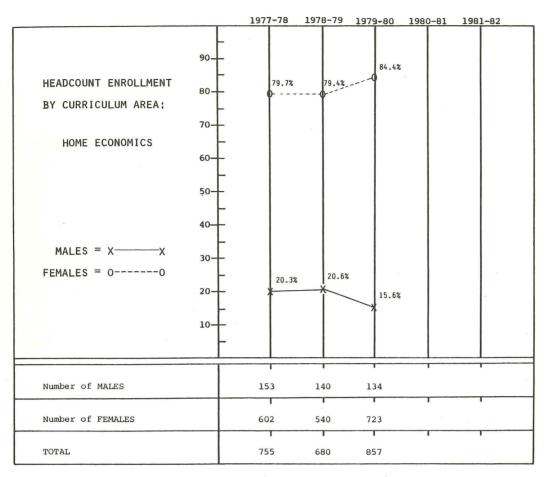


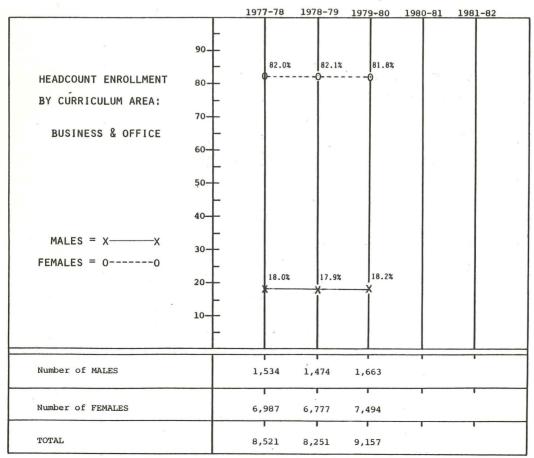
Enrollment by Curriculum Area - Trends, continued



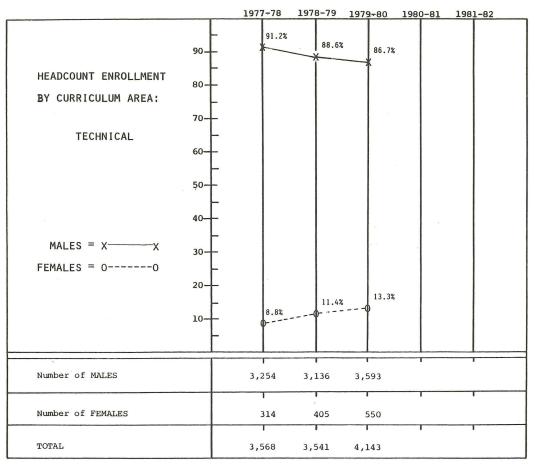


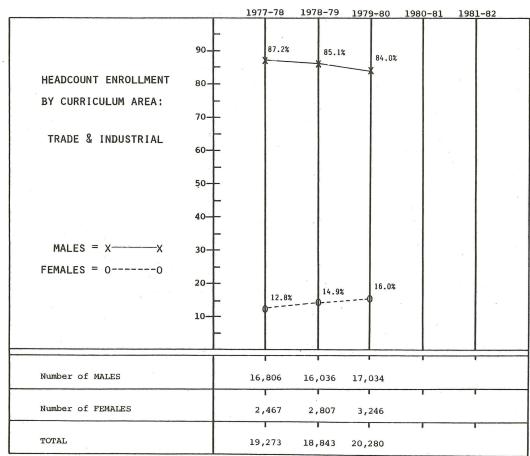
Enrollment by Curriculum Area - Trends, continued





Enrollment by Curriculum Area - Trends, continued





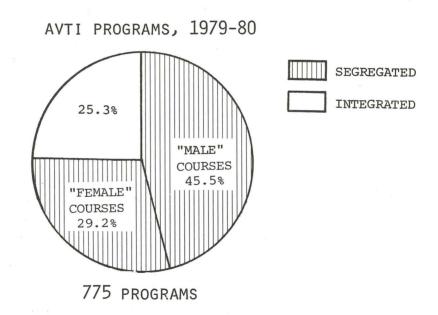
Program Types, 1979-80

A total of 775 programs are offered statewide in Minnesota AVTIs. The number of programs available at each school ranges from 9 at Pine City AVTI to 55 at the 916 AVTI. The median number of programs offered is 21.

AVTI programs are very likely to be "segregated." This term is not meant to imply that such segregation is the result of explicit policies, nor that it has occurred by design. For the purposes of this report, a segregated program is defined as one in which more than 80 percent of the students are of one sex.

Segregated programs which are composed of more than 80 percent male students are defined as "male" programs, and those with more than 80 percent female students are defined as "female" programs. All other programs are considered "integrated."

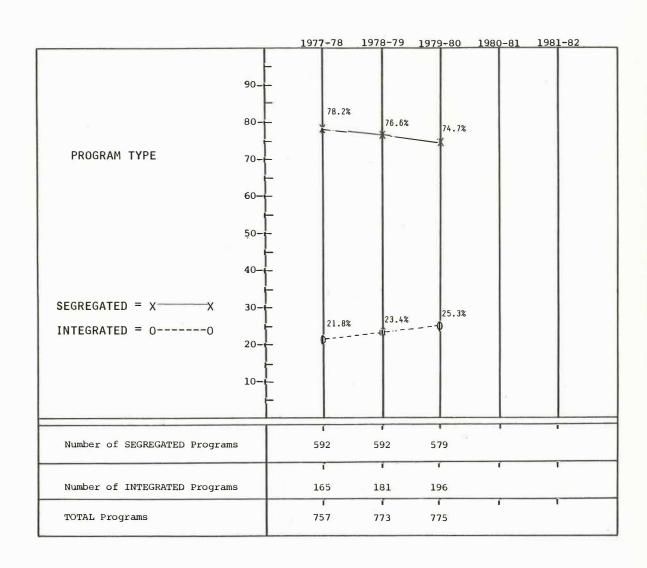
For example, Welding is usually a segregated "male" course and Bookkeeping is usually a segregated "female" course, while General Merchandising is usually an integrated course. A course may be segregated at one AVTI and integrated at another AVTI.



Of the 775 programs offered statewide, 353 are segregated "male" programs and 226 are segregated "female" programs. In fact, about one in three programs are totally segregated, with either 100 percent male students or 100 percent female students.

