

DOCUMENT RESUME

ED 110 824

CE 004 648

TITLE Report of Student Terminations From Full-Time Day Programs of The Minnesota Area Vocational-Technical Institutes Between July 1, 1972 and June 30, 1973. Summary of All Terminations: Across the State.

INSTITUTION Minnesota Univ., Minneapolis. Vocational Follow-Up System.

PUB DATE Dec 73

NOTE 19p.; For related documents, see CE 004 647 and CE 004 649

EDRS PRICE MF-\$0.76 HC-\$1.58 Plus Postage

DESCRIPTORS \*Area Vocational Schools; Curriculum Design; Day Students; Dropout Characteristics; \*Dropouts; Graduates; Occupational Clusters; Post Secondary Education; \*State Surveys; Tables (Data); Technical Institutes; \*Transfers; \*Withdrawal

IDENTIFIERS \*Minnesota

ABSTRACT The vocational followup system in the Minnesota area postsecondary vocational-technical institutes gathers three types of data about the students: (1) biographical, (2) termination and change of program, and (3) followup data on graduates. As part of this three-pronged effort, the termination and change data in the report provide information concerning the number of enrollees who graduated, withdrew, completed training objectives, received trade certificates, or changed programs between July 1, 1972 and June 30, 1973. Appendixes include the system curriculum guide and the categorization system of reasons for withdrawal. (MF)

\*\*\*\*\*  
\* Documents acquired by ERIC include many informal unpublished \*  
\* materials not available from other sources. ERIC makes every effort \*  
\* to obtain the best copy available. nevertheless, items of marginal \*  
\* reproducibility are often encountered and this affects the quality \*  
\* of the microfiche and hardcopy reproductions ERIC makes available \*  
\* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
\* responsible for the quality of the original document. Reproductions \*  
\* supplied by EDRS are the best that can be made from the original. \*  
\*\*\*\*\*



REPORT OF STUDENT TERMINATIONS FROM FULL-TIME DAY PROGRAMS  
OF THE MINNESOTA AREA VOCATIONAL-TECHNICAL INSTITUTES  
BETWEEN JULY 1, 1972, AND JUNE 30, 1973

VOCATIONAL FOLLOW-UP SYSTEM  
Room 302, 1507 University Avenue Southeast  
University of Minnesota  
Minneapolis, Minnesota 55414  
David J. Pucel, Director  
December, 1973

JUL 16 1975

819916003

## FOREWORD

The Vocational Follow-Up System has developed and is operating a system to follow up graduates of the post-secondary day programs of the Area Vocational-Technical Institutes of Minnesota. The System is financed by and operated for the Minnesota State Department of Education, Vocational-Technical Division. The System provides the State of Minnesota with a central follow-up system.

The Vocational Follow-Up System gathers three types of data concerning the students: (1) biographical data, (2) termination and change of program data, and (3) follow-up data on graduates, one year after graduation. The enrollee biographical data provide information concerning the population of people being served by the institutes, as well as the basic information necessary to follow-up students in the future. The termination and change of program data provide information concerning the number of enrollees who graduate, withdraw, complete training objectives or receive trade certificates, or change programs. The follow-up data provide information on what happens to individuals in the world of work after they leave the training programs. Experience with the follow-up system in Minnesota has been highly successful. In the past, returns have been received from about 82 percent of the students followed up and from about 93 percent of their employers.

This report was prepared by the staff of the Vocational Follow-Up System with the coordination of Jeffrey Luftig and Billie T. Rader. Comments concerning the reports and their effectiveness should be addressed to:

Dr. David J. Pucel  
Professor and Director  
Vocational Follow-Up System  
125 Peik Hall  
University of Minnesota  
Minneapolis, Minnesota 55455

## TABLE OF CONTENTS

	PAGE
FOREWORD.....	1
TABLE OF CONTENTS.....	ii
DESCRIPTION AND INTERPRETATION OF TABLES.....	1
TABLE 1 - TERMINATION STATUS OF STUDENTS.....	4
TABLE 2 - REASONS WHY STUDENTS WITHDREW.....	4
TABLE 3 - NUMBER OF TERMINATIONS FROM EACH CURRICULUM AREA INCLUDED IN THIS REPORT.....	5
TABLE 4 - NUMBER OF TERMINATIONS FROM EACH AREA VOCATIONAL-TECHNICAL INSTITUTE INCLUDED IN THIS REPORT.....	7
APPENDIX A - SYSTEM CURRICULUM GUIDE.....	A-1
APPENDIX B - CATEGORIZATION SYSTEM OF REASONS FOR WITHDRAWAL.....	B-1

## DESCRIPTION AND INTERPRETATION OF TABLES

This report features termination data gathered from the Area Vocational Technical Institutes of Minnesota on students who had a change of enrollment status between July 1, 1972 and June 30, 1973.

