840333

## VOCATIONAL EDUCATION SEX EQUITY REPORT: POST-SECONDARY 1983



## TABLE OF CONTENTS

INTRODUCTION ..... 2
AVTI ENROLLMENTS ..... 3
AVTI Enrollment Trends
Program Types
Enrollments by Program Type
CURRICULUM AREAS ..... 12
Enrollment by Curriculum AreaCurriculum. Area - Trends
PROGRAM BUDGETS ..... 17
Program Budgets - Trends
STAFF PATTERNS ..... 19
Teachers by Curriculum AreaStaff Trends
STUDENT TERMINATION \& FOLLOW-UP ..... 22
TABLES ..... 25
DEFINITIONS ..... 43

## INTRODUCTION

Our economy is changing to accommodate the needs of a more serviceoriented, high technology society. New occupations are being created and old occupations are becoming obsolete. At the same time, high unemployment is creating a demand for job training or retraining that will lead to gainful employment for thousands of Minnesotans.

Economic changes pose special challenges for sex equity. Will men and women have access to the full range of occupations? Will retraining be provided on an equal basis to men and women whose skills are outmoded? Will the vocational education system ensure that both men and women are prepared for jobs that are adequately paid?

Vocational education cannot respond to future economic changes without recognizing the ongoing changes in women's life patterns. The increased labor force participation of women continues to be the most significant economic development of the last half century.

More than 60 percent of working age women are now in the Minnesota labor force, including more than two-thirds of women with school-age children and more than half of women with preschool-age children.

Despite women's rising labor force rates, the "feminization of poverty" continues. Two out of three adults living in poverty are women. Women and children in female-headed families with no father present are particularly vulnerable.

In order to break the cycle of poverty, women must have access to higher-paid employment. This will require adequate vocational preparation.

*     * $*$

This report is the seventh in a series presenting data on the status of men and women in Minnesota's AVTI system. The format is similar to that of last year's publication. The body of the report provides current and fiveyear trend data statewide for enrollments, budgets, and staff patterns. A detailed appendix provides information for individual AVTIs, a course-by-course statewide listing, and definitions.

For the first time, information is included about students who drop out before completing programs (see page 21). These data give some indication of differences in retention of male and female students.

The five-year statewide analysis shows some improvement in a number of areas. Female enrollments have increased, the number of integrated programs has increased, and the number of non-traditional students has increased. Health, home economics, office, technical, and trade-industrial programs are more evenly balanced by sex, and staff patterns are improving.

However, sex equity is far from accomplished. In many areas, improvement has been very slight or very slow. In other areas -- such as female enrollments in agriculture and distribution courses -- there is less balance than there was five years ago.

The data presented in this report can be used both statewide and at individual schools. Statistical information is no substitute for active sex equity efforts. However, the statistics can be used to indicate areas needing special efforts and to measure progress.

## AVTI ENROLLMENTS; 1981-1982

Male students account for the majority of AVTI enrollments. In 1981-82, the total statewide enrollment of 49,885 consisted of 20,512 female students and 29,373 male students.

The AVTI system has a lower percentage of female students than all other public post-secondary systems in Minnesota -- the Community College system (59 percent female), the State University system (53 percent female), and the University of Minnesota system ( 45 percent female). In the fall of 1981, AVTIs had higher enrollments than any of these systems except the University of Minnesota.

Women are the majority of students at three AVTIs: Brainerd, Eveleth, and Rochester. At eight additional AVTIs, women represent less than one-third of students. Women account for one-third to one-half of students at the remaining 22 AVTIs. (See Table l.)

AVTI HEADCOUNTS, 1981-82


49,885 students

Except where otherwise noted, all enrollment data in this report refer to an actual student headcount of all students enrolled at a particular time during the school year. Average daily membership, the usual measure of enrollment, is not reported by sex. Enrollment data also exclude students participating in special needs programs except as noted.

## AVTI ENROLLMENT TRENDS

Total enrollment in Minnesota's AVTIs increased by 1,835 students between 1980-81 and 1981-82. However, the percentage of AVTI students who are women dropped slightly.

Overall, female en rollments have remained fairly constant over the last five years. In this period, there has been a 19 percent increase in female students and a 16 percent increase in male students.


## PROGRAM TYPES, 1981-82

A total of 780 programs are offered at individual AVTIs in the state, with an average of 24 programs per school.

More than three-fourths of AVTI programs are "segregated." This term is not meant to imply that segregation is intentional. In this report, a segregated program is defined as one in which more than 80 percent of the students are of one sex.

Segregated programs in which more than 80 percent of students are men are defined as "male" programs, and those in which more than 80 percent of the students are women are defined as "female" programs. All other programs are considered "integrated."

For example, Auto Mechanics is usually a segregated "male" course and Nursing 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.

## AVTI PRograms, 1981-82



780 PROGRAMS

Of the 780 programs offered at individual AVTIs, 373 are segregated "male" programs and 217 are segregated "female" programs. In fact, more than one in four programs are either all-male or all-female. (See Tables 2 and 3.)

## PROGRAM TYPES - TRENDS

The number of AVTI programs which are integrated decreased in the last year after four years of steady increases.

The total number of programs offered at individual AVTIs has increased by 3 percent in this period, while the number of integrated programs has increased by 15 percent. However, integrated programs still account for less than one-quarter of all AVTI programs.


## PROGRAM TYPES - TRENDS, continued

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

Data for 1981-82 show a slight reversal of the trend toward equalizing numbers of "male" and "female" programs. However, there has been a net decrease in the number of "male" programs and a corresponding increase in the number of "female" programs over the past five years.


## ENROLLMENTS BY PROGRAM TYPE, 1981-82

The number of students enrolled in a program varies widely, from 6 students in Materials/Inventory Management at St. Cloud AVTI to 616 in General Office Typing at Suburban Hennepin AVTI. For this reason, it is helpful to compare the numbers of students, as well as the numbers of programs, to determine enrollment patterns by sex.

A "traditional" student is one enrolled in a segregated program dominated by students of the same sex -- men in "male" courses and women in "female" courses. A "non-traditional" student is one enrolled in a course in which more than 80 percent of students are of the other sex.

As shown in the chart below, the large majority of AVTI students are enrolled in traditional programs, while about 1 in 27 students are enrolled in programs which are non-traditional for their sex. Just over one-quarter of all AVTI students are enrolled in integrated programs.

AVTI ENROLLMENT BY PROGRAM TYPE, 1981-82


At six AVTIs -- Albert Lea, Dakota County, Mankato, Minneapolis, 916, and St. Cloud -- integrated programs account for more than one-third of all students.

Hibbing, Red Wing, and St. Paul have the largest proportion of students enrolled in non-traditional programs, accounting for 6 percent of all students at these schools. (See Table 4.)

## ENROLLMENTS BY PROGRAM TYPE, continued

Both male and female students are likely to be enrolled in programs which are traditional for their sex, and unlikely to be enrolled in nontraditional programs. However, there are differences in the enrollment patterns of men and women attending AVTIs.

Female students are more likely than male students to be enrolled in integrated programs -- 31 percent of women compared with 22 percent of men. Female students are almost three times as likely as male students to be enrolled in non-traditional programs -- about 1 in 17 female students compared with about 1 in 48 male students. (See Tables $5 \& 6$.)

## AVti enrollment by program type, 1981-82




29,373 MALE STUDENTS


20,512 female students

Statewide, almost one-sixth of AVTI students are enrolled in programs which are either all-male or all-female. There are 5,100 male students in programs with no women, and 3,560 female students in courses with no men. (See Table 3.)

In addition, many courses have only 1 female student or only 1 male student. These pioneering students are in courses with an average of 50 students of the other sex. Seventy-three women are "the only woman" in courses such as Auto Body Mechanics and Construction Electricity. Forty men are "the only man" in courses such as Practical Nursing and Child Care.

## ENROLLMENTS BY PROGRAM TYPE - TRENDS

Very little change has occurred in enrollment patterns for traditional, non-traditional, and integrated programs in the last three years. However, over the past five years there have been gains in integrated and non-traditional enrollments, and a corresponding decrease in traditional enrollments.

The proportion of students enrolled in integrated programs has increased from just over one-fifth of all students to more than one-quarter of students. Although non-traditional programs still account for less than 1 in 25 students, there have been small increases in this area almost every year.


## ENROLLMENTS BY PROGRAM TYPE - TRENDS, cont.

There has been more change in female enrollment patterns than in male enrollment patterns over the last five years.

Female integrated enrollments have increased from fewer than 1 in 4 to almost 1 in 3. There have also been small but fairly steady increases in female non-traditional enrollments.



In the past five years, there has been positive change in male enrollment patterns. However, this change has been at a slower rate than that of female enrollments.

Male enrollments in integrated programs have increased from about 1 in 5 five years ago, but they have not yet reached 1 in 4.

## ENROLLMENT BY CURRICULUM AREA, 1981-82

The chart below shows the distribution of male and female students in the seven AVTI curriculum areas.

About twothirds of female students are enrolled in health or business-office programs, while more than three-fourths of male students are en rolled in.technical or trade-industrial programs. (See Table 7.)

AVTI HEADCOUNT BY CURRICULUM AREA, 1981-82

|  | - males fif females |  |
| :---: | :---: | :---: |
| AGRICULTURE | MN1才 | 5\% |
| DISTRIBUTION | M197T0 | 7\% |
| HEALTH |  | 11\% |
| HOME ECONOMICS | M17 | 3\% |
| OFFICE |  | 2:1\% |
| TECHNICAL | MMMMIM | 10\% |
| TRADE \& INDUSTRIAL |  <br>  | 43\% |

Each figure represents approximately 1\% of total enrollment, 0.) 499 students.

There is also segregation within program areas. For example, three-fourths of male office students are enrolled in just 3 of the 28 courses offered: Accounting, Computer Programming, and Computer Operations.

More than half of female students in the trade-industrial area are enrolled in just 4 of the 73 courses: Commercial Art, Graphic Arts, Cosmetology, and Food Preparation Cooking. (See Table 10.)

## ENROLLMENT BY CURRICULUM AREA - TRENDS

There have been few changes in the patterns of male and female enrollment by program over the last five years. Agriculture, technical, and trade-industrial courses continue to be "male" courses; health, home economics, and business-office courses continue to be "female" courses. Distribution courses are less balanced than they were five years ago.

However, enrollments have become somewhat more balanced in health, home economics, business-office, technical, and trade-industrial courses in the past five years.

The charts below and on the following pages show changes in enrollment patterns by curriculum area. For more information on enrollment in specific courses in 1981-82, see Table 10 in the appendix to this report.

Women represent about 1 in 7 agriculture students.

In the past year, female enrollments in this area dropped to a level below that of 1977.

Of the 15 agriculture courses offered statewide, 10 are "male" courses and 5 are integrated courses. The "male" courses account for more than three-fourths of students.


## CURRICULUM AREA - TRENDS, con't.

Distribution has historically been the most balanced by sex of the curriculum areas, and the past five years have seen little change in this area.

Of the 27 distribution programs offered statewide, 14 are integrated while 8 are "male" courses and 5 are "female" courses. Nearly two-thirds of students are enrolled in the integrated courses.



Men now represent about 1 in 9 health students. Their enrollment has increased by 61 percent over the last five years, compared to a 6 percent increase in female enrollments.

Of the 21 health courses offered statewide, 13 are "female" courses while 3 are "male" courses and 5 are integrated courses. Ninety percent of health students are enrolled in a "female" class.

## CURRICULUM AREA - TRENDS, con't.

There has been more change in the home economics area than any other in the last 5 years.

Men now represent almost 1 in 3 home economics students, and their enrollments have more than tripled in the past five years while female enrollments have not quite doubled.