Program Types - Trends

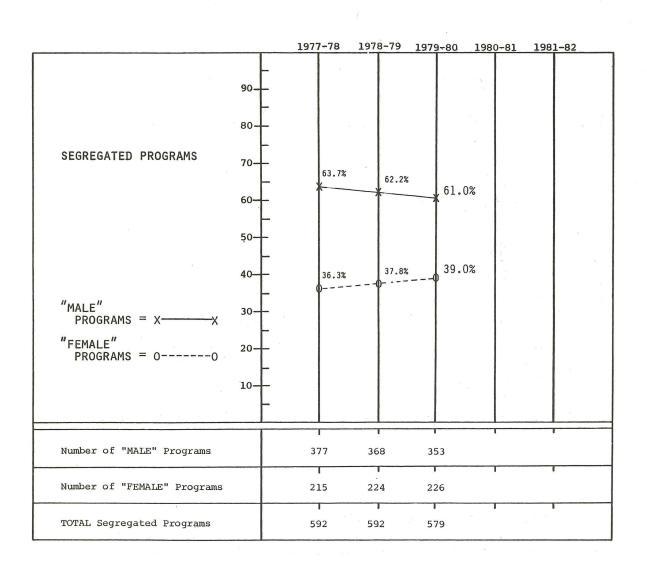
The proportion of AVTI programs which are integrated has increased steadily over the past three years, while the number of programs which are segregated has decreased accordingly. The 1979-80 school year was the first year in which integrated programs accounted for more than one-fourth of all programs.



Program Types - Trends, continued

Segregated programs have not been evenly divided into predominantly male courses and predominantly female courses. In all three years reported here, segregated "male" courses have outnumbered segregated "female" courses by a substantial margin.

Since the 1977-78 school year, the total number of programs offered has increased somewhat. Programs are now less likely than in the past to be segregated "male" programs, and somewhat more likely to be integrated.



Enrollments by Program Type, 1979-80

The number of students enrolled in a particular program varies widely, from 4 students in the Pharmacy Technician program at 916 AVTI to 461 students in the Electronics Technology program at St. Paul AVTI. For this reason, it is helpful to compare the number of students enrolled in various program types, as well as the number of programs, to determine enrollment patterns by sex.

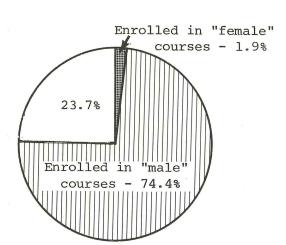
As the charts below show, both female and male students are very likely to be enrolled in segregated programs. Of the 19,346 women enrolled in all AVTIs, 5,712 are now in integrated programs. Of the 26,041 men enrolled in all AVTIs, 6,181 are enrolled in integrated programs. In other words, about one in three female students and about one in four male students are enrolled in integrated programs.

AVTI ENROLLMENT BY COURSE TYPE, 1979-80

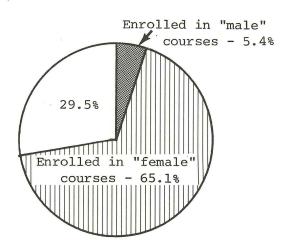
"NON-TRADITIONAL"

TRADITIONAL"

INTEGRATED



26,041 MALE STUDENTS



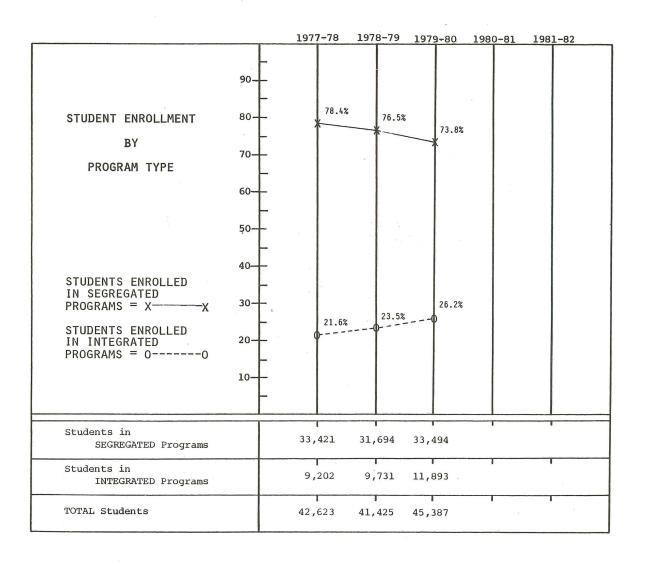
19,346 FEMALE STUDENTS

Statewide, more than one in five students is enrolled in a completely segregated program. There are 5,036 male students in programs with no women, and 4,656 female students in programs with no men.

Enrollments by Program Type - Trends

The most significant change in numerical measures of sex equity in the past three years has been the increase in the number of female students enrolled in integrated AVTI programs. In 1977-78, fewer than one in four female students was enrolled in an integrated program. In 1979-80, this proportion had increased to 30 percent, approaching one in three.

The numbers of male students in integrated programs also increased over this period, though not as dramatically. In 1977-78, about one in five male students were in integrated programs. In 1979-80, this proportion had increased to 24 percent, about one in four.

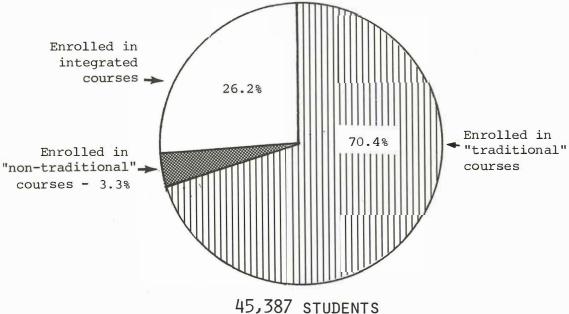


Traditional & Non-Traditional Programs, 1979-80

A "traditional" student is one enrolled in a segregated program dominated by students of the same sex. For example, a female student enrolled in a program in which more than 80 percent of the students are women is a traditional student. Similarly, a "non-traditional" student is one enrolled in a segregated program dominated by students of the other sex -- a female student in a class where more than 80 percent of the students are men, or a male student in a class where more than 80 percent of the students are women.

The proportion of students in segregated programs which are non-traditional for their sex is very small. Only 1 in 20 female students are enrolled in "male" programs, and fewer than 1 in 50 male students are enrolled in "female" programs.