TERMINATIONS ARE DEFINED THROUGHOUT THIS REPORT TO INCLUDE, (1) GRADUATIONS, (2) WITHDRAWALS (DROPS), AND (3) TRAINING OBJECTIVE COMPLETIONS OR TRADE CERTIFICATES.

Information is provided to the Vocational Follow-Up System by an institute when a student graduates, completes his training objective or receives a trade certificate, withdraws from an institute, or changes program. Students are classified as "graduates" if they satisfactorily complete all program requirements and formally graduate. Students are classified as "completed training objective or received trade certificate" as follows. If they have partially met the requirements for graduation but have left the training program before graduation to accept employment directly related to their training, they are classified as having "completed training objective." If they have completed the requirements for graduation but have not met the level of performance required to graduate, some institutes present the students with trade certificates. Trade certificates are also awarded (by some institutes) to students who only complete the first part of a two-part program where it is not possible to graduate from the first part alone. Students are classified as "withdrawals" (drops) if they dropped out of an institute. Changes of status are classified as "program changes" when students change their training objectives and transfer to other programs within the same institute.

Four tables are included in this report: (1) TERMINATION STATUS OF STUDENTS, (2) REASONS WHY STUDENTS WITHDREW, (3) NUMBER OF TERMINATIONS FROM EACH CURRICULUM AREA INCLUDED IN THIS REPORT, and (4) NUMBER OF TERMINATIONS FROM EACH AREA VOCATIONAL-TECHNICAL INSTITUTE INCLUDED IN THIS REPORT.

TABLE 1 - TERMINATION STATUS OF STUDENTS

Table 1 presents the numbers and percentages of students who were reported to have (1) graduates, (2) completed training objective or received trade certificate, or (3) withdrawn (dropped) between July 1, 1972, and June 30, 1973. Table 1 also presents the number of program changes made by students during the same period. Please note that it is possible for a given student to have had more than one change of termination status during the reporting period. For example, a person could change from one program to another, and then graduate from the second program.

TABLE 2- REASONS WHY STUDENTS WITHDREW

The numbers and percentages of students who were reported to have withdrawn or dropped from the area vocational-technical institutes for various reasons between July 1, 1972 and June 30, 1973 are presented in Table 2. This table is a further breakdown of the "WITHDRAWALS" (DROPS) category contained in Table 1. The reasons for withdrawal are categorized as: (1) ENTERED THE ARMED FORCES; (2) TRANSFERRED TO ANOTHER AREA VOCATIONAL-TECHNICAL INSTITUTE; (3) TRANSFERRED TO A JUNIOR COLLEGE; (4) TRANSFERRED TO A COLLEGE OR UNIVERSITY; (5) TRANSFERRED TO INSTITUTION OTHER THAN THOSE MENTIONED IN 2, 3, or 4; (6) ECONOMIC REASONS; (7) PERSONAL PROBLEMS; (8) UNSATISFACTORY PROGRAM PERFORMANCE; and (9) REASON UNKNOWN. A list of sample reasons for withdrawal included under each of these categories is presented in Appendix B.

TABLE 3 - NUMBER OF TERMINATIONS FROM  
EACH CURRICULUM AREA INCLUDED IN THIS REPORT

Table 3 presents the numbers and percentages of students included in this report who terminated from each major curriculum area of the area vocational-

technical institutes. The curriculum classification system underlying the categories in Table 3 is presented in Appendix A.

TABLE 4 - NUMBER OF TERMINATIONS FROM  
EACH AREA VOCATIONAL-TECHNICAL INSTITUTE INCLUDED IN THIS REPORT

Table 4 presents the numbers and percentages of students included in this report who were reported to have terminated from each vocational-technical institute between July 1, 1972 and June 30, 1973.