Of the 12 home economics courses offered statewide, 6 are "female", 5 are integrated and 1 is "male." Almost three-fifths of the students are enrolled in the "female" courses.



Men represent 1 in 5 businessoffice students, and there has been little change in this area in the past five years.

Of the 28 courses offered statewide, 20 are "female" courses and 8 are integrated courses. However, 44 percent of the students are enrolled in the integrated courses.

## CURRICULUM AREA - TRENDS, con't.

Women account for about 1 in 8 technical students. Although their representation decreased in the last two years, it remains above the level of five years ago.

Of the 23 technica 1 courses offered statewide, 17 are "male" courses and 6 are integrated courses. The "male" courses account for fourfifths of the students.


Women account for about 1 in 7 trade-industrial students. Although their representation decreased in the last two years, it remains above the level of five years ago.

Of the 73 trade-industrial courses offered statewide, 52 are "male," 1 (Cosmetology) is "female," and 20 are integrated. The integrated courses account for 19 per-. cent of students.

There are 10 courses with no female students.

## PROGRAM BUDGETS; 1981-82

Program expenditures provide another method of measuring sex equity. The program budget of the AVTI system totals $\$ 72.1 \mathrm{million}$, 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, $\$ 46.3$ miliion is spent on male students and $\$ 25.8$ million is spent on female students, a ratio of almost two to one.

Program costs are apportioned by applying male and female enrollment 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. (See Tables 11 and 12.)

## AVTI PROGRAM COSTS APPORTIONED BY SEX OF STUDENT



1981-82 program budget - $\$ 72.1$ million

Women account for 41 percent of AVTI enrollments, but they receive only 36 percent of budgets statewide. Only three schools -- Brainerd, Faribault, and Red Wing -- have "female" budgets which are in excess of female enrollments. In the remaining 30 AVTIs, financial resources apportioned to male students exceed their representation in the student population.

## PROGRAM BUDGETS - TRENDS

The proportion of AVTI budgets spent on female students remains slightly above the level of five years ago. Total budgets statewide increased from $\$ 48.9$ million to $\$ 72.1$ million over this five-year period.

The net result of these changes was that male students received an additional $\$ 14.2$ million while female students received an additional \$9.0 million over this period.

Costs per student increased in the same period by $\$ 312$ for male students and by $\$ 287$ for female students.


## STAFF PATTERNS, 1981-82

Staff patterns provide another measure of sex equity in vocational education. Staff data in this report are expressed in full-time equivalents (FTEs).

There are 2,370 AVTI teachers, including those in vocational-related activities as well as those in the seven curriculum areas. Less than one-third of the teachers are women. The only school where a majority of teachers are women is Rochester AVTI, where women account for 60 percent of students and 56 percent of teachers. (See Table 13.)

## AVTI POST-SECONDARY TEACHERS, 1981-82



## 2,370 FTE TEACHERS

Female teachers have lower average salaries than male teachers at 32 of the 33 AVTIs, including 5 schools where the women have more years of service than their male counterparts. The exception is Hibbing AVTI, where the women earn an average of $\$ 162$ more per year with an average of 3.7 more years of service.

Statewide, men now earn an average of $\$ 1,954$ per year of service, compared with $\$ 1,795$ for women. (See Table 14.)

Women now account for 18 percent of post-secondary administrators in the state.

## TEACHERS BY CURRICULUM AREA, 1981-82

The chart below shows the distribution of teachers by curriculum area, excluding vocational related activities. More than three-fourths of female teachers are in health or business-office programs, while more than three-fifths of male teachers are in technical or trade-industrial programs.

Only 10.9 of the $1,989.4$ FTE teachers are women in technical or tradeindustrial programs -- accounting for about 1 percent of all teachers in these areas.

AVTI TEACHERS BY CURRICULUM AREA, 1981-82

## Y MALES $\cap_{\text {FEMALES }}$

| AGRICULTURE | \&RM盟 | 7\% |
| :---: | :---: | :---: |
| DISTRIBUTION |  | 7\% |
| HEALTH |  | 12\% |
| HOME ECONOMICS |  | 8\% |
| OFFICE |  | 19\% |
| TECHNICAL |  | 11\% |
| TRADE \& | \&NMMMMMMMMMM | 5\% |
| INDUSTRIAL | MMMMMMI |  |

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 almost every program area. This is true even for some "'female" areas such as business-office, where women are 80 percent of the students but only 48 percent of the teachers.

## STAFF TRENDS

In the last five years, there was a net increase of 106 FTE teaching positions at Minnesota AVTIs. Of this number, 5 were male teachers and 101 were female teachers. The statewide representation of female teachers increased accordingly over this period, from 25 percent to 28.5 percent of all AVTI teachers.

Similar gains occurred in the representation of women among postsecondary vocational administrators and supervisors, from 11 percent in 1977-78 to 19 percent in 1981-82.


## STUDENT TERMINATION AND FOLLOW-UP; 1981-82

## TERMINATION

During the 1981-82 school year, there were 12,161 women and 15,94] men who left an AVTI program. These "terminations" consist of students who complete a program as well as those who drop out before completion.

Overall, there are few differences between male and female terminations. Men are more likely than women to drop out, with dropouts accounting for 33 percent of male terminations compared with 28 percent of female terminations.

Of those who complete a program, 88 percent of the men and 86 percent of the women are available for job placement -- and the large majority in each group are placed in jobs related to their vocational training.

Some differences are evident by curriculum area. Men are more likely than women to drop out of health and business-office courses, while women are more likely to drop out of technical courses. Men have higher placement rates than women in agriculture and home economics.

Thirty-six percent of female non-traditional students who terminate are dropouts, compared with 24 percent of female students in traditional programs. However, the women who complete non-traditional programs have a higher job placement rate than the women who complete traditional programs, 80 percent compared with 75 percent.

```
* * * * *
```


## FOLLOW-UP

Data are also available for 6,619 women and 6,763 men who completed AVTI programs in fiscal year 1981 and who responded to a survey one year later. In general, there are few differences between male and female graduates except in occupation and earnings.

Most graduates -- 81 percent of the women and 82 percent of the men -are employed one year later. Both male and female graduates are likely to work full time, although more women than men work part time. Seventy percent of the women and 76 percent of the men are employed in jobs related to their training.

Female graduates express a higher level of satisfaction than male graduates in most questions related to their AVTI experience and their present jobs. However, male graduates are more satisfied with their salary and advancement potential. Twenty-six percent of male graduates and 21 percent of female graduates report that they have received job advancement in the first year after graduation.

Employers are more likely to rank female graduates above average on each measure included in the survey: quality of work, quantity of work, knowledge important to job success, ability to operate equipment, and reading, verbal, and computational skills.

## FOLLOW-UP, continued

There are significant differences between male and female AVTI graduates in their occupations and earnings one year later. Both men and women are in occupations traditional for their sex, and the women earn less.

The largest occupational cluster for male graduates is tradeindustrial jobs, while the largest cluster for women is office jobs. The single most likely occupation for the men is Auto Mechanic. For women, the single most likely occupation is Licensed Practical Nurse.

One year after completing their vocational training, the women working full time had median earnings of $\$ 9,756$ compared with $\$ 12,048$ for their male counterparts.

MONTHLY WAGES ONE YEAR AFTER GRADUATION,
AVTI GRADUATES EMPLOYED FULL-TIME IN JOBS RELATED TO TRAINING (1982 REPORT)


MEN


WOMEN

The state minimum wage in 1982 was $\$ 3.35$ per hour, or $\$ 581$ per month for full time employees. Although most AVTI graduates earned more than this, the women were more than twice as likely as the men to have earnings at or near minimum wage -- 15 percent of the female graduates and 7 percent of the male graduates earned $\$ 600$ per month or less.

## LIST OF TABLES

Table 1. Headcount Enrollments by Sex ..... 26
Table 2. Segregated \& Integrated Programs ..... 27
Table 3. Single-Sex Programs E Enrollments ..... 28
Table 4. Enrollments by Program Type - All Students ..... 29
Table 5. Enrollments by Program Type - Males ..... 30
Table 6. Enrollments by Program Type - Females ..... 31
Table 7. Enrollments by Curriculum Area ..... 32
Table 8. Curriculum Area by Program Type - Number of Programs ..... 34
Table 9. Curriculum Area by Program Type - Number of Students ..... 34
Table 10. Enrollments by Course ..... 35
Agriculture Distribution Health Occupations Business Technical Occupations Trade E Industrial
Table 11. Program Budgets ..... 39
Table 12. Program Cost per Student ..... 40
Table 13. Post-Secondary Vocational Teachers ..... 41
Table 14. Vocational Teacher Salaries \& Tenure ..... 42

TABLE 1, HEADCOUNT ENROLLMENTS BY SEX, 1981-82

| AVTI | Male <br> Students | Female <br> Students | Total Students | Percent Female |
| :---: | :---: | :---: | :---: | :---: |
| Albert Lea | 433 | 201 | 634 | 31.7 \% |
| Alexandria | 978 | 838 | 1,816 | 46.1 \% |
| Anoka | 1,685 | 1,187 | 2,872 | 41.3 \% |
| Austin | 544 | 343 | 887 | 38.7 \% |
| Bemidji | 280 | 225 | 505 | 44.6 \% |
| Brainerd | 351 | 396 | 747 | 53.0\% |
| Canby | 337 | 146 | 483 | 30.2 \% |
| Dakota County | 1,371 | 1,014 | 2,385 | 42.5 \% |
| Detroit Lakes | 663 | 274 | 937 | 29.2 \% |
| Duluth | 1,127 | 1,046 | 2,173 | 48.1\% |
| East Grand Forks | 435 | 402 | 837 | 48.0\% |
| Eveleth | 184 | 220 | 404 | 54.5 \% |
| Faribault | 316 | 208 | 524 | 39.7 \% |
| Granite Falls | 315 | 283 | 598 | 47.3\% |
| Hibbing | 484 | 252 | 736 | 34.2\% |
| Hutchinson | 563 | 401 | 964 | 41.6 \% |
| Jackson | 562 | 261 | 823 | 31.7 \% |
| Mankato | 1,103 | 883 | 1,986 | 44.5 \% |
| Minneapolis | 2,064 | 1,548 | 3,612 | 42.9 \% |
| Moorhead | 588 | 462 | 1,050 | 44.0\% |
| 916 | 2,239 | 2,136 | 4,375 | 48.8\% |
| Pine City | 279 | 124 | 403 | 30.8\% |
| Pipestone | 555 | 237 | 792 | 29.9\% |
| Red Wing | 713 | 225 | 938 | 24.0 \% |
| Rochester | 562 | 854 | 1,416 | 60.3 \% |
| St. Cloud | 1,319 | 819 | 2,138 | 38.3\% |
| St. Paul | 2,731 | 1,724 | 4,455 | 38.7 \% |
| Staples | 626 | 118 | 744 | 15.9\% |
| Suburban Hennepin | 3,549 | 1,865 | 5,414 | 34.4 \% |
| Thief River Falls | 449 | 276 | 725 | 38.1 \% |
| Wadena | 486 | 291 | 777 | 37.5\% |
| Willmar | 1,019 | 954 | 1,973 | 48.4\% |
| Winona | 463 | 299 | 762 | 39.2 \% |
| TOTAL | 29,373 | 20,512 | 49,885 | 41.1 \% |