AVTI ENROLLMENT BY COURSE TYPE, 1979-80

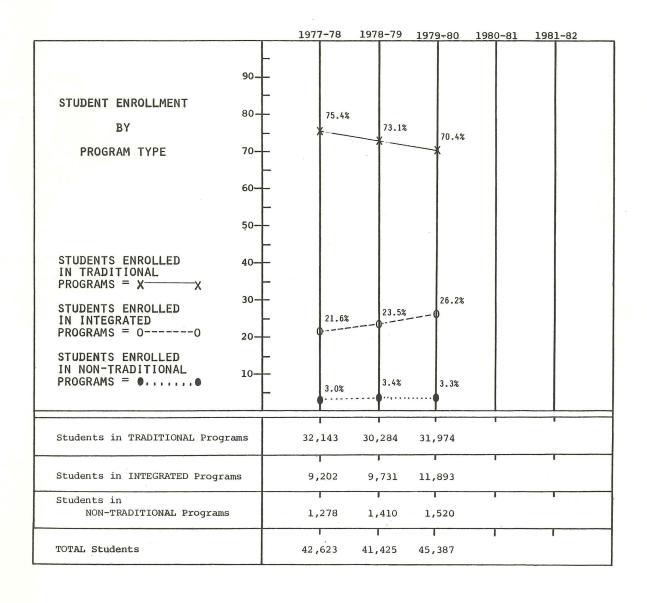


In addition, 92 students are the only member of their sex in the program. Fifty-eight women are in the position of being "the only woman" in the class in programs such as Auto Mechanics, Welding, or Agricultural Production. Thirty-four men are "the only man" in their classes, such as Cosmetology, Office Clerk, or Nurse Aide. Another 53 students are one of only two members of their sex in a particular program.

Traditional & Non-Traditional Programs - Trends

In the past three years, the number of students in non-traditional programs and the number of students in integrated programs have increased, with a corresponding decline in the number of students in traditional programs. This change is largely accounted for, however, by movement from segregated traditional courses to integrated courses, rather than to non-traditional courses.

Throughout the three-year period, female students have remained more likely than male students to enter non-traditional programs. Both male and female students are somewhat more likely in 1979-80 than they were in 1977-78 to enroll in programs which are non-traditional for their sex.



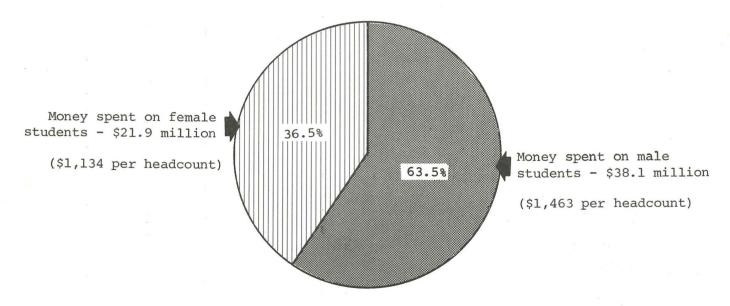
Program Budgets, 1979-80

Program expenditures provide another method of measuring sex equity. The program budget of the AVTI system totals \$60.0 million, a figure which includes instructors' salaries and all other program costs, but which does not include general administration and costs associated with support programs.

Of this amount, \$38.1 million is spent on male students and \$21.9 million is spent on female students, a ratio of two to one.

Program costs are apportioned by applying male and female enroll-ment ratios in each program to the net budget for that program. For example, a budget of \$100,000 for a program with 90 male and 10 female students is recorded as \$90,000 spent on male students and \$10,000 spent on female students.

AVTI PROGRAM COSTS APPORTIONED BY SEX OF STUDENT



1979-80 PROGRAM BUDGET - \$60.0 MILLION

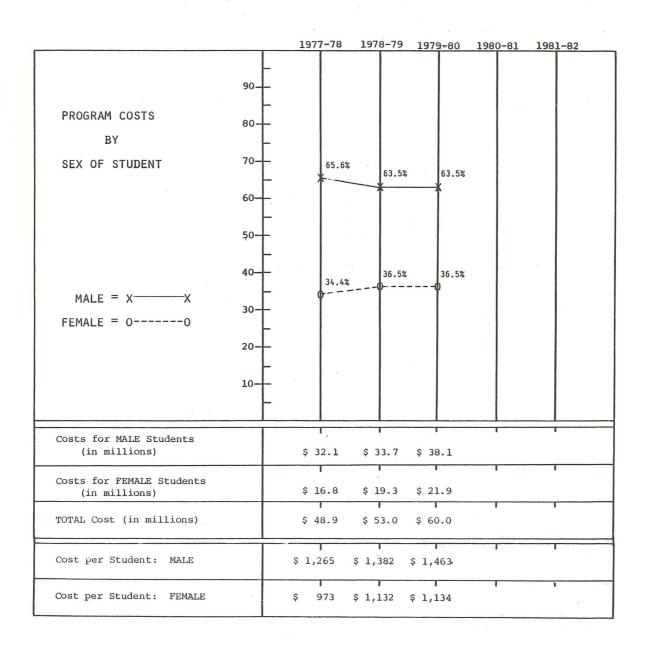
Women account for 43 percent of AVTI enrollments, but they receive only 37 percent of budgets statewide. Only four schools -- Albert Lea, Brainerd, Canby, and Minneapolis -- have "female" budgets which are in excess of female enrollments. In the remaining 29 AVTIs, financial resources apportioned by male students exceed their representation in the student population.

Program Budgets - Trends

The proportion of AVTI budgets spent on female students increased from 1977-78 to 1978-79, and remained constant from 1978-79 to 1979-80. Total budgets statewide increased from \$48.9 million to \$60.0 million over the three-year period.

The net result of these changes was that male students received an additional \$6.0 million while female students received an additional \$5.1 million over that period.

Costs per student increased over the same period by \$198 for male students and \$161 for female students.

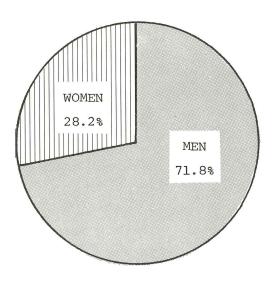


Staff Patterns, 1980-81

Staffing patterns provide another measure of sex equity in vocational education. Female staff can serve as role models for female students, and provide tangible evidence of an institution's commitment to equal opportunity. Both numbers of staff and staff salaries in this report are expressed in full-time equivalents (FTEs).

A substantial majority of the 2,294 AVTI teachers are men. Women represent the minority of teachers, usually less than one-third, at all AVTIs except East Grand Forks (52.7 percent female) and Rochester (57.2 percent female) -- both schools where a majority of students are women.