TERMINATIONS FROM FULL TIME DAY  
PROGRAMS OF MINNESOTA AVTI BETWEEN 7/1/72 AND 6/30/73

9900

TABLE 1-TERMINATION STATUS OF STUDENTS - TERMINATIONS  
INCLUDE GRADUATES, WITHDRAWALS, TRAINING OBJECTIVE  
COMPLETIONS AND TRADE CERTIFICATES

C A T E G O R Y	NUMBER	PERCENT
1. GRADUATES . . . . .	9374	65.38
2. COMP. TRNG. OBJ./TRADE CERT. . . . .	747	5.21
3. WITHDRAWALS (DROPS) . . . . .	4216	29.41
PROGRAM CHANGES . . . . .	520	**
T O T A L S	14857	100.00

TABLE 2-REASONS WHY STUDENTS WITHDREW

C A T E G O R Y	NUMBER	PERCENT
1. ENTERED THE ARMED FORCES . . . . .	154	3.65
2. TRANSFERRED TO ANOTHER AVTI . . . . .	122	2.89
3. TRANSFERRED TO A JUNIOR COLLEGE . . . . .	37	0.88
4. TRANSFERRED TO A COLLEGE OR UNIV. . . . .	80	1.90
5. TRANS. TO INST. OTHER THAN 2,3, OR 4 . . . . .	23	0.55
6. ECONOMIC REASONS . . . . .	1051	24.93
7. PERSONAL PROBLEMS . . . . .	777	18.43
8. UNSATISFACTORY PROGRAM PERFORMANCE . . . . .	1398	33.16
9. REASON UNKNOWN . . . . .	574	13.61
T O T A L S	4216	100.00

TABLE 3-NUMBER OF TERMINATIONS FROM  
EACH CURRICULUM AREA INCLUDED IN THIS REPORT

C A T E G O R Y	NUMBER	PERCENT
1. ACCOUNTING (45) (9 1) . . . . .	771	5.19
2. AGRI-BUSINESS (50) (902) . . . . .	78	0.53
3. AGRI-TECHNOLOGY (37) (902) . . . . .	62	0.42
4. AIRCRAFT MECHANICS (18) (923) . . . . .	175	1.18
5. AIR TRAFFIC CONTROL (81) (937) . . . . .	13	0.09
6. ARCHITECTURAL DRAFTING (09) (908) . . . . .	255	1.72
7. AUDIO-VISUAL TECHNOLOGY (79) (915) . . . . .	22	0.15
8. AUTO BODY REPAIR (75) (923) . . . . .	317	2.13
9. AUTOMOTIVE (06) (923) . . . . .	944	6.35
10. AUTOMOTIVE MACHINIST (86) (923) . . . . .	12	0.08
11. BAKERY PROCEDURES (31) (913) . . . . .	56	0.38
12. BANK TELLER (88) (901) . . . . .	34	0.23
13. BARBERING (24) (916) . . . . .	14	0.09
14. BRICKLAYING (28) (925) . . . . .	24	0.16
15. BROADCASTING (63) (904) . . . . .	35	0.24
16. BUTCHER AND MEAT CUTTING (62) (913) . . . . .	93	0.63
17. CABINETMAKING (20) (941) . . . . .	54	0.36
18. CARPENTRY (04) (941) . . . . .	322	2.17
19. CHEFS, COOKS AND FOOD MGMT. (15) (913) . . . . .	432	2.91
20. CHEMICAL TECHNOLOGY (77) (920) . . . . .	49	0.33
21. CHILD DEVELOPMENT ASST. (66) (917) . . . . .	121	0.81
22. CLERICAL TRAINING (47) (901) . . . . .	960	6.46
23. COMMERCIAL ART (68) (9 3) . . . . .	112	0.75
24. CONSERVATION AND FORESTRY (61) (914) . . . . .	40	0.27
25. CONST./MECH. TRADES (92) (934) . . . . .	34	0.23
26. CONSTRUCTION WORKER (78) (906) . . . . .	32	0.22
27. COSMETOLOGY (17) (916) . . . . .	325	2.19
28. CUSTODIAL WORKER (71) (907) . . . . .	13	0.09
29. DATA PROCESSING (49) (901) . . . . .	269	1.81
30. DENTAL ASSISTANT (33) (917) . . . . .	158	1.06
31. DIESEL MECHANICS (10) (923) . . . . .	220	1.48
32. DRY CLEANING AND LAUNDRY (89) (905) . . . . .	2	0.01
33. EDUCATIONAL AIDE (76) (909) . . . . .	39	0.26
34. ELECTRO-MECHANICAL TECH. (40) (911) . . . . .	122	0.82
35. ELECTRO-MEDICAL TECHNOLOGY (82) (910) . . . . .	6	0.04
36. ELECTRONICS (01) (910) . . . . .	509	3.43
37. ENVIRONMENTAL TECH. (99) (939) . . . . .	13	0.09
38. EQUIPMENT PARTS AND SALES (42) (933) . . . . .	80	0.54
39. FARM EQUIPMENT MECHANICS (13) (902) . . . . .	82	0.55
40. FARM MANAGEMENT (51) (902) . . . . .	116	0.78
41. FARRIER (70) (912) . . . . .	18	0.12
42. FASHION MERCHANDISING (57) (905) . . . . .	216	1.45
43. FLUID POWER TECH. AND HYD. (22) (923) . . . . .	94	0.63
44. HEAVY EQUIPMENT (56) (923) . . . . .	20	0.13
45. HIGHWAY TECHNOLOGY (35) (908) . . . . .	86	0.58
46. INDUSTRIAL TECHNOLOGY (83) (936) . . . . .	9	0.06
47. INTERIOR DESIGN AND SALES (44) (933) . . . . .	43	0.29
48. INTL. DOCUMENTS SPEC. (59) (933) . . . . .	14	0.09
49. JEWELRY (55) (919) . . . . .	16	0.11
50. LAW ENFORCEMENT (60) (922) . . . . .	30	0.20
51. MACHINE SHOP (11) (924) . . . . .	403	2.71
52. MAINTENANCE MECHANIC (46) (924) . . . . .	32	0.22
53. MARINE AND SMALL ENG. MECH. (25) (923) . . . . .	182	1.23