table 2. Segregated and integrated programs, 1981-82

| AVTI | Total Programs | Segregated Programs |  |  | Integrated Programs | Percent <br> Integrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | "Male" | "Female" |  |  |  |
|  |  | Programs | Programs | Total |  |  |
| Albert Lea | 13 | 6 | 1 | 7 | 6 | 46.2 \% |
| Alexandria | 33 | 15 | 10 | 25 | 8 | 24.2 \% |
| Anoka | 38 | 14 | 15 | 29 | 9 | 23.7 \% |
| Austin | 16 | 8 | 4 | 12 | 4 | 25.0\% |
| Bemidji | 13 | 5 | 5 | 10 | 3 | 23.1 \% |
| Brainerd | 23 | 7 | 11 | 18 | 5 | 21.7 \% |
| Canby | 13 | 7 | 2 | 9 | 4 | 30.8 \% |
| Dakota County | 36 | 17 | 6 | 23 | 13 | 36.1\% |
| Detroit Lakes | 27 | 17 | 6 | 23 | 4 | 14.8 \% |
| Duluth | 31 | 12 | 9 | 21 | 10 | 32.3 \% |
| East Grand Forks | 17 | 7 | 8 | 15 | 2 | 11.8 \% |
| Eveleth | 12 | 5 | 5 | 10 | 2 | 16.7 \% |
| Faribault | 15 | 9 | 4 | 13 | 2 | 13.3 \% |
| Granite Falls | 14 | 5 | 6 | 11 | 3 | 21.4 \% |
| Hibbing | 14 | 6 | 6 | 12 | 2 | 14.3 \% |
| Hutch inson | 18 | 9 | 6 | 15 | 3 | 16.7 \% |
| Jackson | 22 | 14 | 7 | 21 | 1 | $4.5 \%$ |
| Mankato | 23 | 10 | 5 | 15 | 8 | 34.8\% |
| Minneapolis | 34 | 14 | 6 | 20 | 14 | 41.2 \% |
| Moorhead | 24 | 11 | 8 | 19 | 5 | 20.8 \% |
| 916 | 54 | 20 | 14 | 34 | 20 | 37.0\% |
| Pine City | 10 | 6 | 3 | 9 | 1 | 10.0\% |
| Pipestone | 14 | 9 | 4 | 13 | 1 | 7.1 \% |
| Red Wing | 19 | 14 | 2 | 16 | 3 | 15.8\% |
| Rochester | 25 | 8 | 13 | 21 | 4 | 16.0 \% |
| St. Cloud | 36 | 18 | 6 | 24 | 12 | 33.3\% |
| St. Paul | 40 | 19 | 12 | 31 | 9 | 22.5 \% |
| Staples | 19 | 13 | 2 | 15 | 4 | 21.1 \% |
| Suburban Hennepin | 49 | 27 | 7 | 34 | 15 | 30.6 \% |
| Thief River Falls | 16 | 9 | 5 | 14 | 2 | 12.5 \% |
| Wadena | 15 | 10 | 3 | 13 | 2 | 13.3\% |
| Willmar | 27 | 11 | 9 | 20 | 7 | 25.9 \% |
| Winona | 20 | 11 | 7 | 18 | 2 | 10.0\% |
| TOTAL | 780 | 373 | 217 | 590 | 190 | 24.4 \% |

table 3. single-sex programs \& enrollments, 1981-82

| AVT I | \# Programs |  | Total <br> One-Sex <br> Programs | \# Students |  | Total <br> Students <br> in One- <br> Sex Progs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AllFemale | All- <br> Male |  | in All- <br> F Progs | in allM Progs |  |
| Albert Lea | 0 | 3 | 3 | 0 | 84 | 84 |
| Alexandria | 6 | 9 | 15 | 288 | 318 | 606 |
| Anoka | 8 | 0 | 8 | 358 | 0 | 358 |
| Austin | 1 | 5 | 6 | 39 | 237 | 276 |
| Bemidji | 4 | 4 | 8 | 127 | 201 | 328 |
| Brainerd | 6 | 1 | 7 | 115 | 68 | 183 |
| Canby | 2 | 5 | 7 | 92 | 190 | 282 |
| Dakota County | 1 | 8 | 9 | 166 | 348 | 514 |
| Detroit Lakes | 2 | 9 | 11 | 57 | 244 | 301 |
| Duluth | 1 | 3 | 4 | 17 | 147 | 164 |
| East Grand Forks | 3 | 2 | 5 | 76 | 108 | 184 |
| Eveleth | 3 | 1 | 4 | 119 | 22 | 141 |
| Faribault | 1 | 5 | 6 | 52 | 128 | 180 |
| Granite Falls | 6 | 1 | 7 | 183 | 23 | 206 |
| Hibbing | 0 | 2 | 2 | 0 | 102 | 102 |
| Hutchinson | 5 | 4 | 9 | 180 | 137 | 317 |
| Jackson | 4 | 7 | 11 | 74 | 268 | 342 |
| Mankato | 2 | 2 | 4 | 61 | 95 | 156 |
| Minneapolis | 0 | 2 | 2 | 0 | 69 | 69 |
| Moorhead | 6 | 4 | 10 | 217 | 141 | 358 |
| 916 | 4 | 5 | 9 | 272 | 236 | 508 |
| Pine City | 2 | 2 | 4 | 39 | 53 | 92 |
| Pipestone | 1 | 2 | 3 | 49 | 127 | 176 |
| Red Wing | 0 | 4 | 4 | 0 | 111 | 111 |
| Rochester | 6 | 4 | 10 | 255 | 213 | 468 |
| St. Cloud | 3 | 5 | 8 | 141 | 293 | 434 |
| St. Paul | 2 | 4 | 6 | 50 | 175 | 225 |
| Staples | 1 | 6 | 7 | 12 | 159 | 171 |
| Suburban Hennepin | 1 | 2 | 3 | 8 | 193 | 201 |
| Thief River Falls | 3 | 2 | 5 | 84 | 67 | 151 |
| Wadena | 2 | 2 | 4 | 97 | 60 | 157 |
| Willmar | 5 | 4 | 9 | 284 | 402 | 686 |
| Winona | 3 | 3 | 6 | 48 | 81 | 129 |
| TOTAL | 94 | 122 | 216 | 3,560 | 5,100 | 8,660 |
| Percent of all programs |  |  | 27.7 \% |  |  |  |
| Percent of all students |  |  |  |  |  | 17.4 \% |

TABLE 4. ENROLLMENTS BY PROGRAM TYPE, 1981-82 - ALL STUDENTS

| AVTI | Total Students |  | In Seg Trad'l Programs |  | In Seg NonTrad'l Progs |  | In Integrated Programs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | \% | Number | \% | Number | \% | Number | \% |
| Albert Lea | 634 | 100\%* | 387 | 61.0 | 4 | 0.6 | 243 | 38.3 |
| Alexandria | 1,816 | 100\% | 1,235 | 68.0 | 45 | 2.5 | 536 | 29.5 |
| Anoka | 2,872 | 100\% | 2,356 | 82.0 | 111 | 3.9 | 405 | 14.1 |
| Austin | 887 | 100\% | 676 | 76.2 | 18 | 2.0 | 193 | 21.8 |
| Bemidji | 505 | 100\% | 392 | 77.6 | 4 | 0.8 | 109 | 21.6 |
| Brainerd | 747 | 100\% | 551 | 73.8 | 35 | 4.7 | 161 | 21.6 |
| Canby | 483 | 100\% | 380 | 78.7 | 4 | 0.8 | 99 | 20.5 |
| Dakota County | 2,385 | 100\% | 1,333 | 55.9 | 71 | 3.0 | 981 | 41.1 |
| Detroit Lakes | 937 | 100\% | 750 | 80.0 | 31 | 3.3 | 156 | 16.6 |
| Duluth | 2,173 | 100\% | 1,499 | 69.0 | 79 | 3.6 | 595 | 27.4 |
| East Grand Forks | 837 | 100\% | 714 | 85.3 | 42 | 5.0 | 81 | 9.7 |
| Eveleth | 404 | 100\% | 346 | 85.6 | 17 | 4.2 | 41 | 10.1 |
| Faribault | 524 | 100\% | 414 | 79.0 | 18 | 3.4 | 92 | 17.6 |
| Granite Falls | 598 | 100\% | 441 | 73.7 | 19 | 3.2 | 138 | 23.1 |
| Hibbing | 736 | 100\% | 612 | 83.2 | 44 | 6.0 | 80 | 10.9 |
| Hutch inson | 964 | 100\% | 737 | 76.5 | 40 | 4.1 | 187 | 19.4 |
| Jackson | 823 | 100\% | 763 | 92.7 | 34 | 4.1 | 26 | 3.2 |
| Mankato | 1,986 | 100\% | 1,101 | 55.4 | 34 | 1.7 | 851 | 42.8 |
| Minneapolis | 3,612 | 100\% | 2,171 | 60.1 | 175 | 4.8 | 1,266 | 35.0 |
| Moorhead | 1,050 | 100\% | 741 | 70.6 | 17 | 1.6 | 292 | 27.8 |
| 916 | 4,375 | 100\% | 2,576 | 58.9 | 161 | 3.7 | 1,638 | 37.4 |
| Pine City | 403 | 100\% | 347 | 86.1 | 9 | 2.2 | 47 | 11.7 |
| Pipestone | 792 | 100\% | 674 | 85.1 | 47 | 5.9 | 71 | 9.0 |
| Red Wing | 938 | 100\% | 724 | 77.2 | 56 | 6.0 | 158 | 16.8 |
| Rochester | 1,416 | 100\% | 1,260 | 89.0 | 65 | 4.6 | 91 | 6.4 |
| St. Cloud | 2,138 | 100\% | 1,233 | 57.7 | 39 | 1.8 | 866 | 40.5 |
| St. Paul | 4,455 | 100\% | 3,231 | 72.5 | 271 | 6.1 | 953 | 21.4 |
| Staples | 744 | 100\% | 564 | 75.8 | 21 | 2.8 | 159 | 21.4 |
| Suburban Hennepin | 5,414 | 100\% | 3,510 | 64.8 | 244 | 4.5 | 1,660 | 30.7 |
| Thief River Falls | 725 | 100\% | 621 | 85.7 | 18 | 2.5 | 86 | 11.9 |
| Wadena | 777 | 100\% | 638 | 82.1 | 27 | 3.5 | 112 | 14.4 |
| Willmar | 1,973 | 100\% | 1,439 | 72.9 | 28 | 1.4 | 506 | 25.6 |
| Winona | 762 | 100\% | 647 | 84.9 | 27 | 3.5 | 88 | 11.5 |
| TOTAL | 49,885 | 100\% | 35,063 | 70.3 | 1,855 | 3.7 | 12,967 | 26.0 |

*Percentages may add to 99.9 or 100.1 , rather than .100 .0 , due to rounding.