AVTI POST-SECONDARY TEACHERS, 1980-81



2,294 FTE TEACHERS

Although male and female teachers have the same average years of service statewide, female teachers have significantly lower average salaries. Male teachers have higher average salaries than female teachers at every AVTI but Hibbing, where men earn an average of \$21,049 and women earn an average of \$21,273. However, women have as many or more years of service, on the average, at six AVTIs.

Among all post-secondary administrators, women now account for 14 percent, or about one in seven.

Teachers by Curriculum Area, 1980-81

Women account for just over one in four vocational teachers at the post-secondary level statewide. More than half of female teachers are in health or business and office programs, "female" fields which also account for the majority of female AVTI students. More than half of male teachers are concentrated in technical or trade-industrial programs, which account for the majority of male enrollments and for the smallest numbers of female students.

AVTI TEACHERS BY CURRICULUM AREA, 1980-81

	MALES \(\int \) FEMALES	-
AGRICULTURE	*******	10%
DISTRIBUTION	********	7%
HEALTH		12%
HOME ECONOMICS	Ϋ́νν̈́ν	3%
OFFICE		18%
TECHNICAL	*******	10%
TRADE &	***********	40%
INDUSTRIAL		

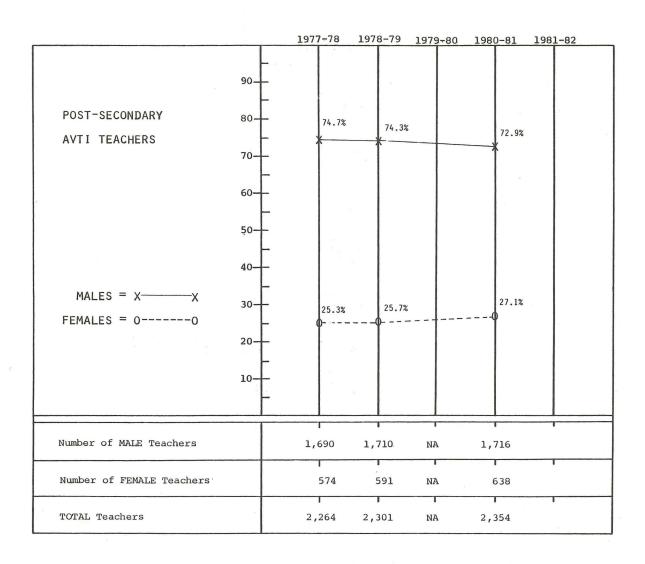
Each figure represents 1% of total post-secondary AVTI teachers, or approximately 20 teachers.

The proportion of teachers who are female is lower than the proportion of students who are female in every program area. Women are 89 percent of the teachers and 92 percent of the students in health programs; 82 percent of the teachers and 84 percent of the students in home economics programs; and 50 percent of the teachers and 82 percent of the students in business and office programs.

Teacher Trends

From 1977-78 to 1980-81, the number of post-secondary vocational teachers increased from 2264 to 2354, a net increase of 91 FTE positions. Of this number, 26 were male teachers and 65 were female teachers. The statewide representation of female teachers increased over this period from 25 percent to 27 percent, with most of the increase occurring over the last two years of this four-year period.

Similar gains occurred in the representation of women among post-secondary vocational administrators, from 11 percent in 1977-78 to 14 percent in 1980-81.



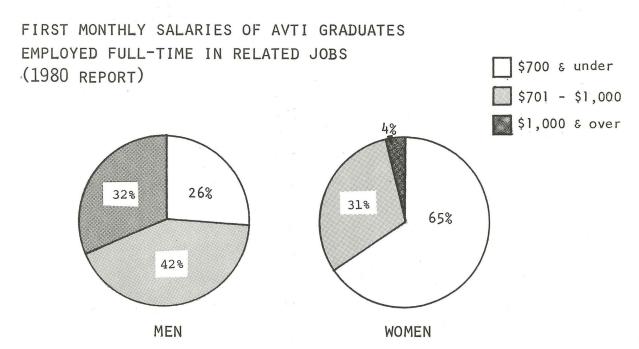
Student Follow-Up, 1980

Information about AVTI students is available from three reports compiled yearly by the Minnesota Vocational Follow-up System: an enrollee report; a termination report; and a one-year follow-up of graduates. The 1980 Report gives information on students enrolled or terminated in 1979-80 and follows up on students who graduated in 1978-79.

Overall, there are few differences between male and female students. The females are likely to be slightly younger, but there are no other differences in personal characteristics or prior vocational training. The women are slightly more likely than the men to be high school graduates, and the men are slightly more likely to have had prior employment experience.

In general, female students are more likely than males to graduate from a program. Overall, about two-thirds of all students either graduate or otherwise attain their vocational objectives. Of the students who do withdraw, the males are more likely to cite economic reasons while the females more often list personal reasons.

The most striking difference between male and female graduates is in their salaries -- three-quarters of the men made over \$700 per month in their first job after graduation, whereas two-thirds of the women made less than that amount. For students employed full-time in jobs related to their training, the median annualized salary for their first job was \$10,428 for men and \$7,632 for women.



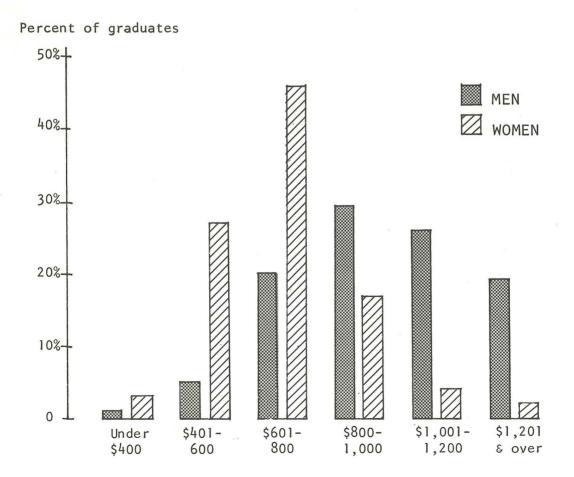
Student Follow-Up, 1980, continued

Both men and women were likely to be employed at the time of the one-year follow-up -- 91 percent of the men and 84 percent of the women. Of these, about two-thirds were in jobs related to their vocational training. The women, however, were more likely to have worked part-time in their first job after graduation.

In their present jobs, women reported a higher level of overall job satisfaction, particularly with job security and safety conditions. The men were more likely to have had formal job advancement in the year since graduation, and were more satisfied with salary and opportunity for promotion.