(TABLE CONTINUED ON NEXT PAGE)

## (TABLE CONTINUED FROM PREVIOUS PAGE)

54. MECH. DRAFTING AND DESIGN (08)(908)	279	1.88
55. MECH. REF. AIR. CON. APP. REP. (32)(911)	150	1.01
56. MEDICAL CLERICAL (96)(901) . . . . .	254	1.71
57. MEDICAL LABORATORY ASST. (39)(917)	146	0.98
58. MEDICAL SECRETARIAL (91)(901) . . . . .	344	2.32
59. MOBILE HOMES SERVICES (84)(926) . . . . .	11	0.07
60. NEEDLE ARTS (53)(905) . . . . .	126	0.85
61. NEWSPAPER SKILLS (87)(907) . . . . .	7	0.05
62. NURSERY/LANDSCAPE TECH. (34)(921)	132	0.89
63. NURSES AIDE OR ORDERLY (67)(917) . . . . .	518	3.49
64. OCCUPATIONAL THERAPY ASST. (74)(917)	47	0.32
65. OFFICE MACHINE MECH. (30)(928) . . . . .	40	0.27
66. OPTICAL TECHNOLOGY (38)(929) . . . . .	46	0.31
67. PAINTING AND DECORATING (95)(930)	42	0.28
68. PATTERN MAKING (23)(924) . . . . .	16	0.11
69. PHOTOGRAPHIC TECHNOLOGY (72)(931)	45	0.30
70. PLASTIC INJEC. MOLD. TECH. (26)(924)	14	0.09
71. PLUMBING (21)(932) . . . . .	113	0.76
72. POWER AND HOME ELEC. (02)(910) . . . . .	451	3.04
73. PRACTICAL NURSING (03)(917) . . . . .	829	5.58
74. PRINTING AND GRAPHIC ARTS (07)(915)	257	1.73
75. PURCH. AND INVENTORY MGMT. (94)(901)	6	0.04
76. RETAIL FLORISTRY (43)(921) . . . . .	26	0.18
77. SALES AND BUSINESS MGMT. (41)(933)	491	3.30
78. SECRETARIAL TRAINING (48)(901) . . . . .	1214	8.17
79. SERVICE STATION MECH. (19)(923) . . . . .	17	0.11
80. SHEET METAL (64)(934) . . . . .	59	0.40
81. SHOE REPAIR (16)(935) . . . . .	18	0.12
82. SURGICAL TECHNICIAN (80)(917) . . . . .	72	0.48
83. TECHNICAL ILLUSTRATION (52)(903) . . . . .	17	0.11
84. TELEPHONE COMMUNICATIONS (58)(910)	104	0.70
85. TESTING TECH. AND METAL FAB. (14)(936)	19	0.13
86. TOOL AND DIE (05)(924) . . . . .	139	0.94
87. TRAFFIC TRANSPORT. MGMT. (54)(937)	37	0.25
88. TRUCK DRIVER (90)(937) . . . . .	49	0.33
89. UPHOLSTERING (29)(938) . . . . .	19	0.13
90. WAITER/WAITRESS (85)(913) . . . . .	1	0.01
91. WASTE/WATER TREAT. TECH. (73)(939)	25	0.17
92. WATCH REPAIR (27)(919) . . . . .	15	0.10
93. WATER WELL DRILLING (93)(932) . . . . .	1	0.01
94. WELDING (12)(940) . . . . .	483	3.25
-----		
T O T A L S	14857	100.02