| AVTI | Total <br> Male <br> Students | $\begin{aligned} & \text { Enrolled } \\ & \hline \text { In "Male" } \\ & \text { Programs } \\ & \hline \end{aligned}$ | In Segregated <br> "Female" <br> Programs | Programs <br> Total | Enrolled in Integrated Programs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Albert Lea | 433 | 319 | 1 | 320 | 113 |
| Alexandria | 978 | 716 | 9 | 725 | 253 |
| Anoka | 1,685 | 1,426 | 31 | 1,457 | 228 |
| Austin | 544 | 430 | 8 | 438 | 106 |
| Bemidji | 280 | 237 | 3 | 240 | 40 |
| Brainerd | 351 | 276 | 10 | 286 | 65 |
| Canby | 337 | 288 | 0 | 288 | 49 |
| Dakota County | 1,371 | 821 | 33 | 854 | 517 |
| Detroit Lakes | 663 | 576 | 10 | 586 | 77 |
| Duluth | 1,127 | 739 | 39 | 778 | 349 |
| East Grand Forks | 435 | 392 | 21 | 413 | 22 |
| Eveleth | 184 | 156 | 8 | 164 | 20 |
| Faribault | 316 | 255 | 10 | 265 | 51 |
| Granite Falls | 315 | 258 | 0 | 258 | 57 |
| Hibbing | 484 | 424 | 13 | 437 | 47 |
| Hutchinson | 563 | 470 | 1 | 471 | 92 |
| Jackson | 562 | 541 | 11 | 552 | 10 |
| Mankato | 1,103 | 690 | 6 | 696 | 407 |
| Minneapolis | 2,064 | 1,319 | 99 | 1,418 | 646 |
| Moorhead | 588 | 443 | 4 | 447 | 141 |
| 916 | 2,239 | 1,317 | 65 | 1,382 | 857 |
| Pine City | 279 | 264 | 2 | 266 | 13 |
| Pipestone | 555 | 490 | 14 | 504 | 51 |
| Red Wing | 713 | 636 | 2 | 638 | 75 |
| Rochester | 562 | 482 | 47 | 529 | 33 |
| St. Cloud | 1,319 | 928 | 4 | 932 | 387 |
| St. Paul | 2,731 | 2,223 | 83 | 2,306 | 425 |
| Staples | 626 | 538 | 1 | 539 | 87 |
| Suburban Hennepin | 3,549 | 2,524 | 56 | 2,580 | 969 |
| Thief River Falls | 449 | 419 | 2 | 421 | 28 |
| Wadena | 486 | 437 | 5 | 442 | 44 |
| Willmar | 1,019 | 752 | 10 | 762 | 257 |
| Winona | 463 | 417 | 12 | 429 | 34 |
| TOTAL | 29,373 | 22,203 | 620 | 22,823 | 6,550 |

TABLE 6. ENROLLMENTS BY PROGRAM TYPE, 1981-82 - FEMALES

| AVTI | Total <br> Female <br> Students | Enrolled <br> In "Male" <br> Programs | $\begin{aligned} & \text { n Segregated } \\ & \frac{\text { In "Female" }}{} \text { "Fograms } \\ & \text { Prog } \\ & \hline \end{aligned}$ | Programs <br> Total | Enrolled in Integrated Programs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Albert Lea | 201 | 3 | 68 | 71 | 130 |
| Alexandria | 838 | 36 | 519 | 555 | 283 |
| Anoka | 1,187 | 80 | 930 | 1,010 | 177 |
| Austin | 343 | 10 | 246 | 256 | 87 |
| Bemidji | 225 | 1 | 155 | 156 | 69 |
| Brainerd | 396 | 25 | 275 | 300 | 96 |
| Canby | 146 | 4 | 92 | 96 | 50 |
| Dakota County | 1,014 | 38 | 512 | 550 | 464 |
| Detroit Lakes | 274 | 21 | 174 | 195 | 79 |
| Duluth | 1,046 | 40 | 760 | 800 | 246 |
| East Grand Forks | 402 | 21 | 322 | 343 | 59 |
| Eveleth | 220 | 9 | 190 | 199 | 21 |
| Faribault | 208 | 8 | 159 | 167 | 41 |
| Granite Falls | 283 | 19 | 183 | 202 | 81 |
| Hibbing | 252 | 31 | 188 | 219 | 33 |
| Hutchinson | 401 | 39 | 267 | 306 | 95 |
| Jackson | 261 | 23 | 222 | 245 | 16 |
| Mankato | 883 | 28 | 411 | 439 | 444 |
| Minneapolis | 1,548 | 76 | 852 | 928 | 620 |
| Moorhead | 462 | 13 | 298 | 311 | 151 |
| 916 | 2,136 | 96 | 1,259 | 1,355 | 781 |
| Pine City | 124 | 7 | 83 | 90 | 34 |
| Pipestone | 237 | 33 | 184 | 217 | 20 |
| Red Wing | 225 | 54 | 88 | 142 | 83 |
| Rochester | 854 | 18 | 778 | 796 | 58 |
| St. Cloud | 819 | 35 | 305 | 340 | 479 |
| St. Paul | 1,724 | 188 | 1,008 | 1,196 | 528 |
| Staples | 118 | 20 | 26 | 46 | 72 |
| Suburban Hennepin | 1,865 | 188 | 986 | 1,174 | 691 |
| Thief River Falls | 276 | 16 | 202 | 218 | 58 |
| Wadena | 291 | 22 | 201 | 223 | 68 |
| Willmar | 954 | 18 | 687 | 705 | 249 |
| Winona | 299 | 15 | 230 | 245 | 54 |
| TOTAL | 20,512 | 1,235 | 12,860 | 14,095 | 6,417 |


| AVTI | Agriculture |  |  | Distribution |  |  | Health |  |  | Home Economics |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \#M | \#F | \% F | \#M | \#F | \%F | \#M | \#F | \%F | \#M | \#F | \%F |
| Albert Lea | -- | -- | -- | 45 | 35 | 43.8\% | -- | -- | -- | 16 | 25 | 61.0\% |
| Alexandria | 73 | 1 | 1.4\% | 124 | 281 | 69.4\% | 2 | 90 | 97.8\% | 0 | 44 | 100.0\% |
| Anoka | 89 | 30 | 25.2\% | 94 | 103 | 52.3\% | 44 | 626 | 93.4\% | 0 | 46 | 100.0\% |
| Austin | 53 | 0 | 0.0\% | 25 | 51 | 67.1\% | 2 | 79 | 97.5\% | -- | -- | -- |
| Bemidji | 21 | 0 | 0.0\% | 18 | 22 | 55.0\% | 3 | 49 | 94.2\% | -- | -- | -- |
| Brainerd | 85 | 43 | 33.6\% | 60 | 56 | 48.3\% | 4 | 86 | 95.6\% | -- | -- | -- |
| Canby | 150 | 3 | 2.0\% | -- | -- | -- | 0 | 51 | 100.0\% | 9 | 6 | 40.0\% |
| Dakota County | 76 | 29 | 27.6\% | 291 | 430 | 59.6\% | 3 | 70 | 95.9\% | 69 | 40 | 36.7\% |
| Detroit Lakes | 59 | 7 | 10.6\% | 32 | 46 | 59.0\% | 2 | 33 | 94.3\% | 28 | 34 | 54.8\% |
| Duluth | 86 | 24 | 21.8\% | 84 | 96 | 53.3\% | 45 | 390 | 89.7\% | 25 | 8 | 24.2\% |
| East Grand Forks | 108 | 0 | 0.0\% | -- | -- | -- | 17 | 198 | 92.1\% | -- | -- | -- |
| Eveleth | -- | -- | -- | -- | -- | -- | 6 | 97 | 94.2\% | -- | -- | -- |
| Faribault | 48 | 0 | 0.0\% | 15 | 32 | 68.1\% | 4 | 73 | 94.8\% | -- | -- | -- |
| Granite Falls | 23 | 0 | 0.0\% | 14 | 8 | 36.4\% | 0 | 36 | 100.0\% | -- | -- | -- |
| Hibbing | -- | -- | -- | 23 | 18 | 43.9\% | 8 | 118 | 93.7\% | 1 | 19 | 95.0\% |
| Hutchinson | 82 | 3 | 3.5\% | 47 | 34 | 42.0\% | -- | -- | -- | -- | -- | -- |
| Jackson | 35 | 3 | 7.9\% | 10 | 16 | 61.5\% | 5 | 79 | 94.0\% | -- | -- | -- |
| Mankato | 116 | 3 | 2.5\% | 77 | 94 | 55.0\% | 4 | 194 | 98.0\% | 70 | 87 | 55.4\% |
| Minneapolis | -- | -- | -- | 88 | 38 | 30.2\% | 31 | 332 | 91.5\% | 15 | 60 | 80.0\% |
| Moorhead | 41 | 2 | 4.7\% | 79 | 57 | 41.9\% | 0 | 20 | 100.0\% | -- | -- | -- |
| 916 | 31 | 23 | 42.6\% | 98 | 149 | 60.3\% | 219 | 523 | 70.5\% | 58 | 245 | 80.9\% |
| Pine City | 42 | 1 | 2.3\% | -- | -- | -- | -- | -- | -- | 0 | 13 | 100.0\% |
| Pipestone | 44 | 6 | 12.0\% | 99 | 105 | 51.5\% | -- | -- | -- | -- | -- | -- |
| Red Wing | 16 | 0 | 0.0\% | 14 | 26 | 65.0\% | 1 | 48 | 98.0\% | 161 | 20 | 11.0\% |
| Rochester | 3 | 17 | 85.0\% | -- | -- | -- | 42 | 548 | 92.9\% | 0 | 32 | 100.0\% |
| St. Cloud | 52 | 1 | 1.9\% | 151 | 145 | 49.0\% | 12 | 173 | 93.5\% | 1 | 40 | 97.6\% |
| St. Paul | -- | -- | -- | -- | -- | -- | 52 | 492 | 90.4\% | 3 | 34 | 91.9\% |
| Staples | 57 | 3 | 5.0\% | -- | -- | -- | 1 | 14 | 93.3\% | 16 | 21 | 56.8\% |
| Suburban Hennepin | 199 | 110 | 35.6\% | 87 | 87 | 50.0\% | 87 | 311 | 78.1\% | 2 | 82 | 97.6\% |
| Thief River Falls | 24 | 0 | 0.0\% | 16 | 24 | 60.0\% | 1 | 28 | 96.6\% | -- | -- | -- |
| Wadena | -- | -- | - | 7 | 26 | 78.8\% | - | -- | -- | -- | -- | - |
| Willmar | 337 | 32 | 8.7\% | 48 | 79 | 62.2\% | 2 | 218 | 99.1\% | 28 | 206 | 88.0\% |
| Winona | 41 | 1 | 2.4\% | 19 | 26 | 57.8\% | 10 | 101 | 91.0\% | 1 | 65 | 98.5\% |
| TOTAL | 1,991 | 342 | 14.7\% | 1,665 | 2,084 | 55.6\% | 607 | 5,077 | 89.3\% | 503 | 1,127 | 69.1\% |


| Office |  |  | Technical |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \#M | \#F | \%F | \#M | \#F | \%F |
| 13 | 110 | 89.4\% | 14 | 19 | 57.6\% |
| 97 | 340 | 77.8\% | 112 | 1 | 0.9\% |
| 2 | 262 | 99.2\% | 214 | 22 | 9.3\% |
| 1 | 76 | 98.7\% | 122 | 21 | 14.7\% |
| 22 | 153 | 87.4\% | -- | -- | -- |
| 26 | 165 | 86.4\% | -- | -- | -- |
| 16 | 71 | 81.6\% | 19 | 5 | 20.8\% |
| 93 | 338 | 78.4\% | 94 | 16 | 14.5\% |
| 5 | 116 | 95.9\% | 48 | 9 | 15.8\% |
| 81 | 434 | 84.3\% | 271 | 41 | 13.1\% |
| 26 | 183 | 87.6\% | -- | -- | -- |
| 2 | 93 | 97.9\% | 32 | 4 | 11.1\% |
| 6 | 86 | 93.5\% | 36 | 9 | 20.0\% |
| 22 | 209 | 90.5\% | 149 | 13 | 8.0\% |
| 4 | 51 | 92.7\% | 37 | 4 | 9.8\% |
| 24 | 320 | 93.0\% | 159 | 15 | 8.6\% |
| 6 | 143 | 96.0\% | 72 | 12 | 14.3\% |
| 196 | 424 | 68.4\% | 268 | 24 | 8.2\% |
| 230 | 648 | 73.8\% | 196 | 34 | 14.8\% |
| 75 | 340 | 81.9\% | 33 | 1 | 2.9\% |
| 272 | 745 | 73.3\% | 241 | 63 | 20.7\% |
| 15 | 104 | 87.4\% | -- | -- | -- |
| 57 | 99 | 63.5\% | -- | -- | -- |
| 62 | 97 | 61.0\% | 164 | 15 | 8.4\% |
| 17 | 220 | 92.8\% | 87 | 14 | 13.9\% |
| 189 | 346 | 64.7\% | 187 | 13 | 6.5\% |
| 260 | 653 | 71.5\% | 751 | 131 | 14.9\% |
| 0 | 12 | 100.0\% | 28 | 5 | 15.2\% |
| 151 | 722 | 82.7\% | 524 | 73 | 12.2\% |
| - 12 | 118 | 90.8\% | 93 | 11 | 10.6\% |
| 37 | 139 | 79.0\% | 112 | 10 | 8.2\% |
| 34 | 359 | 91.3\% | 165 | 14 | 7.8\% |
| 16 | 92 | 85.2\% | 50 | 4 | 7.4\% |
| 2,069 | 8,268 | 80.0\% | 4,278 | 603 | 12.4\% |