One year after graduation, salary differentials between men and women continued to prevail. While the majority of women made less than \$800 per month, the majority of men made more than that amount. The median annualized salary was \$11,568 for men and \$8,196 for women -- a wider gap than in their first job.

MONTHLY WAGES ONE YEAR AFTER GRADUATION, AVTI GRADUATES EMPLOYED FULL-TIME IN JOBS RELATED TO TRAINING (1980 REPORT)



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TABLE 1. HEADCOUNT ENROLLMENTS BY SEX, 1979-80

AVTI	Male	Female	Total	Percent
	Students	Students	Students	Female
Albert Lea	440	189	629	30.0 %
Alexandria	875	797	1,672	47.7 %
Anoka	1,502	1,178	2,680	44.0 %
Austin	456	252	708	35.6 %
Bemidji	295	259	554	46.8 %
Brainerd	390	392	782	50.1 % 27.7 % 41.1 % 26.5 % 52.1 %
Canby	295	113	408	
Dakota County	1,082	756	1,838	
Detroit Lakes	682	246	928	
Duluth	1,108	1,203	2,311	
East Grand Forks	415	483	898	53.8 %
Eveleth	198	294	492	59.8 %
Faribault	274	241	515	46.8 %
Granite Falls	318	221	539	41.0 %
Hibbing	330	261	591	44.2 %
Hutchinson	457	293	750	39.1 %
Jackson	630	189	819	23.1 %
Mankato	986	831	1,817	45.7 %
Minneapolis	1,117	1,097	2,214	49.5 %
Moorhead	559	522	1,081	48.3 %
916	2,431	2,188	4,619	47.4 %
Pine City	336	233	569	40.9 %
Pipestone	510	223	733	30.4 %
Red Wing	429	183	612	29.9 %
Rochester	438	936	1,374	68.1 %
St. Cloud	1,146	759	1,905	39.8 % 39.0 % 15.1 % 33.9 % 40.4 %
St. Paul	2,665	1,707	4,372	
Staples	611	109	720	
Suburban Hennepin	3,242	1,659	4,901	
Thief River Falls	369	250	619	
Wadena	298	226	524	43.1 %
Willmar	777	729	1,506	48.4 %
Winona	380	327	707	46.3 %
TOTAL	26,041	19,346	45,387	42.6 %

AVTI	Agricul #M	ture #F	Distrik #M	#F	Health #M	_#F	Home E	conom. #F
Albert Lea Alexandria Anoka Austin Bemidji	61 108 29	12 39 0	52 122 80 14 18	45 254 111 6 14	1 36 2 2	84 615 45 51	14 0 1 	16 44 54
Brainerd Canby Dakota County Detroit Lakes Duluth	81 120 49 60	39 28 12 32	78 176 31 54	48 337 43 88	4 0 1 1 36	96 32 43 35 397	10 47 22	 5 18 10
East Grand Forks Eveleth Faribault Granite Falls Hibbing	90 45 27 	0 1 1	1 12 19 11	21 17 4 14	18 1 1 0 6	218 115 108 41 120	0 0	13 18
Hutchinson Jackson Mankato Minneapolis Moorhead	82 58 119 27	4 4 0 1	39 16 80 46 75	36 10 82 19 84	0 0 10 0	19 214 306 33	 3 4	 22 56
916 Pine City Pipestone Red Wing Rochester	24 203 10 17 3	39 99 1 0	76 93 0 	134 104 27 	169 0 35	519 43 563	23 0 3 0	227 43 12 34
St. Cloud St. Paul Staples Suburban Hennepin Thief River Falls	32 48 153 17	0 0 86 1	128 37 114 11	115 18 110 19	6 43 0 49 0	160 593 9 269 27	0 6 1	51 29 71
Wadena Willmar Winona	180 26	21 3	5 46 29	14 62 38	 0 4	 179 80		
TOTAL	1,729	445	1,463	1,874	425	5,014	134	723

Office #M	#F	Techni #M	cal _#F	Trade #M	& Ind. #F		AL #F	AVTI
22 88 1 19 25	90 348 242 92 190	8 89 210 80	27 2 35 16	344 514 1,066 312 250	11 53 82 93 4	440 875 1,502 456 295	189 797 1,178 252 259	Albert Lea Alexandria Anoka Austin Bemidji
20 12 76 4 88	179 53 234 87 555	16 66 236	 3 19 47	207 137 667 586 612	30 17 77 69 74	390 295 1,082 682 1,108	392 113 756 246 1,203	Brainerd Canby Dakota Detroit Lakes Duluth
14 5 15 29 7	211 123 77 160 39	29 26 120 31	 6 16 3 12	292 163 175 123 275	20 50 22 12 58	415 198 274 318 330	483 294 241 221 261	East Grand Forks Eveleth Faribault Granite Falls Hibbing
13 18 144 109 64	227 136 367 369 342	144 77 241 79 34	6 10 27 16 1	179 461 399 869 359	20 10 119 331 61	457 630 986 1,117 559	293 189 831 1,097 522	Hutchinson Jackson Mankato Minneapolis Moorhead
293 6 77 38 32	769 86 86 54 285	230 132 52	63 19 13	1,616 127 330 239 316	437 5 32 28 22	2,431 336 510 429 438	2,188 233 223 183 936	916 Pine City Pipestone Red Wing Rochester
88 137 135 10	334 584 544 100	148 703 565 63	10 114 64 16	744 1,739 563 2,225 268	89 369 100 515 87	1,146 2,665 611 3,242 369	759 1,707 109 1,659 250	St. Cloud St. Paul Staples Suburban Hennepin Thief River Falls
27 30 17	122 288 121	96 70 48	2 0 3	170 451 256	88 179 82	298 777 380	226 729 327	Wadena Willmar Winona
1,663	7,494	3,593	550	17,034	3,246	26,041	19,346	TOTAL

			d Programs		
AVTI	Total Programs	Male Programs	Female Programs	Total	Integrated Programs
Albert Lea	13	7	1	8	5
Alexandria	31	14	9	23	8
Anoka	39	13	16	29	10
Austin	16	8	3	11	5
Bemidji	11	4	5	9	2
Brainerd	23	8	9	17	6
Canby	13	7	2	9	4
Dakota County	35	18	6	24	11
Detroit Lakes	27	16	6	22	5
Duluth	31	11	11	22	9
East Grand Forks	18	7	10	17	1
Eveleth	12	5	6	11	1
Faribault	16	7	3	10	6
Granite Falls	15	7	6	13	2
Hibbing	14	4	5	9	5
Hutchinson	18	9	6	15	3
Jackson	22	14	6	20	2
Mankato	23	9	5	14	9
Minneapolis	34	14	7	21	13
Moorhead	23	8	8	16	7
916 Pine City Pipestone Red Wing Rochester	55	22	16	38	17
	9	3	4	7	2
	13	8	3	11	2
	18	11	3	14	4
	24	7	14	21	3
St. Cloud	35	19	8	27	8
St. Paul	40	19	12	31	9
Staples	16	10	1	11	5
Suburban Hennepin	52	28	10	38	14
Thief River Falls	16	7	5	12	4
Wadena	15	8	3	11	4
Willmar	27	10	9	19	8
Winona	21	11	8	19	2
TOTAL	775	353	226	579	196