TABLE 4-NUMBER OF TERMINATIONS FROM EACH  
 AREA VOCATIONAL-TECHNICAL INSTITUTE INCLUDED IN THIS REPORT

C A T E G O R Y	NUMBER	PERCENT
1. 916 VO-TECH INSTITUTE . . . . .	503	3.39
2. ALBERT LEA . . . . .	140	0.94
3. ALEXANDRIA . . . . .	713	4.80
4. ANOKA . . . . .	1425	9.59
5. AUSTIN . . . . .	208	1.40
6. BEMIDJI . . . . .	165	1.11
7. BRAINERD . . . . .	324	2.18
8. CANBY . . . . .	252	1.70
9. DAKOTA COUNTY . . . . .	207	1.39
10. DETROIT LAKES . . . . .	279	1.88
11. DULUTH . . . . .	797	5.36
12. EVELETH . . . . .	225	1.51
13. FARIBAULT . . . . .	292	1.97
14. GRANITE FALLS . . . . .	212	1.43
15. HIBBING . . . . .	253	1.70
16. HUTCHINSON . . . . .	214	1.44
17. JACKSON . . . . .	326	2.19
18. MANKATO . . . . .	738	4.97
19. MINNEAPOLIS . . . . .	817	5.50
20. MOORHEAD . . . . .	548	3.69
21. PINE CITY . . . . .	143	0.96
22. PIPESTONE . . . . .	328	2.21
23. RED WING . . . . .	38	0.26
24. ROCHESTER . . . . .	546	3.68
25. ST. CLOUD . . . . .	831	5.59
26. ST. PAUL . . . . .	1597	10.75
27. STAPLES . . . . .	259	1.74
28. SUBURBAN HENNEPIN . . . . .	442	2.98
29. THIEF RIVER FALLS . . . . .	357	2.40
30. WADENA . . . . .	326	2.19
31. WILLMAR . . . . .	785	5.28
32. WINONA . . . . .	567	3.82
T O T A L S	14857	100.00

## APPENDIX A - SYSTEM CURRICULUM GUIDE

The following appendix, the System Curriculum Guide, is useful in interpreting Table 3 - NUMBER OF TERMINATIONS FROM EACH CURRICULUM AREA INCLUDED IN THIS REPORT. The appendix lists the broad occupational clusters, the curriculum areas included in each cluster, and specific programs within each curriculum area.

The numbers within parentheses following each of the curriculum categories presented in Table 3 indicate the broad occupational cluster and the curriculum area in which that specific program is located. The first number in parentheses is the number of the curriculum area. The second number (the "900" number) is the number of the broad occupational cluster. The broad occupational clusters are arranged numerically within the appendix.

EXAMPLE: In the case of Agri-Business, the first number in parentheses indicates the number of the curriculum area (50). The second number in parentheses (902) indicates that the curriculum area is located in the broad occupational cluster AGRICULTURAL RELATED OCCUPATIONS. The course names underneath (50) Agri-Business are specific programs offered across the state included in the curriculum area, Agri-Business.

Some curriculum areas are placed under more than one broad occupational cluster, since graduates of these curriculum areas may find employment related to training in more than one broad occupational cluster.