| \#M | \#F | \%F |
| :---: | :---: | :---: |
| 345 | 12 | 3.4\% |
| 570 | 81 | 12.4\% |
| 1,242 | 98 | 7.3\% |
| 341 | 116 | 25.4\% |
| 216 | 1 | 0.5\% |
| 176 | 46 | 20.7\% |
| 143 | 10 | 6.5\% |
| 745 | 91 | 10.9\% |
| 489 | 29 | 5.6\% |
| 535 | 53 | 9.0\% |


| TOTAL |  |  | AVT I |
| :---: | :---: | :---: | :---: |
| \#M | \#F | \%F |  |
| 433 | 201 | 31.7\% | Albert Lea |
| 978 | 838 | 46.1\% | Alexandria |
| 1,685 | 1,187 | 41.3\% | Anoka |
| 544 | 343 | 38.7\% | Austin |
| 280 | 225 | 44.6\% | Bemidji |
| 351 | 396 | 53.0\% | Brainerd |
| 337 | 146 | 30.2\% | Canby |
| 1,371 | 1,014 | 42.5\% | Dakota County |
| 663 | 274 | 29.2\% | Detroit Lakes |
| 1,127 | 1,046 | 48.1\% | Duluth |
| 435 | 402 | 48.0\% | East Grand Forks |
| 184 | 220 | 54.5\% | Eveleth |
| 316 | 208 | 39.7\% | Faribault |
| 315 | 283 | 47.3\% | Granite Falls |
| 484 | 252 | 34.2\% | Hibbing |
| 563 | 401 | 41.6\% | Hutchinson |
| 562 | 261 | 31.7\% | Jackson |
| 1,103 | 883 | 44.5\% | Mankato |
| 2,064 | 1,548 | 42.9\% | Minneapolis |
| 588 | 462 | 44.0\% | Moorhead |
| 2,239 | 2,136 | 48.8\% | 916 |
| 279 | 124 | 30.8\% | Pine City |
| 555 | 237 | 29.9\% | Pipestone |
| 713 | 225 | 24.0\% | Red Wing |
| 562 | 854 | 60.3\% | Rochester |
| 1,319 | 819 | 38.3\% | St. Cloud |
| 2,731 | 1,724 | 38.7\% | St. Paul |
| 626 | 118 | 15.9\% | Staples |
| 3,549 | 1,865 | 34.4\% | Suburban Hennepin |
| 449 | 276 | 38.1\% | Thief River Falls |
| 486 | 291 | 37.5\% | Wadena |
| 1,019 | 954 | 48.4\% | Willmar |
| 463 | 299 | 39.2\% | Winona |
| 29,373 | 20,512 | 41.1\% | TOTAL |

TABLE 8, CURRICULUM AREA BY PROGRAM TYPE: NUMBER OF PROGRAMS

| Curriculum Area | Male | Female | Integrated |  | Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number .of | Programs* | Which Are: |  |  |
| Curriculum Area | Male | Female | Integrated | Total | Integrated |
| Agriculture | 10 | 0 | 5 | 15 | 33.3 \% |
| Distribution | 8 | 5 | 14 | 27 | $51.9 \%$ |
| Health |  | 13 | 5 | 21 | 23.8 \% |
| Home Economics | 1 | 6 | 5 | 12 | 41.7 \% |
| Business-Office | 0 | 20 | 8 | 28 | 28.6 \% |
| Technical | 17 | 0 | 6 | 23 | 26.1 \% |
| Trade-Industrial | 52 | 1 | 20 | 73 | 27.4 \% |
| TOTAL | 91 | 45 | 63 | 199 | 31.7 \% |

table 9. Curriculum area by program type: number of students

| Curriculum Area | \# Students in Programs* Which Are: |  |  |  | Percent <br> Integrated |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Integrated | Total |  |
| Agriculture | 1,778 | 0 | 555 | 2,333 | 23.8 \% |
| Distribution | 455 | 883 | 2,411 | 3,749 | $64.3 \%$ |
| Health | 194 | 5,110 | 380 | 5,684 | 6.7 \% |
| Home Economics | 181 | 922 | 527 | 1,630 | 32.3 \% |
| Business-Office | 0 | 5,780 | 4,557 | 10,337 | 44.1 \% |
| Technical | 3,956 | 0 | 925 | 4,881 | 19.0\% |
| Trade-Industrial | 16,479 | 765 | 4,027 | 21,271 | 18.9 \% |
| TOTAL | 23,043 | 13,460 | 13,382 | 49,885 | 26.8 \% |

[^0]
## AGRICULTURE

| OE Code | Course | Male | Female | Total |
| :---: | :---: | :---: | :---: | :---: |
| 010100 | Production Agriculture/Farm Mgmt. | 746 | 17 | 763 |
| 010101 | Animal Science | 37 | 33 | 70 |
| 010104 | Farm Management | 47 | 0 | 47 |
| 010200 | Agricultural Supplies Sales \& Svc. | 262 | 58 | 320 |
| 010299 | Farrier | 12 | 3 | 15 |
| 010300 | Agriculture, Farm Equipment Mech. | 297 | 1 | 298 |
| 010302 | Agri-Systems/Structures \& Conven. | 50 | 1 | 51 |
| 010500 | Horticulture/Specialty Crops | 50 | 59 | 109 |
| 010501 | Specialty Crop Production | 45 | 11 | 56 |
| 010502 | Floriculture/Commercial Flower Pro. | 14 | 32 | 46 |
| 010504 | Landscaping | 212 | 103 | 315 |
| 010600 | Natural Resources Management | 85 | 16 | 101 |
| 010603 | Soil | 12 | 0 | 12 |
| 010702 | Forest Harvesting | 11 | 0 | 11 |
| 010703 | Forest Harvesting Equipment Maint. | 111 | 8 | 119 |
| TOTAL |  | 1,991 | 342 | 2,333 |


| Percent Male | Percent Female | Course Type |
| :---: | :---: | :---: |
| 97.8\% | 2.2\% | Male |
| 52.9 \% | 47.1 \% | Integrated |
| 100.0 \% | 0.0 \% | Male |
| 81.9 \% | 18.1 \% | Male |
| 80.0 \% | 20.0 \% | Integrated |
| 99.7 \% | 0.3 \% | Male |
| 98.0\% | 2.0\% | Male |
| $45.9 \%$ | 54.1 \% | Integrated |
| 80.4\% | 19.6 \% | Male |
| 30.4\% | 69.6 \% | Integrated |
| 67.3\% | 32.7\% | Integrated |
| 84.2 \% | 15.8\% | - Male |
| 100.0\% | 0.0\% | Male |
| 100.0 \% | 0.0 \% | Male |
| 93.3\% | 6.7 \% | Male |
| 85.3\% | 14.7 \% |  |

DISTRIBUTION

| OE Code | Course | Male | Female | Total | Percent Male | Percent Female | Course Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 040100 | Advertising Design/Layout/Sales | 19 | 58 | 77 | 24.7 \% | 75.3\% | Integrated |
| 040103 | Visual Merch/Industrial Display | 8 | 24 | 32 | 25.0\% | 75.0 \% | Integrated |
| 040200 | Fashion Merchandising | 32 | 487 | 519 | 6.2 \% | 93.8\% | Female |
| 040400 | Credit and Finance Management | 24 | 60 | 84 | 28.6\% | 71.4\% | Integrated |
| 040500 | Retail Floristry | 2 | 69 | 71 | 2.8 \% | 97.2 \% | Female |
| 040600 | Supermarket Merch/Mgmt/Distrib. | 135 | 25 | 160 | 84.4\% | 15.6\% | Male |
| 040800 | General Merchandising/Retail Sales | 216 | 184 | 400 | 54.0 \% | 46.0\% | Integrated |
| 040900 | Hardware \& Home Ctr Marketing \& | 26 | 3 | 29 | 89.7 \% | 10.3\% | Male |
| 040910 | Lumberyard/Bldg Materials Market. | 25 | 2 | 27 | 92.6 \% | 7.4\% | Male |
| 041000 | Home Furnishings Sales/Merch/Mgmt. | 5 | 61 | 66 | 7.6 \% | 92.4\% | Female |
| 041050 | Interior Design | 128 | 227 | 355 | 36.1 \% | 63.9 \% | Integrated |
| 041060 | Environmental Interior Space Des. | 0 | 19 | 19 | 0.0\% | 100.0 \% | Female |
| 041100 | Hotel/Motel Marketing \& Management | 32 | 31 | 63 | 50.8 \% | 49.2 \% | Integrated |
| 041200 | Professional/Industrial/Wholesale | 67 | 44 | 111 | 60.4\% | 39.6\% | Integrated |
| 041201 | Vending Machine Repair \& Merchand. | 83 | 9 | 92 | 90.2 \% | 9.8\% | Male |
| 041400 | International Trade | 29 | 34 | 63 | 46.0\% | $54.0 \%$ | Integrated |
| 041600 | Petroleum/Service Station | 41 | 0 | 41 | 100.0 \% | 0.0\% | Male |
| 041700 | Real Estate Sales | 10 | 7 | 17 | 58.8 \% | 41.2\% | Integrated |
| 041710 | Property \& Facilities Management | 11 | 4 | 15 | 73.3 \% | 26.7 \% | Integrated |
| 041801 | Sporting Goods Sales \& Management | 44 | 8 | 52 | 84.6\% | 15.4\% | Male |
| 041802 | Travel Planning | 16 | 192 | 208 | 7.7 \% | 92.3\% | Female |
| 041805 | Arena Management | 23 | 0 | 23 | 100.0 \% | 0.0\% | Male |
| 041900 | Traffic/Transportation Management | 23 | 6 | 29 | 79.3\% | 20.7 \% | Integrated |
| 041910 | Distribution Ctr Operations/Mgmt. | 28 | 3 | 31 | 90.3\% | 9.7 \% | Male |
| 042200 | Sales Marketing and Management | 603 | 481 | 1,084 | 55.6 \% | 44.4\% | Integrated |
| 044000 | Materials/Inventory Management | 4 | 2 | 6 | 66.7 \% | 33.3\% | Integrated |
| 04XXXX | Unspecified | 31 | 44 | 75 | 41.3 \% | 58.7 \% | Integrated |
| TOTAL |  | 1,665 | 2,084 | 3,749 | 44.4\% | 55.6 \% |  |