AVT:I		s ll- ale	Total One-Sex Programs	# Studen Female in All- F Progs	Male in All- M Progs	Total Students in One- Sex Progs
Albert Lea Alexandria Anoka Austin Bemidji	3 6 8 1 4	1 8 1 4	4 14 9 5 5	61 283 290 42 163	114 304 69 170 23	175 587 359 212 186
Brainerd Canby Dakota County Detroit Lakes Duluth	7 2 2 2 3	2 5 10 6 0	9 7 12 8 3	154 63 206 32 169	73 172 332 196 0	227 235 538 228 169
East Grand Forks Eveleth Faribault Granite Falls Hibbing	3 3 1 4 2	3 0 3 3	6 3 4 7 3	84 99 76 91 57	168 0 69 136 58	252 99 145 227 115
Hutchinson Jackson Mankato Minneapolis Moorhead	6 5 4 1 6	4 7 5 3 2	10 12 9 4 8	189 90 374 29 235	131 244 292 238 77	320 334 666 267 312
916 Pine City Pipestone Red Wing Rochester	4 2 2 3 5	3 0 5 7 3	7 2 7 10 8	177 75 80 103 254	120 0 180 169 128	297 75 260 272 382
St. Cloud St. Paul Staples Suburban Hennepin Thief River Falls	6 2 1 1 5	7 1 6 6	13 3 7 7 6	316 39 9 15 176	261 136 82 369 52	577 175 91 384 228
Wadena Willmar Winona	2 8 4	4 9 3	6 17 7	78 477 70	65 500 108	143 977 178
TOTAL	119	124	243	4,656	5,036	9,692
Percent of all progra	nms		31.4%			
Percent of all studer	nts			24.1%	19.3%	21.4%

AVTI	Total Male Students	Enrolled in "Male" Programs	n Segregated In "Female" Programs	Programs Total	Enrolled in Integrated Programs
Albert Lea	440	344	0	344	96
Alexandria	875	604	9	613	262
Anoka	1,502	1,163	23	1,186	316
Austin	456	364	5	369	87
Bemidji	295	250	2	252	43
Brainerd	390	312	7	319	71
Canby	295	255	0	255	40
Dakota County	1,082	790	10	800	282
Detroit Lakes	682	577	6	583	99
Duluth	1,108	694	49	743	365
East Grand Forks	415	382	23	405	10
Eveleth	198	184	6	190	8
Faribault	274	185	2	187	87
Granite Falls	318	268	1	269	49
Hibbing	330	202	8	210	120
Hutchinson	457	384	0	384	73
Jackson	630	596	4	600	30
Mankato	986	631	3	634	352
Minneapolis	1,117	748	28	776	341
Moorhead	559	344	2	346	213
916	2,431	1,626	79	1,705	726
Pine City	336	127	6	133	203
Pipestone	510	425	8	433	77
Red Wing	429	381	0	381	48
Rochester	438	357	41	398	40
St. Cloud St. Paul Staples Suburban Hennepin Thief River Falls	1,146 2,665 611 3,242 369	864 2,170 457 2,259 317	6 102 0 43	870 2,272 457 2,302 317	276 393 154 940 52
Wadena	298	255	0	255	43
Willmar	777	534	3	537	240
Winona	380	327	8	335	45
TOTAL	26,041	19,376	484	19,860	6,181

TABLE 6. FEMALE STUDENTS BY PROGRAM TYPE, 1979-80

AVTI	Total Female Students	Enrolled I In "Male" Programs	n Segregated In "Female" Programs	Programs Total	Enrolled in Integrated Programs
Albert Lea	189	11	61	72	117
Alexandria	797	24	526	550	247
Anoka	1,178	64	924	988	190
Austin	252	12	145	157	95
Bemidji	259	4	192	196	63
Brainerd	392	23	240	263	129
Canby	113	6	63	69	44
Dakota County	756	45	476	521	235
Detroit Lakes	246	27	149	176	70
Duluth	1,203	57	943	1,000	203
East Grand Forks	483	20	425	445	38
Eveleth	294	22	249	271	23
Faribault	241	8	161	169	72
Granite Falls	221	10	162	172	49
Hibbing	261	8	159	167	94
Hutchinson	293	21	189	210	83
Jackson	189	24	130	154	35
Mankato	831	21	396	417	414
Minneapolis	1,097	41	646	687	410
Moorhead	522	9	324	333	189
916	2,188	115	1,318	1,433	755
Pine City	233	5	129	134	99
Pipestone	223	14	167	181	42
Red Wing	183	35	103	138	45
Rochester	936	14	866	880	56
St. Cloud	759	44	378	422	337
St. Paul	1,707	154	1,187	1,341	366
Staples	109	7	9	16	93
Suburban Hennepin	1,659	1 5 4	808	962	697
Thief River Falls	250	11	176	187	63
Wadena	226	9	153	162	64
Willmar	729	1	496	497	232
Winona	327	16	248	264	63
TOTAL	19,346	1,036	12,598	13,634	5,712

TABLE 7. ENROLLMENTS BY PROGRAM TYPE, 1979-80 - ALL STUDENTS

AVTI	In Segregate	ed Programs Non- Traditional	In Integrated Programs	Total Students
Albert Lea	405	11	213	629
Alexandria	1,130	33	509	1,672
Anoka	2,087	87	506	2,680
Austin	509	17	182	708
Bemidji	442	6	106	554
Brainerd	552	30	200	782
Canby	318	6	84	408
Dakota County	1,266	55	517	1,838
Detroit Lakes	726	33	169	928
Duluth	1,637	106	568	2,311
East Grand Forks	807	43	48	898
Eveleth	433	28	31	492
Faribault	346	10	159	515
Granite Falls	430	11	98	539
Hibbing	361	16	214	591
Hutchinson	573	21	156	750
Jackson	726	28	65	819
Mankato	1,027	24	766	1,817
Minneapolis	1,394	69	751	2,214
Moorhead	668	11	402	1,081
916	3,612	194	1,481	4,619
Pine City	256	11	302	569
Pipestone	592	22	119	733
Red Wing	484	35	93	612
Rochester	1,223	55	96	1,374
St. Cloud	1,242	50	613	1,905
St. Paul	3,357	256	759	4,372
Staples	466	7	247	720
Suburban Hennepin	3,067	197	1,637	4,901
Thief River Falls	493	11	115	619
Wadena	408	9	107	524
Willmar	1,030	4	472	1,506
Winona	575	24	108	707
TOTAL	31,974	1,520	11,893	45,387