## APPENDIX A - SYSTEM CURRICULUM GUIDE

## Broad Occupational Clusters, Curriculum Areas, and Specific Programs

- |  |  |
|--|--|
| <p>901. ACCOUNTING AND CLERICAL RELATED OCCUPATIONS</p> <p>45. <u>Accounting</u><br/><u>Bookkeeping</u></p> <p>88. <u>Bank Teller</u><br/><u>Banking and Finance</u></p> <p>47. <u>Clerical</u><br/><u>Clerical Training and</u><br/><u>Key punch</u><br/>General Office Practice<br/>Insurance Procedures<br/>Loan Clerk<br/>Typing and Related</p> <p>49. <u>Data Processing</u><br/><u>Computer Operator</u><br/><u>Computer Programmer</u><br/><u>Computer Programming</u><br/><u>for Accountants</u><br/><u>Key punch</u></p> <p>96. <u>Medical Clerical</u><br/><u>Hospital Service Coordinator</u><br/><u>Hospital Station Secretary</u><br/><u>Medical Receptionist</u></p> <p>91. <u>Medical Secretarial</u><br/><u>Medical Office Assistant</u><br/><u>Medical Office Services</u><br/><u>Medical Secretarial</u></p> <p>94. <u>Purchasing and Inventory</u><br/><u>Management</u></p> <p>48. <u>Secretarial</u><br/><u>Clerical Secretary</u><br/>Education Office Occupations<br/>Law Enforcement Office Occupations<br/>Personnel Office<br/>Secretarial, Finance<br/>Secretarial, Legal<br/>Secretarial, Stenography<br/>Steno-Clerical<br/>Traffic Office</p> | <p>902. AGRICULTURAL RELATED OCCUPATIONS</p> <p>50. <u>Agri-Business</u><br/><u>Agri-Business Sales and</u><br/><u>Management</u><br/>Agricultural Banking</p> <p>37. <u>Agri-Technology</u><br/><u>Ag Chemicals and Seed</u><br/><u>Technology</u><br/>Agricultural Supplies<br/>Technology<br/>Irrigation Technology<br/>Specialty Crops</p> <p>42. <u>Equipment Parts and Sales</u><br/><u>Auto Parts Counterman</u><br/><u>Partsman Training</u></p> <p>13. <u>Farm Equipment Mechanics</u><br/><u>Agri-Business Materials</u><br/><u>Handling</u></p> <p>51. <u>Farm Management</u><br/><u>Production Agriculture</u></p> <p>903. ART RELATED OCCUPATIONS</p> <p>68. <u>Commercial Art</u><br/><u>Production Art</u></p> <p>52. <u>Technical Illustration</u></p> <p>904. BROADCASTING RELATED OCCUPATIONS</p> <p>63. <u>Broadcasting</u><br/><u>Radio Broadcasting</u><br/><u>Telecasting and Broadcasting</u><br/><u>Technology</u></p> |
|--|--|

## Broad Occupational Clusters, Curriculum Areas, and Specific Programs

905. CLOTHING RELATED OCCUPATIONS
- 57. Fashion Merchandising  
Fashion Management  
Men's Wear Management  
Men's Wear Merchandising
  - 53. Needle Arts  
Apparel Arts  
Apparel Specialist  
Commercial Tailoring  
Tailoring
  - 89. Drycleaning and Laundry
906. CONSTRUCTION WORKER RELATED OCCUPATIONS
- 04. Carpentry
  - 78. Construction Worker
907. CUSTODIAL RELATED OCCUPATIONS
- 71. Custodial Worker  
Building Cleaning & Care  
Custodial Service  
Household, Commercial and  
Domestic Aid
908. DRAFTING RELATED OCCUPATIONS
- 09. Architectural Drafting and Design  
Electrical Drafting
  - 35. Highway Technology  
Civil Technology  
Civil Engineering Technology
  - 08. Mechanical Drafting and Design  
Design Technology  
Engineering Drafting Technician  
Industrial Drafting  
Municipal Engineering Technology
909. EDUCATIONAL AIDE RELATED OCCUPATIONS
- 76. Educational Aide  
Teacher Aide
910. ELECTRICITY - ELECTRONICS RELATED OCCUPATIONS
- 82. Electro-Medical Technology
  - 01. Electronics  
Communications  
Electronics Engineering  
Technology  
Industrial Electronics  
Instrumentation and Computer  
Maintenance  
Mobile Communications Technology  
Radio and TV Repair  
Radio, TV, and Home Entertainment  
Equipment Service
  - 02. Power and Home Electricity  
Construction Electrician  
Electrical Maintenance  
Electrical Technology  
Electrician, Power Distributing  
Industries  
Lineman Electrician  
Total Energy
  - 58. Telephone Communications Technician
911. ELECTRO - MECHANICAL TECHNOLOGY RELATED OCCUPATIONS
- 92. Construction Mechanical Trades
  - 40. Electro-Mechanical Technology  
Building, Electrical, and  
Mechanical Maintenance  
Building Operation and  
Maintenance  
Industrial Instrumentation
- (continued)