HEALTH

| OE Code | Course | Male | Female | Total |
| :---: | :---: | :---: | :---: | :---: |
| 070101 | Dental Assistant Education | 4 | 510 | 514 |
| 070103 | Dental Laboratory Technician | 63 | 78 | 141 |
| 070203 | Medical Lab Technician-Assoc Deg, | 26 | 198 | 224 |
| 070205 | Medical Lab Technician-Certificate | 11 | 379 | 390 |
| 070302 | Practical Nurse Education | 10.4 | 1,973 | 2,077 |
| 070303 | Nurse Assistant Education | 130 | 1,079 | 1,209 |
| 070304 | Human Services Technician | 8 | 77 | 85 |
| 070305 | Surgical Technician Education | 25 | 128 | 153 |
| 070401 | Occupational Therapy Assistant | 8 | 134 | 142 |
| 070403 | Prosthetics Technician Education | 77 | 19 | 96 |
| 070603 | Optometric Assistant Education | 0 | 58 | 58 |
| 070801 | Ward Clerk Education | 1 | 34 | 35 |
| 070900 | Dio-Medical Equipment Technician | 37 | 7 | 44 |
| 070901 | Electroencephalograph Technician | 5 | 15 | 20 |
| 070903 | Respiratory Therapy Technician | 24 | 72 | 96 |
| 070904 | Medical Assistant | 0 | 95 | 95 |
| 070905 | Central Service Technician | 21 | 54 | 75 |
| 070906 | Human Services Education | 2 | 37 | 39 |
| 070907 | Emergency Medical Technician | 46 | 8 | 54 |
| 070911 | Human Services-Mental Retardation | 15 | 33 | 48 |
| 07XXXX | Unspecified | 0 | 89 | 89 |
| TOTAL |  | 607 | 5,077 | 5,684 |

HOME ECONOMICS

| OE Code | Course | Male | Female | Total |
| :---: | :---: | :---: | :---: | :---: |
| 090101 | Consumer Homemaking Occupations | 36 | 12 | 48 |
| 090201 | Child Care, Guidance $\varepsilon$ Education | 4 | 294 | 298 |
| 090202 | Fabrics, Fashions \& Related Mgmt. | 37 | 169 | 206 |
| 090203 | Food Management | 103 | - 54 | 157 |
| 090206 | Pers Sva/Fashions, Fabrics \& Notions | 0 | 13 | 13 |
| 390207 | Grooming Services | 3 | 127 | 130 |
| 090211 | Delicatessen \& Catering | 16 | 25 | 41 |
| 090212 | Comm Svc/Wilderness Guide/Educ Devel | 161 | 20 | 181 |
| 092602 | Cosmetology | 6 | 252 | 258 |
| 092901 | Baking \& Bakery Assistant Program | 22 | 38 | 60 |
| 092902 | Food Service Occupations | 115 | 106 | 221 |
| 092908 | Dietetic Assistant Program | 0 | 17 | 17 |
| TOTAL |  | 503 | 1,127 | 1,630 |


| Male | Female | Total |
| :---: | :---: | :---: |
| 677 | 1,55] | 2,228 |
| 12 | 95 | 107 |
| 17 | 131 | 148 |
| 18 | 50 | 68 |
| 57 | 71 | 128 |
| 324 | 442 | 766 |
| 13 | 227 | 240 |
| 560 | 533 | 1,093 |
| 0 | 37 | 37 |
| 138 | 1,538 | 1,676 |
| 0 | 69 | 69 |
| 2 | 71 | 73 |
| 31 | 25 | 56 |
| 59 | 45 | 104 |
| 0 | 54 | 54 |
| 0 | 21 | 21 |
| 0 | 207 | 207 |


| Percent Male | Percent Female | Course Type |
| :---: | :---: | :---: |
| 0.8\% | 99.2 \% | Female |
| 44.7 \% | 55.3\% | Integrated |
| 11.6 \% | 88.4\% | Female |
| 2,8\% | 97.2 \% | Female |
| 5.0\% | 95.0\% | Female |
| 10.8 \% | 89.2 \% | Female |
| 9.4\% | 90.6 \% | Female |
| 16.3\% | 83.7 \% | Female |
| 5.6 \% | 94.4\% | Female |
| 80.2 \% | 19.8 \% | Male |
| 0.0 \% | 100.0 \% | Female |
| 2.9\% | 97.1 \% | Female |
| 84.1\% | 15.9 \% | Male |
| 25.0\% | 75.0 \% | Integrated |
| 25.0 \% | 75.0 \% | Integrated |
| 0.0\% | 100.0 \% | Female |
| 28.0 \% | 72.0 \% | Integrated |
| 5.1\% | 94.9\% | Female |
| 85.2 \% | 14.8\% | Male |
| 31.3 \% | 68.7 \% | Integrated |
| 0.0 \% | 100.0 \% | Female |
| 10.7 \% | 89.3 \% |  |


| Percent Male | Percent Female | Course Type |
| :---: | :---: | :---: |
| 75.0 \% | 25.0\% | Integrated |
| 1.3 \% | 98.7 \% | Female |
| 18.0 \% | 82.0\% | Female |
| 65.6 \% | 34.4\% | Integrated |
| 0.0\% | 100.0\% | Female |
| 2.3\% | 97.7\% | Female |
| 39.0\% | 61.0 \% | Integrated |
| 89.0 \% | 11.0 \% | Male |
| 2.3 \% | 97.7\% | Female |
| 36.7 \% | 63.3\% | Integrated |
| 52.0 \% | 48.0\% | Integrated |
| 0.0 \% | 100.0\% | Female |
| 30.9 \% | 69.1 \% |  |


| Percent Male | Percent <br> Female | Course Type |
| :---: | :---: | :---: |
| 30,4\% | 69.6 \% | Integrated |
| 11.2 \% | 88.8\% | Female |
| 11.5 \% | 88.5 \% | Female |
| 26.5 \% | 73.5 \% | Integrated |
| 44.5 \% | 55.5 \% | Integrated |
| $42.3 \%$ | 57.7 \% | Integrated |
| 5.4 \% | 94.6 \% | Female |
| 51.2 \% | 48.8\% | Integrated |
| 0.0\% | 100.0\% | Female |
| 8.2 \% | 91.8\% | Female |
| 0.0\% | 100.0 \% | Female |
| 2.7 \% | 97.3 \% | Female |
| 55.4 \% | 44.6\% | Integrated |
| 56.7 \% | 43.3\% | Integrated |
| 0.0 \% | 100.0 \% | Female |
| 0.0\% | 100.0 \% | Female |
| 0.0\% | 100.0 \% | Female |


| 140704 | Court Reporting | 5 | 55 | 60 | 8.3\% | 91.7. | Female |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 140705 | General Secretarial | 12 | 1,138 | 1,150 | 1.0\% | 99.0\% | Female |
| 140707 | Legal Secretary | 2 | 443 | 445 | 0.4\% | 99.6\% | Female |
| 140709 | Medical Secretary | 1 | 471 | 472 | 0.2\% | 99.8\% | Female |
| 140730 | Secretarial/Clerical w/Shorthand | 2 | 343 | 345 | 0.6 \% | 99.4\% | Female |
| 140731 | Secretarial/Clerical w/o Shorthand | 8 | 195 | 203 | 3.9\% | 96.1 \% | Female |
| 140742 | Legal Secretarial w/o Shorthand | 0 | 13 | 13 | 0.0\% | 100.0 \% | Female |
| 140743 | Legal Secretarial w/Shorthand | 0 | 37 | 37 | 0.0\% | 100.0\% | Female |
| 140752 | Medical Secretarial w/Shorthand | 2 | 125 | 127 | 1.6 \% | 98.4\% | Female |
| 140801 | Rural Banking Credit | 76 | 38 | 114 | 66.7 \% | 33.3 \% | Integrated |
| 140901 | Clerk/Typist | 53 | 243 | 296 | 17.9 \% | 82.1 \% | Female |
| TOTAL |  | 2,069 | 8,268 | 10,337 | 20.0 \% | 80.0\% |  |
| TECHNIC |  |  |  | - |  |  |  |
|  |  |  |  |  | Percent | Percent |  |
| OE Code | Course | Male | Female | Total | Male | Female | Course Type |
| 160101 | Aèronáutical. Technology | 61 | 14 | 75 | 81.3\% | 18.7 \% | Male |
| 160103 | Architectural, Technology | 321 | 84 | 405 | 79.3 \% | 20.7 \% | Integrated |
| 160105 | Chemical Tectinology | 40 | 48 | 88 | 45.5\% | 54.5 \% | Integrated |
| 160106 | Civil/Highway Technician Occup. | 235 | 37 | 272 | 86.4\% | 13.6\% | Male |
| 160107 | Cable TV/Electrical Technology | 83 | 4 | 87 | 95.4\% | $4.6 \%$ | Male |
| 160108 | Electronics Technician Occup/Gen. | 1,725 | 181 | 1,906 | 90.5\% | 9.5\% | Male |
| 160109 | Electro-Mechanical Technology | 257 | 22 | 279 | 92.1\% | 7.9\% | Male |
| 160110 | Environmental Technician Occup. | 98 | 28 | 126 | 77.8 \% | 22.2 \% | Integrated |
| 160111 | Industrial Engineering Technician | 129 | 8 | 137 | 94.2\% | $5.8 \%$ | Male |
| 160112 | Industrial Instrumentation Techn. | 81 | 9 | 90 | 90.0\% | 10.0\% | Male |
| 160113 | Quality Control/Mechanical Technol. | 131 | 15 | 146 | 89.7 \% | 10.3\% | Male |
| 160114 | Metallurgical Technology | 179 | 18 | 197 | 90.9 \% | 9.1\% | Male |
| 160115 | Nuclear Technology | 23 | 5 | 28 | 82.1\% | 17.9 \% | Male |
| 160118 | Tool Engineering \& Design | 36 | 9 | 45 | 80.0 \% | 20.0 \% | Integrated |
| 160181 | Electron Tech/Radio \& TV Repair | 35 | 4 | 39 | 89.7 \% | 10.3 \% | Male |
| 160187 | Electron Tech/Communications | 40 | 1 | 41 | 97.6\% | 2.4\% | Male |
| 160203 | Food Lab Management | 25 | 38 | 63 | 39.7 \% | 60.3 \% | Integrated |
| 160300 | Electro-Medical Technology | 45 | 7 | 52 | 86.5 \% | 13.5\% | Male |
| 160701 | Avionics - Aviation Electronics | 67 |  | 68 | 98.5 \% | 1.5 \% | Male |
| 160704 | Communications Technology | 156 | 42 | 198 | 78.8 \% | 21.2 \% | Integrated |
| 160705 | Fluid Power Technology | 349 | 11 | 360 | 96.9\% | 3.1\% | Male |
| 160706 | Powder Metal Technology | 25 | 1 | 26 | 96.2 \% | 3.8\% | Male |
| 161301 | Mechanical Drafting | 137 | 16 | 153 | 89.5 \% | 10.5 \% | Male |
| TOTAL |  | 4,278 | 603 | 4,881 | 87.6 \% | 12.4\% |  |