		Net Budget	Budget-	Percent	
AVTI	Total	Male Students	Female Students	Percent Female	Female Students
Albert Lea	\$ 845,188	\$ 577,111	\$ 268,077	31.7 %	30.0 %
Alexandria	2,947,430	1,763,150	1,184,280	40.2 %	47.7 %
Anoka	3,670,496	2,419,391	1,251,105	34.1 %	44.0 %
Austin	1,134,840	815,149	319,691	28.2 %	35.6 %
Bemidji	939,316	560,324	378,992	40.3 %	46.8 %
Brainerd	1,186,566	544,400	642,166	54.1 %	50.1 % 27.7 % 41.1 % 26.5 % 52.1 %
Canby	846,139	602,596	243,543	28.8 %	
Dakota County	3,579,004	2,408,404	1,170,600	32.7 %	
Detroit Lakes	1,410,472	1,051,871	358,601	25.4 %	
Duluth	2,117,501	1,222,562	894,939	42.3 %	
East Grand Forks	1,088,698	576,053	512,645	47.1 % 55.6 % 41.7 % 35.2 % 41.3 %	53.8 %
Eveleth	585,929	260,335	325,594		59.8 %
Faribault	877,159	511,277	365,882		46.8 %
Granite Falls	838,652	543,467	295,185		41.0 %
Hibbing	757,441	444,331	313,110		44.2 %
Hutchinson	1,472,108	994,017	478,091	32.5 %	39.1 %
Jackson	1,216,684	942,341	274,343	22.5 %	23.1 %
Mankato	2,165,101	1,238,824	926,277	42.8 %	45.7 %
Minneapolis	2,430,476	1,186,889	1,243,587	51.2 %	49.5 %
Moorhead	1,524,816	935,159	589,657	38.7 %	48.3 %
916 Pine City Pipestone Red Wing Rochester	3,870,939 429,499 988,351 934,922 1,759,127	2,250,999 295,521 737,530 669,335 670,882	1,619,940 133,978 250,821 265,587 1,088,245	41.8 % 31.2 % 25.4 % 28.4 % 61.9 %	47.4 % 40.9 % 30.4 % 29.9 % 68.1 %
St. Cloud St. Paul Staples Suburban Hennepin Thief River Falls	2,643,707 3,662,400 1,956,974 7,120,345 968,248	1,636,662 2,289,848 1,708,748 5,041,207 698,667	1,007,045 1,372,552 248,226 2,079,138 269,581	38.1 % 37.5 % 12.7 % 29.2 % 27.8 %	39.8 % 39.0 % 15.1 % 33.9 % 40.4 %
Wadena	857,730	579,390	278,340	32.5 %	43.1 %
Willmar	2,370,982	1,422,034	948,948	40.0 %	48.4 %
Winona	841,078	532,903	308,175	36.6 %	46.3 %
TOTAL	\$ 60,038,318	\$ 38,131,377	\$ 21,906,941	36.5 %	42.6 %

AVTI	Cost Males	per Student Females	Total	F/M Ratio
Albert Lea	\$ 1,312	\$ 1,418	\$ 1,344	108.1.%
Alexandria	2,015	1,486	1,763	73.7 %
Anoka	1,611	1,062	1,370	65.9 %
Austin	1,788	1,269	1,603	71.0 %
Bemidji	1,899	1,463	1,696	77.0 %
Brainerd	1,396	1,638	1,517	117.3 % 105.5 % 69.5 % 94.6 % 67.5 %
Canby	2,043	2,155	2,073	
Dakota County	2,226	1,548	1,947	
Detroit Lakes	1,542	1,458	1,520	
Duluth	1,103	744	916	
East Grand Forks	1,388	1,061	1,212	76.4 %
Eveleth	1,315	1,107	1,191	84.2 %
Faribault	1,866	1,518	1,703	81.4 %
Granite Falls	1,709	1,336	1,556	78.2 %
Hibbing	1,346	1,200	1,282	89.2 %
Hutchinson	2,175	1,632	1,963	75.0 %
Jackson	1,496	1,452	1,486	97.1 %
Mankato	1,256	1,115	1,192	88.8 %
Minneapolis	1,063	1,134	1,098	106.7 %
Moorhead	1,673	1,130	1,411	67.5 %
916	926	740	838	79.9 % 65.3 % 77.8 % 93.0 % 75.9 %
Pine City	880	575	755	
Pipestone	1,446	1,125	1,348	
Red Wing	1,560	1,451	1,528	
Rochester	1,532	1,163	1,280	
St. Cloud	1,428	1,327	1,388	92.9 %
St. Paul	859	804	838	93.6 %
Staples	2,797	2,277	2,718	81.4 %
Suburban Hennepin	1,555	1,253	1,453	80.6 %
Thief River Falls	1,893	1,078	1,564	56.9 %
Wadena	1,944	1,232	1,637	63.4 %
Willmar	1,830	1,302	1,574	71.1 %
Winona	1,402	942	1,190	67.2 %
TOTAL	\$ 1,463	\$ 1,134	\$ 1,323	77.3 %