## Broad Occupational Clusters, Curriculum Areas, and Specific Programs

911. ELECTRO - MECHANICAL TECHNOLOGY RELATED OCCUPATIONS  
(continued)
32. Mechanical Refrigeration, Air Conditioning, and Heating  
Major Appliance Service  
Refrigeration, Heating,  
Air Conditioning, and  
Appliance Repair
912. FARRIER RELATED OCCUPATIONS
70. Farrier
913. FOOD SERVING AND/OR PROCESSING RELATED OCCUPATIONS
31. Bakery Procedures
62. Butcher and Meat Cutting
15. Chefs, Cooks, and Food Management  
Commercial Foods  
Commercial Cooking and  
Baking  
Dietetic Assistant  
Food Service Management  
Quality Food Production  
and Management  
Quantity Food Preparation  
Restaurant and Hotel  
Cookery Management  
Service Occupations and  
Occupational Home Economics
85. Waiter, Waitress
914. FOREST INDUSTRY RELATED OCCUPATIONS
61. Conservation and Forestry  
Forest Harvesting Technician  
Land Construction Conservation  
Technology  
Natural Resource Technician
36. Paper and Pulp Technology
915. GRAPHIC ARTS RELATED OCCUPATIONS
79. Audio-Visual Technology  
Audio-Video Technician  
Television and Audio-Video  
Production
07. Printing and Graphic Arts  
Offset Printing
916. GROOMING RELATED OCCUPATIONS
24. Barbering
17. Cosmetology
917. HEALTH RELATED OCCUPATIONS
66. Child Development Assistant  
Child Service Technology
33. Dental Assistant  
Dental Lab Technician
96. Medical Clerical  
Hospital Service Coordinator  
Hospital Station Secretary  
Medical Receptionist
39. Medical Laboratory Assistant
91. Medical Secretarial  
Medical Office Assistant  
Medical Office Services  
Medical Record Technician
67. Nurse's Aide or Orderly  
Home Health Aide  
Nursing Assistant  
Psychiatric Technician
74. Occupational Therapy Assistant
03. Practical Nursing
80. Surgical Technician

## Broad Occupational Clusters, Curriculum Areas, and Specific Programs

## 918. INDUSTRIAL SUPERVISION RELATED OCCUPATIONS

69. Industrial Foremanship Training

## 919. JEWELRY/WATCH REPAIR RELATED OCCUPATIONS

55. Jewelry Metal Arts27. Watch Repair

## 920. LABORATORY ASSISTANT RELATED OCCUPATIONS

77. Chemical Technology Chemical Laboratory Technician39. Medical Laboratory Assistant

## 921. LANDSCAPE/FLORISTRY RELATED OCCUPATIONS

34. Nursery/Landscape Technology43. Retail Floristry

## 922. LAW ENFORCEMENT RELATED OCCUPATIONS

60. Law Enforcement

## 923. MACHINERY REPAIR RELATED OCCUPATIONS

18. Aircraft Mechanics Avionics (Aviation Electronics)75. Auto Body Repair Automobile Body Repairman Used Car Renovator

(continued)

## 923. MACHINERY REPAIR RELATED OCCUPATIONS (continued)

06. Automotive Auto Mechanics Automobile Management Automobile Tune-Up Automotive Service Specialist Automotive Technician Wheel Alignment and Brake Service86. Automotive Machinist10. Diesel Mechanics Heavy Truck and Diesel Engine Mechanics Truck Mechanics42. Equipment Parts and Sales Auto Parts Counterman Partsman Training13. Farm Equipment Mechanics Agri-Business Materials Handling22. Fluid Power Technology and Hydraulics Industrial Hydraulics and Pneumatics56. Heavy Equipment Heavy Equipment Operation and Maintenance25. Marine and Small Engine Mechanics19. Service Station Mechanic Service Station Sales and Repair

## 924. MACHINIST RELATED OCCUPATIONS

86. Automotive Machinist

(continued)