TRADE-INDUSTRIAL

| OE Code | Course | Male | Female | Total |
| :---: | :---: | :---: | :---: | :---: |
| 170100 | Air Cond, Heating \& Refrigerating | 378 | 0 | 378 |
| 170200 | Major Appliance Repair | 161 | 5 | 166 |
| 170300 | Auto Services | 15 | 0 | 15 |
| 170301 | Auto Body Mechanics | 883 | 6 | 889 |
| 170302 | Auto Mechanics | 2,593 | 58 | 2,651 |
| 170308 | Parts Sales and Service | 82 | 15 | 97 |
| 170318 | Motorcycle Mechanics | 19 | 0 | 19 |
| 170399 | Parts Person Training | 262 | 21 | 283 |
| 170401 | Aircraft Maintenance | 411 | 8 | 419 |
| 170600 | Office Machine Repair \& Servicing | 77 | 7 | 84 |
| 170700 | Commercial Art | 188 | 262 | 450 |
| 170705 | Technical lllustration | 7 | 13 | 20 |
| 170900 | Commercial Photography | 61 | 50 | 111 |
| 170901 | Photographic Technology | 34 | 31 | 65 |
| 171000 | Construction Occupations/General | 125 | 3 | 128 |
| 171001 | Carpentry | 1,062 | 30 | 1,092 |
| 171002 | Construction Electricity | 868 | 27 | 895 |
| 171003 | Heavy Equipment Operations | 267 | 5 | 272 |
| 171004 | Brick, Block \& Stone Masonry | 62 | 1 | 63 |
| 171005 | Painting and Decorating | 93 | 14 | 107 |
| 171007 | Plumbing | 178 | 6 | 184 |


| Percent <br> Male | Percent <br> Female |  |  |
| ---: | ---: | ---: | :--- |
|  |  |  |  |
| Course Type |  |  |  |

TRADE-INDUSTRIAL, continued

| 171011 | Maintenance Mechanic/Housing | 329 | 4 | 333 | 98.8 | \% | 1.2 | \% | Male |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 171012 | Heavy Equipment Operation \& Maint. | 49 | 0 | 49 | 100.0 | \% | 0.0 | \% | Male |
| 171014 | Mobile Home Repair | 65 | 0 | 65 | 100.0 | \% | 0.0 | \% | Male |
| 171083 | Heavy Equipment Mechanics | 57 | 1 | 58 | 98.3 | \% | 1.7 | \% | Male |
| 171100 | Custodial \& Building Maintenance | 151 | 10 | 161 | 93.8 | \% | 6.2 | \% | Male |
| 171200 | Diesel Engine Mechanics | 832 | 4 | 836 | 99.5 | \% | 0.5 | \% | Male |
| 171201 | Truck Driving | 359 | 56 | 415 | 86.5 | \% | 13.5 | \% | Male |
| 171301 | Architectural Drafting | 224 | 42 | 266 | 84.2 | \% | 15.8 | \%. | Male |
| 171302 | Mechanical Drafting | 626 | 162 | 788 | 79.4 | \% | 20.6 | \% | Integrated |
| 171303 | Mechanical Drafting Occupations | 68 | 14 | 82 | 82.9 | \% | 17.1 | \% | Male |
| 171304 | Construction Drafting/Planning | 79 | 12 | 91 | 86.8 | \% | 13.2 | \% | Male |
| 171402 | Electrical Linework | 125 | 1 | 126 | 99.2 | \% | 0.8 | \% | Male |
| 171403 | Motor Repair | 17 | 0 | 17 | 100.0 | \% | 0.0 | \% | Male |
| 171501 | Communications | 201 | 9 | 210 | 95.7 | \% | 4.3 | \% | Male |
| 171502 | Communications/Media Technician | 165 | 35 | 200 | 82.5 | \% | 17.5 | \% | Male |
| 171503 | Radio/Television | 109 | 10 | 119 | 91.6 | \% | 8.4 | \% | Male |
| 171900 | Graphic Arts | 522 | 454 | 976 | 53.5 | \% | 46.5 | \% | Integrated |
| 171902 | Printing Press Occupations | 41 | 20 | 61 | 67.2 | \% | 32.8 | \% | Integrated |
| 171907 | Photographic Finishing | 43 | 18 | 61 | 70.5 | \% | 29.5 |  | Integrated |
| 172101 | Optical Technology/Instruments | 29 | 21 | 50 | 58.0 | \% | 42.0 | \% | Integrated |
| 172102 | Clock and Watchmaking | 14 | 6 | 20 | 70.0 | \% | 30.0 | \% | Integrated |
| 172302 | Machine Shop Operations | 1,480 | 75 | 1,555 | 95.2 | \% | 4.8 |  | Male |
| 172303 | Production Machinist Occupations | 141 | 8 | 149 | 94.6 | \% | 5.4 |  | Male |
| 172305 | Sheet Metal Working/Fabrication | 155 | 2 | 157 | 98.7 | \% | 1.3 | \% | Male |
| 172306 | Welding Occupations | 1,588 | 28 | 1,616 | 98.3 | \% | 1.7 | \% | Male |
| 172307 | Tool and Die Making | 564 | 24 | 588 | 95.9 | \% | 4.1 |  | Male |
| 172309 | Metal Pattern \& Model Making | 35 | 1 | 36 | 97.2 | \% | 2.8 | \% | Male |
| 172399 | Jewelry Repair | 22 | 13 | 35 | 62.9 | \% | 37.1 |  | Integrated |
| 172601 | Barbering | 19 | 27 | 46 | 41.3 | \% | 58.7 |  | Integrated |
| 172602 | Cosmetology | 41 | 724 | 765 | 5.4 |  | 94.6 |  | Female |
| 172700 | Plastics/Lamination Occupations | 70 | 4 | 74 | 94.6 | \% | 5.4 | \% | Male |
| 172802 | Law Enforcement Training | 298 | 49 | 347 | 85.9 | \% | 14.1 | \% | Male |
| 172901 | Baking | 26 | 27 | 53 | 49.1 | \% | 50.9 |  | Integrated |
| 172902 | Food Preparation Cooking | 648 | 307 | 955 | 67.9 | \% | 32.1 | \% | Integrated |
| 172903 | Meat Cutting | 186 |  | 187 | 99.5 | \% | 0.5 | \% | Male |
| 172904 | Waiter/Waitress | 5 | 5 | 10 | 50.0 | \% | 50.0 |  | Integrated |
| 172999 | Kitchen Assistant | 13 | 42 | 55 | 23.6 | \% | 76.4 | \% | Integrated |
| 173100 | Small Engine Mechanics | 358 | 45 | 403 | 88.8 | \% | 11.2 | \% | Male |
| 173110 | Marine Engine Mechanics | 12 | 0 | 12 | 100.0 | \% | 0.0 | \% | Male |
| 173200 | Stationary Engineering | 16 | 0 | 16 | 100.0 | \% | 0.0 | \% | Male |
| 173302 | Tailoring | 26 | 65 | 91 | 28.6 | \% | 71.4 |  | Integrated |
| 173402 | Shoe Repair | 30 | 4 | 34 | 88.2 | \% | 11.8 | \% | Male |
| 173500 | Upholstery | 63 | 42 | 105 | 60.0 | \% | 40.0 | \% | Integrated |
| 173601 | Cabinetmaking | 253 | 23 | 276 | 91.7 | \% | 8.3 | \% | Male |
| 173699 | Wood Finishing | 23 | 8 | 31 | 74.2 | \% | 25.8 | \% | Integrated |
| 174001 | Automated Packaging Equip Maint. | 16 | 3 | 19 | 84.2 |  | 15.8 | \% | Male |
| 174002 | Band Instrument Repair | 30 | 5 | 35 | 85.7 | \% | 14.3 | \% | Male |
| 174003 | Electronic Musical Instrument | 36 | 0 | 36 | 100.0 | \% | 0.0 | \% | Male |
| 176000 | Water Well Drilling | 10 | 0 | 10 | 100.0 | \% | 0.0 | \% | Male |
| 178803 | Truck Driving | 81 | 12 | 93 | 87.1 | \% | 12.9 | \% | Male |
| 179700 | Sign Painting | 20 | 24 | 44 | 45.5 | \% | 54.5 | \% | Integrated |
| 17XXXX | Unspecified | 64 | 2 | 66 | 97.0 | \% | 3.0 | \% | Male |
| TOTAL |  | 18,260 | 3,011 | 21,271 | 85.8 | \% | 14.2 | \% |  |

SPECIAL NEEDS

| OE Code | Course | Male | Female | Total | Percent <br> Male | Percent Female | Course Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 200066 | Vocational Education Advisory Svc. | 188 | 173 | 361 | 52.1 \% | 47.9\% | Integrated |
| 200068 | Supervisor of Special Needs | 267 | 192 | 459 | 58.2 \% | 41.8 \% | Integrated |
| 200069 | Pre-Vocational | 203 | 136 | 339 | 59.9 \% | 40.1\% | Integrated |
| 201000 | General Special Needs | -2,103 | 1,599 | 3,702 | 56.8 \% | 43.2\% | Integrated |
| 20xXXX | Unspecified | 209 | 75 | 284 | 73.6 \% | 26.4 \% | Integrated |
| TOTAL |  | 2,970 | 2,175 | 5,145 | 57.7 \% | $42.3 \%$ |  |

table 11. program budgets, 1981-82

| AVTI | Total |  | Male <br> Students |  | Female <br> Students |  | Budget - <br> Percent Female | Students- <br> Percent Female |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Albert Lea | \$ | 1,032,292 | \$ | 720,698 | \$ | 311,594 | 30.2 \% | 31.7 \% |
| Alexandria |  | 3,731,146 |  | 2,220,561 |  | 1,510,585 | 40.5 \% | 46.1 \% |
| Anoka |  | 4,247,482 |  | 2,759,829 |  | 1,487,653 | 35.0 \% | 41.3 \% |
| Austin |  | 1,282,351 |  | 853,782 |  | 428,569 | 33.4 \% | 38.7 \% |
| - Bemidji |  | 1,261,960 |  | 774,655 |  | 487,305 | 38.6 \% | 44.6 \% |
| Brainerd |  | 1,469,987 |  | 630,644 |  | 839,343 | 57.1 \% | 53.0\% |
| Canby |  | 1,026,613 |  | 720,718 |  | 305,895 | 29.8 \% | 30.2 \% |
| Dakota County |  | 4,410,479 |  | 3,015,039 |  | 1,395,440 | 31.6 \% | 42.5 \% |
| Detroit Lakes |  | 1,690,573 |  | 1,245,973 |  | 444,600 | 26.3 \% | 29.2 \% |
| Duluth |  | 2,337,008 |  | 1,426,788 |  | 910,220 | 38.9 \% | 48.1 \% |
| East Grand Forks |  | 1,234,084 |  | 693,117 |  | 540,967 | 43.8 \% | 48.0 \% |
| Eveleth |  | 633,346 |  | 318,696 |  | 314,650 | 49.7 \% | 54.5 \% |
| Faribault |  | 1,011,604 |  | 578,205 |  | 433,399 | 42.8 \% | 39.7 \% |
| Granite Falls |  | 933,313 |  | 580,465 |  | 352,848 | 37.8 \% | 47.3 \% |
| Hibbing |  | '1,038,929 |  | 691,201 |  | 347,728 | 33.5 \% | 34.2 \% |
| Hutchinson |  | 1,540,163 |  | 1,054,630 |  | 485,533 | 31.5 \% | 41.6 \% |
| Jackson |  | 1,214,335 |  | 885,366 |  | 328,969 | 27.1 \% | 31.7 \% |
| Mankato |  | 2,665,415 |  | 1,567,159 |  | 1,098,256 | 41.2 \% | 44.5 \% |
| Minneapolis |  | 3,907,969 |  | 2,256,592 |  | 1,651,377 | 42.3 \% | 42.9 \% |
| Moorhead |  | 1,866,273 |  | 1,166,401 |  | 699,872 | 37.5 \% | 44.0 \% |
| 916 |  | 4,530,207 |  | 2,661,475 |  | 1,868,732 | $41.3 \%$ | 48.8 \% |
| Pine City |  | -759,547 |  | 561,463 |  | 198,084 | 26.1 \% | 30.8 \% |
| Pipestone |  | 1,076,758 |  | 791,376 |  | 285,382 | 26.5 \% | 29.9 \% |
| Red Wing |  | 1,395,673 |  | 1,051,711 |  | 343,962 | 24.6 \% | 24.0 \% |
| Rochester |  | 2,024,491 |  | 859,525 |  | 1,164,966 | 57.5 \% | 60.3 \% |
| St. Cloud |  | 2,944,254 |  | 1,865,502 |  | 1,078,752 | 36.6 \% | 38.3 \% |
| St. Paul |  | 4,406,899 |  | 2,758,918 |  | 1,647,981 | 37.4 \% | 38.7 \% |
| Staples |  | 2,091,641 |  | 1,837,385 |  | 254,256 | 12.2 \% | 15.9 \% |
| Suburban Hennepin |  | 7,780,986 |  | 5,481,464 |  | 2,299,522 | 29.6 \% | 34.4 \% |
| Thief River Falls |  | 1,292,934 |  | 859,083 |  | 433,851 | 33.6 \% | 38.1 \% |
| Wadena |  | 1,144,225 |  | 806,929 |  | 337,296 | 29.5 \% | 37.5 \% |
| Willmar |  | 3,080,578 |  | 1,886,483 |  | 1,194,095 | 38.8 \% | 48.4 \% |
| Winona |  | 1,102,746 |  | 735,981 |  | 366,765 | 33.3 \% | 39.2 \% |
| TOTAL | \$ | 72,166,261 | \$ | $46,317,814$ | \$ | 25,848,447 | 35.8 \% | 41.1 \% |