AVTI	# Male Teachers (FTE)	<pre># Female Teachers (FTE)</pre>	# Total Teachers (FTE)	% Female Teachers
Albert Lea Alexandria Anoka Austin Bemidji	31.0 85.0 102.0 38.0	8.0 22.0 48.0 12.0 13.2	39.0 107.0 150.0 50.0 46.2	20.5 % 20.6 % 32.0 % 24.0 % 28.6 %
Brainerd	38.0	18.0	56.0	32.1 % 17.0 % 26.6 % 16.9 % 32.9 %
Canby	29.2	6.0	35.2	
Dakota County	86.0	31.2	117.2	
Detroit Lakes	54.0	11.0	65.0	
Duluth	50.0	24.5	74.5	
East Grand Forks	25.5	24.0	49.5	52.7 % 32.0 % 25.0 % 20.5 % 25.0 %
Eveleth	17.0	8.0	25.0	
Faribault	30.0	10.0	40.0	
Granite Falls	28.7	7.4	36.1	
Hibbing	27.0	9.0	36.0	
Hutchinson	34.0	14.6	48.6	30.0 %
Jackson	38.7	2.2	40.9	5.4 %
Mankato	68.0	23.8	91.8	25.9 %
Minneapolis	61.0	33.9	94.9	35.7 %
Moorhead	47.4	19.8	67.2	29.5 %
916	75.1	40.3	115.4	34.9 % ** 17.7 % 23.6 % 57.2 %
Pine City	*	*	*	
Pipestone	32.5	7.0	39.5	
Red Wing	33.0	10.2	43.2	
Rochester	32.0	42.8	74.8	
St. Cloud	68.2	30.0	98.2	30.5 % 36.4 % 5.7 % 20.0 % 27.7 %
St. Paul	113.4	65.0	178.4	
Staples	39.6	2.4	42.0	
Suburban Hennepin	153.4	37.3	190.7	
Thief River Falls	32.4	12.4	44.8	
Wadena	33.6	6.2	39.8	15.6 %
Willmar	82.0	32.1	114.1	28.1 %
Winona	29.0	13.6	42.6	31.9 %
TOTAL	1,647.7	645.9	2,293.6	28.2 %

 $[\]mbox{*}$ Staff data are not available for Pine City AVTI.

AVTI	Average Ann	nual Salary Females	Average Yea	ars Service Females
Albert Lea	\$ 22,585	\$ 15,571	8.7 yrs	5.8 yrs
Alexandria	21,476	14,693	10.0	6.9
Anoka	23,442	18,164	9.2	9.2
Austin	21,109	19,320	13.7	9.9
Bemidji	20,671	16,669	8.9	7.3
Brainerd	20,229	17,825	10.5	9.9
Canby	21,420	12,849	11.0	9.8
Dakota County	20,295	18,675	7.3	6.2
Detroit Lakes	20,291	17,502	9.0	8.8
Duluth	19,469	17,426	11.6	10.5
East Grand Forks	18,073	11,903	18.8	12.5
Eveleth	18,866	17,316	9.2	8.1
Faribault	21,992	18,489	11.5	10.8
Granite Falls	19,397	14,865	10.2	9.4
Hibbing	21,049	21,273	7.6	10.3
Hutchinson	19,652	16,715	12.6	13.5
Jackson	22,738	12,480	13.0	7.0
Mankato	23,165	18,068	8.2	6.3
Minneapolis	26,124	24,606	12.9	10.4
Moorhead	22,617	17,830	10.7	11.1
916	22,993	20,497	6.6	5.9
Pine City	*	*	*	*
Pipestone	22,347	16,682	11.0	7.3
Red Wing	21,254	18,994	8.9	15.1
Rochester	20,676	17,497	17.0	14.1
St. Cloud	23,286	19,183	12.5	11.3
St. Paul	24,732	19,445	12.7	11.5
Staples	24,932	16,746	8.1	18.0
Suburban Hennepin	25,828	20,900	8.1	5.7
Thief River Falls	20,648	15,544	13.6	9.0
Wadena	19,792	15,648	8.2	4.3
Willmar	23,843	19,101	14.4	9.3
Winona	21,639	17,963	11.1	9.6
TOTAL	\$ 22,480	\$ 18,366	10.3 yrs	10.3 yrs

 $[\]boldsymbol{\star}$ Staff data are not available for Pine City AVTI.

Definitions

All data in this report are from the Minnesota Department of Education, as reported by local school districts. Student information is for the school year July 1, 1979 to June 30, 1980 and previous years. Staff information is for the school year 1980-81 as reported on October 1, 1980, and previous years. In this report, the following definitions are used:

Headcount. The annual headcount includes every student enrolled in an AVTI during the year, and does not control for the amount of time a student is enrolled.

Program. For the purposes of this report, programs have been limited to courses of study related to an occupation such as Health Aide or Welding. Special needs programs and other administrative and support programs have not been included. In counting the number of prorgams statewide, a similar course offered at two different AVTIs is considered two programs.

<u>Curriculum Area or Cluster</u>. Curriculum areas or clusters are groupings of programs into seven areas: Agriculture, Distribution, Health, Home Economics, Business and Office, Technical, and Trade-Industry.

Segregated Programs. Programs are considered segregated if over 80 percent of their enrollments are of one sex.

Integrated Programs. A program which is not segregated is considered
integrated.

"Male" Programs. A segregated program is considered a "male" program if over 80 percent of the students are male. Since this definition is based on actual enrollments, a program may be a "male" program at one AVTI, but an integrated program at another.

"Female" Programs. A segregated program is considered a "female" program if over 80 percent of the students are female.

Traditional. If a female student is enrolled in a program in which over 80 percent of students are female, she is considered enrolled in a traditional program. Similarly a male student enrolled in a program which is over 80 percent male is considered enrolled in a traditional program. Students in traditional programs are referred to as traditional students.

Non-traditional. If a male or a female student is enrolled in a program in which over 80 percent of students are of the other sex, that person is considered enrolled in a non-traditional program and is referred to as a non-traditional student.

Net Budget. Program budgets in this report give expenditures for an instructional program which include all salaries, fringe benefits, supplies and materials, purchased services, and other expenses connected with the program, but does not include general administration and general support services in that AVTI. Program revenues have been subtracted.

Definitions, continued

"Male" Budget. A "male" budget is calculated by apportioning the net budget for a program in the same ratio as there are male students. For example, a net budget of \$100,000 in a program where 75 percent of students are male would have a male budget of \$75,000.

"Female" Budget. A "female" budget is calculated by apportioning the budget for a program according to the percentage of female students. In the example above, the female budget would be \$25,000.

Cost per headcount. The cost per headcount is calculated by dividing the net budget for a program or an AVTI by the headcount for that program or AVTI. The cost per headcount for females is calculated by dividing the female budget by the female headcount for that program or AVTI, and the same method is used for calculating the male cost per headcount.

Average yearly salary. This salary is the total contracted salary based on full-time equivalence, and therefore controls for the number of weeks worked and for part-time employment.

Average years of service. Years of service refers to total years as a licensed teacher or administrator, not simply as an employee of a particular institution.

VOCATIONAL EDUCATION SEX EQUITY REPORT POST-SECONDARY 1981

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