## Broad Occupational Clusters, Curriculum Areas, and Specific Programs

924. MACHINIST RELATED OCCUPATIONS  
(continued)
11. Machine Shop  
Machine Operator  
Machine Tool Operator  
Machine Tool Process  
Machine Tool Rebuilding  
Machinist  
Numerical Control Technology  
Production Machinist
46. Maintenance Mechanic
23. Pattern Making
26. Plastic Injection Molding  
Technology
05. Tool and Die  
Machine Shop - Die Making  
Machine Tool and Die  
Tool Design Technician  
Tool, Die, Mold-Making  
Tool Engineering Technician
925. MASONRY RELATED OCCUPATIONS
28. Bricklaying
926. MOBILE HOMES SERVICES RELATED  
OCCUPATIONS
84. Mobile Homes Services
927. NEWSPAPER RELATED OCCUPATIONS
87. Newspaper Skills
928. OFFICE MACHINE MECHANIC  
RELATED OCCUPATIONS
30. Office Machine Mechanics
929. OPTIC RELATED OCCUPATIONS
38. Optical Technology
930. PAINTING AND DECORATING RELATED  
OCCUPATIONS
95. Painting and Decorating
931. PHOTOGRAPHIC RELATED OCCUPATIONS
72. Photographic Technology
932. PIPEFITTING AND PLUMBING RELATED  
OCCUPATIONS
92. Construction Mechanical Tra
21. Plumbing  
Pipefitting
93. Water Well Drilling
933. SALES RELATED OCCUPATIONS
50. Agri-Business  
Agri-Business Sales and  
Manufacturing  
Agricultural Banking
42. Equipment Parts and Sales  
Auto Parts Counterman  
Partsman Training
57. Fashion Merchandising  
Fashion Management  
Men's Wear Management  
Men's Wear Merchandising
44. Interior Design and Sales  
Assistant
59. International Documents  
Specialist

(continued)

## Broad Occupational Clusters, Curriculum Areas, and Specific Programs

933. SALES RELATED OCCUPATIONS  
(continued)
41. Sales and Business Management  
Aviation Administration  
Food Merchandising  
Hardware Marketing &  
Building Supplies  
Lumberyard Management  
Marketing-Merchandising  
Produce Management  
Retail Merchandising  
Sales Associate  
Sales and Marketing  
Small Business Management  
Supermarket Management  
Wholesaling, Retailing  
Marketing-Management
934. SHEET METAL RELATED OCCUPATIONS
92. Construction Mechanical Trades
64. Sheet Metal  
Sheet Metal and Design
935. SHOE REPAIRING RELATED OCCUPATIONS
16. Shoe Repairing
936. TESTING RELATED OCCUPATIONS
83. Industrial Technology  
Industrial Lab Technician  
Quality Control Technician
14. Testing Technology and Metal Fabrication
937. TRANSPORTATION RELATED OCCUPATIONS
81. Air Traffic Control
54. Traffic Transportation Management
90. Truck Driver
938. UPHOLSTERING RELATED OCCUPATIONS
29. Upholstering
939. WASTE AND WATER TREATMENT TECHNOLOGY RELATED OCCUPATIONS
73. Waste and Water Treatment Technology
940. WELDING RELATED OCCUPATIONS
75. Auto Body Repair  
Automobile Body Repairman  
Used Car Renovator
12. Welding
941. WOODWORKING RELATED OCCUPATIONS
20. Cabinetmaking
04. Carpentry
942. UNSKILLED WORKER
943. MISCELLANEOUS OCCUPATIONS

## APPENDIX B

### Categorization System for Reasons for Withdrawal

Student withdrawals are classified in Table 2 - REASONS WHY STUDENTS WITHDREW, into nine categories. These categories are listed below along with several sample reasons for withdrawal which would result in a particular classification.

1. ENTERED THE ARMED FORCES
2. TRANSFERRED TO ANOTHER AREA VOCATIONAL-TECHNICAL INSTITUTE
3. TRANSFERRED TO A JUNIOR COLLEGE
4. TRANSFERRED TO A COLLEGE OR UNIVERSITY
5. TRANSFERRED TO INSTITUTION OTHER THAN THOSE MENTIONED IN 2, 3, 4
6. ECONOMIC REASONS
  - insufficient funds
  - accepted a full-time job not related to his AVTI program
  - etc.
7. PERSONAL PROBLEMS
  - family problems
  - health-illness-or death
  - marriage
  - moved from area
  - pregnancy
  - etc.
8. UNSATISFACTORY PROGRAM PERFORMANCE
  - poor grades-lack of progress
  - absent too frequently
  - could not adjust to training program
  - lack of educational interest
  - etc.
9. REASON UNKNOWN
  - no reason given by student
  - non-interpretable reason
  - etc.