table 12. program cost per student, 1981-82

| AVTI | Cost per Student |  |  | F/M Ratio |
| :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Total |  |
| Albert Lea | \$ 1,664 | \$ 1,550 | \$ 1,628 | 93.1\% |
| Alexandria | 2,271 | 1,803 | 2,055 | 79.4 \% |
| Anoka | 1,638 | 1,253 | 1,479 | 76.5 \% |
| Austin | 1,569 | 1,249 | 1,446 | 79.6 \% |
| Bemidji | 2,767 | 2,166 | 2,499 | 78.3 \% |
| Brainerd | 1,797 | 2,120 | 1,968 | 118.0\% |
| Canby | 2,139 | 2,095 | 2,125 | 97.9 \% |
| Dakota County | 2,199 | 1,376 | 1,849 | 62.6\% |
| Detroit Lakes | 1,879 | 1,623 | 1,804 | 86.4 \% |
| Duluth | 1,266 | 870 | 1,075 | 68.7 \% |
| East Grand Forks | 1,593 | 1,346 | 1,474 | 84.5 \% |
| Eveleth | 1,732 | 1,430 | 1,568 | 82.6 \% |
| Faribault | 1,830 | 2,084 | 1,931 | 113.9 \% |
| Granite Falls | 1,843 | 1,247 | 1,561 | 67.7 \% |
| Hibbing | 1,428 | 1,380 | 1,412 | 96.6 \% |
| Hutchinson | 1,873 | 1,211 | 1,598 | 64.7 \% |
| Jackson. | 1,575 | 1,260 | 1,475 | 80.0 \% |
| Mankato | 1,421 | 1,244 | 1,342 | 87.5 \% |
| Minneapolis | 1,093 | 1,067 | 1,082 | 97.6\% |
| Moorhead | 1,984 | 1,515 | 1,777 | 76.4 \% |
| 916 | 1,189 | 875 | 1,035 | 73.6 \% |
| Pine City | 2,012 | 1,597 | 1,885 | 79.4 \% |
| Pipestone. | 1,426 | 1,204 | 1,360 | 84.4 \% |
| Red Wing | 1,475 | 1,529 | 1,488 | 103.7 \% |
| Rochester | 1,529 | 1,364 | 1,430 | 89.2 \% |
| St. Cloud | 1,414 | 1,317 | 1,377 | 93.1\% |
| St. Paul | 1,010 | 956 | 989 | 94.7 \% |
| Staples | 2,935 | 2,155 | 2,811 | 73.4 \% |
| Suburban Hennepin | 1,545 | 1,233 | 1,437 | 79.8 \% |
| Thief River Falls | 1,913 | 1,572 | 1,783 | 82.2 \% |
| Wadena | 1,660 | 1,159 | 1,473 | 69.8 \% |
| Willmar | 1,851 | 1,252 | 1,561 | 67.6 \% |
| Winona | 1,590 | 1,227 | 1,447 | 77.2 \% |
| TOTAL | \$ 1,577 | \$ 1,260 | \$ 1,447 | 79.9 \% |

TABLE 13. POST-SECONDARY VOCATIONAL TEACHERS, 1981-82

| AVTI | \# Male <br> Teachers (FTE) | \# Female Teachers (FTE) | \# Total <br> Teachers <br> (FTE) | \% Female <br> Teachers |
| :---: | :---: | :---: | :---: | :---: |
| Albert Lea | 30.0 | 5.0 | 35.0 | 14.3 \% |
| Alexandria | 89.0 | 24.0 | 113.0 | 21.2 \% |
| Anoka | 96.9 | 42.6 | 139.5 | 30.5\% |
| Austin | 37.0 | 17.0 | 54.0 | 31.5 \% |
| Bemidji | 29.4 | 14.8 | 44.2 | 33.5 \% |
| Brainerd | 31.0 | 17.0 | 48.0 | 35.4\% |
| Canby | 30.0 | 5.9 | 35.9 | 16.4\% |
| Dakota County | 86.6 | 29.8 | 116.4 | 25.6 \% |
| Detroit Lakes | 49.0 | 12.0 | 61.0 | 19.7 \% |
| Duluth | 56.0 | 32.1 | 88.1 | 36.4 \% |
| East Grand Forks | 25.4 | 25.2 | 50.6 | 49.8\% |
| Eveleth | 15.0 | 8.0 | 23.0 | 34.8 \% |
| Faribault | 28.0 | 10.0 | 38.0 | 26.3\% |
| Granite Falls | 28.6 | 6.8 | 35.4 | 19.2 \% |
| Hibbing | 25.0 | 9.0 | 34.0 | 26.5 \% |
| Hutch inson | 36.0 | 15.8 | 51.8 | 30.5 \% |
| Jackson | 39.3 | 1.2 | 40.5 | 3.0 \% |
| Mankato | 67.0 | 27.8 | 94.8 | 29.3 \% |
| Minneapolis | 73.0 | 42.0 | 115.0 | 36.5 \% |
| Moorhead | 46.4 | 22.6 | 69.0 | 32.8\% |
| 916 | 81.2 | 45.4 | 126.6 | 35.9\% |
| Pine City | 23.0 | 3.0 | 26.0 | 11.5 \% |
| Pipestone | 33.0 | 7.0 | 40.0 | 17.5 \% |
| Red Wing | 26.0 | 11.9 | 37.9 | 31.4\% |
| Rochester | 36.1 | 45.0 | 81.1 | 55.5 \% |
| St. Cloud | 68.6 | 28.0 | 96.6 | 29.0\% |
| St. Paul | 121.0 | 55.3 | 176.3 | 31.4 \% |
| Staples | 39.0 | 5.4 | 44.4 | 12.2 \% |
| Suburban Hennepin | 164.6 | 40.8 | 205.4 | 19.9 \% |
| Thief River Falls | 33.0 | 12.0 | 45.0 | 26.7 \% |
| Wadena | 35.0 | 6.0 | 41.0 | 14.6 \% |
| Willmar | 88.3 | 34.0 | 122.3 | 27.8 \% |
| Winona | 28.0 | 12.6 | 40.6 | 31.0 \% |
| TOTAL | 1,695.4 | 675.0 | 2,370.4 | 28.5 \% |


| AVTI | Average Annual Salary |  | Average Years Service |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females |
| Albert Lea | \$ 22,550 | \$ 13,033 | 10.2 yrs | 7.2 yrs |
| Alexandria | 21,373 | 14,937 | 11.5 | 8.4 |
| Anoka | 24,470 | 18,652 | 11.2 | 11.0 |
| Austin | 20,754 | 16,548 | 14.8 | 9.3 |
| Bemidji | 20,654 | 16,771 | 11.5 | 9.4 |
| Brainerd | 20,097 | 17,687 | 11.7 | 11.5 |
| Canby | 21,615 | 12,167 | 12.7 | 10.1 |
| Dakota County | 20,647 | 18,554 | 8.8 | 8.7 |
| Detroit Lakes | 19,882 | 17,363 | 11.4 | 10.4 |
| Duluth | 21,506 | 19,058 | 13.6 | 11.3 |
| East Grand Forks | 19,012 | 13,073 | 21.0 | 14.2 |
| Eveleth | 19,636 | 17,529 | 11.9 | 10.5 |
| Faribault | 22,072 | 18,621 | 13.8 | 12.6 |
| Granite Falls | 19,766 | 15,616 | 11.5 | 11.6 |
| Hibbing | 21,049 | 21,211 | 9.1 | 12.8 |
| Hutchinson | 20,157 | 17,459 | 14.2 | 15.3 |
| Jackson | 22,569 | 11,981 | 15.0 | 10.5 |
| Mankato | 22,785 | 18,137 | 9.7 | 7.6 |
| Minneapolis | 28,473 | 26,225 | 11.8 | 11.0 |
| Moorhead | 22,798 | 17,693 | 12.3 | 11.5 |
| 916 | 25,166 | 21,043 | 8.2 | 7.2 |
| Pine City | 19,894 | 17,125 | 11.3 | 12.7 |
| Pipestone | 22,022 | 16,750 | 13.0 | 11.0 |
| Red Wing | 20,603 | 17,064 | 9.8 | 12.0 |
| Rochester | 22,433 | 19,529 | 16.5 | 13.8 |
| St. Cloud | 22,640 | 19,354 | 12.7 | 11.7 |
| St. Paul | 27,013 | 22,957 | 13.9 | 12.3 |
| Staples | 26,545 | 17,805 | 10.0 | 11.3 |
| Suburban Hennepin | 27,993 | 23,434 | 9.7 | 8.1 |
| Thief River Falls | 20,724 | 14,366 | 15.5 | 11.5 |
| Wadena | 21,883 | 17,644 | 9.8 | 6.8 |
| Willmar | 23,115 | 18,757 | 15.3 | 10.8 |
| Winona | 20,804 | 18,680 | 11.4 | 8.8 |
| TOTAL | \$ 23,261 | \$ 19,204 | 11.9 yrs | 10.7 yrs |

## DEFINITIONS

All data in this report are from the Minnesota Department of Education, as reported by local school districts. The following definitions are used:

Headcount. The annual headcount conducted on October 1 includes every student enrolled in an AVTI on that date, 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 $\overline{\text { related to an occupation such as Health Aide or Welding. Special needs programs and other }}$ administrative and support programs have not been included.

Curriculum Area. Curriculum areas are the seven program areas: Agriculture, Distribution, Health, Home Economics, Business-Office, Technical, and Trade-Industrial.

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

Integrated Programs. A program which is not segregated is integrated.
"Male" Programs. A segregated program is defined as a "male" program if more than 80 percent of the students are male.
"Female" Programs. A segregated program is defined as a "female" program if more than 80 percent of the students are female.

Traditional. A female student enrolled in a program in which over 80 percent of students are female, and a male student enrolled in a program in which over 80 percent of students are male, are traditional students.

Non-traditional. When a male or female student is enrolled in a program in which over 80 percent of students are of the other sex, that person is 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 includes 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.
"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 $\$ 100,000$ for a program where 75 percent of students are male has a male budget of $\$ 75,000$.
"Female" Budget. A "female" budget is calculated by apportioning the net budget for a program according to the proportion 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.


[^0]:    * A "program," on these and the following tables, refers to a statewide aggregate. For example, Agricultural Production may be an integrated course at one or more AVTIs, but statewide total enrollments in all Agricultural Production courses are 97.8 percent male and therefore this is a "male" program at the state level.

