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**Prioritizing Iowa's training
needs :(occupations requiring
specialized training of less
than baccalaureate degree)**

Prioritizing Iowa's Training Needs

3-1335



Department of Public Instruction

Prioritizing

Iowa's

Training

Needs

(OCCUPATIONS REQUIRING SPECIALIZED TRAINING OF
LESS THAN BACCALAUREATE DEGREE)

STATE OF IOWA
DEPARTMENT OF PUBLIC INSTRUCTION
CAREER EDUCATION DIVISION
GRIMES STATE OFFICE BUILDING
DES MOINES, IOWA 50319

JUNE 1980

State of Iowa
DEPARTMENT OF PUBLIC INSTRUCTION
Career Education Division
Grimes State Office Building
Des Moines, Iowa 50319

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IOWA'S PRIORITY PROGRAM AREA LISTINGS

I. Introduction

Efforts to prioritize career education preparatory training activities were initiated in 1974 with valuable assistance from a twelve-member ad hoc committee composed of representatives from various educational associations and related state agencies. Revisions to the original publication were made in 1976 and 1978. The current updated version reflects labor demand projections for 1982 from CENIS, Cycle III; student interest data from the 1979 Student Interest Survey; and follow-up information from the 1977-78 Vocational Student Follow-up Survey.

II. Priority Program Areas

Since many different factors are involved in planning training programs, the Priority Program Area process encompasses the following components:

- Manpower Needs
- Availability of Students
 - Student Interest
 - Student Need
- Program Effectiveness
 - Attrition Rate
 - Placement Rate
 - Cost/Benefit

Rating and point assignment for these components is accomplished by application of equations designed to achieve optimum objectivity.

Following the Priority Program Area Ranking listing (pp. 2-6), tables are presented (in the Appendix) for each component—indicating the calculations involved, and the ratings for each OE taxonomy area.

Note: The figures for each column in the priority listing refer to point assignments - not to numbers of individuals.

PRIORITY PROGRAM AREA RANKINGS - FY 1981

Rank Order	Taxonomy	Program Area Name	Points Allocated - By Component						Tot. Poi.
			Manpower Needs	Student Availability		Program Effectiveness			
				Interest	Need	Attri-tion	Place-ment	Cost/Benefit	
1	04.0100	Advertising Services	27	20	11	10	10	4	82
2	04.1800	Recreation & Tourism	27	20	12	10	0	4	73
3	07.0410	Recreational Therapy	30	6	12	10	10	4	72
4	17.2904	Waiter/Waitress	26	4	14	10	10	4	68
5	17.7002	Truck Driving	20	2	15	10	10	10	67
6-7	07.0603	Optometrist Assistants	30	4	10	0	10	0	64
	07.0402	Physical Therapy	15	20	15	5	5	4	64
8	17.1014	Structural Steel Workers (Ironworker)	30	6	12	5	5	4	62
9-10	04.1600	Petroleum	22	1	13	10	5	10	61
	17.1403	Electric Motor Repairers	22	2	13	10	10	4	61
	07.0307	Homemaker-Home Health Aides	30	1	15	5	5	4	60
11-13	17.1002	Electricity (Construction)	17	6	9	10	10	8	60
	17.1005	Painting & Decorating	23	10	13	10	0	4	60
14	17.3300	Textile Production & Fabrication	30	1	14	5	5	4	59
15-16	04.1700	Real Estate	30	3	11	5	5	4	58
	17.2102	Watchmaking & Repair	30	0	14	5	5	4	58
	04.0402	Finance & Credit-Securities	30	0	13	5	5	4	57
17-19	07.0503	Nuclear Medical Technology	30	3	10	5	5	4	57
	09.0205	Instit./Home Mgmt., & Supp. Svcs.	17	5	11	10	10	4	57
	07.0502	Radiation Therapy	30	0	12	5	5	4	56
	17.0100	Air Conditioning	30	1	9	5	5	6	56
20-24	17.1001	Carpentry	28	2	8	5	5	8	56
	17.1015	Mobile Home Servicers	30	0	12	5	5	4	56
	17.7100	Misc. Repair Occupations	30	2	10	5	5	4	56
	07.0914	EEG/EKG Technicians	29	2	10	5	5	4	55
	14.0400	Information Communications	9	7	15	10	10	4	55
25-30	14.0503	Shipping & Receiving Clerks	16	0	15	10	10	4	55
	17.1009	Glaziers	29	9	12	5	5	4	55
	17.2700	Plastics	24	0	17	5	5	4	55
	17.3600	Woodworking Occupations	17	3	11	10	0	4	55
31	17.2302	Machine Shop	15	0	9	10	10	10	54
	04.0600	Food Distribution	12	3	13	10	5	10	53
32-34	14.0901	Clerk Typists	17	3	13	10	10	0	53
	17.1011	Floor Covering Mechanics	26	1	12	5	5	4	53

PRIORITY PROGRAM AREA RANKINGS - FY 1981

Rank Order	Taxonomy	Program Area Name	Points Allocated - By Component						Total Point
			Manpower Needs	Student Availability		Program Effectiveness			
				Interest	Need	Attri-tion	Place-ment	Cost/Benefit	
35-38	07.0810	Alcoholism Counselors	23	5	10	5	5	4	52
	17.1008	Dry Wall Installation	25	0	14	5	5	4	52
	17.2301	Foundry	22	4	12	5	5	4	52
	17.1000	Construction/Maintenance Trades	10	12	10	10	5	4	52
39-41	04.0900	Hdwe., Bldg. Mtl's, Farm & Gdn. Supp.	12	1	12	10	10	6	51
	16.0200	Agricultural Related Technology	30	0	7	5	5	4	51
	17.1010	Roofing	25	0	12	5	5	4	51
42-43	01.0501	Turf Management	11	7	12	10	10	0	50
	04.0300	Automotive	20	1	14	10	5	0	50
44-46	04.0800	General Merchandise	13	2	14	10	10	0	49
	04.1900	Transportation	5	20	10	10	0	4	49
	09.0203	Food Mgmt., Production & Services	17	1	12	10	5	4	49
	17.1004	Masonry	18	4	10	5	5	6	48
47-50	17.1501	Communications	11	0	13	10	10	4	48
	17.2304	Metal Trades (Combined)	20	0	13	5	10	0	48
	17.3400	Leather Working	20	1	13	5	5	4	48
51	17.1012	Siding Applicators	21	0	12	5	5	4	47
52-56	07.0102	Dental Hygiene	0	8	14	10	10	4	46
	17.0200	Appliance Repair	5	20	11	10	0	0	46
	17.1401	Industrial Electricians	8	1	12	5	10	10	46
	17.2305	Sheet Metal	17	3	12	5	5	4	46
	17.6001	Fluid Power Occupations	19	3	10	5	5	4	46
	01.0401	Food Products	10	0	11	10	10	4	45
57-64	04.1200	Industrial Marketing	21	1	11	0	0	12	45
	16.0605	Police Science Technology	30	3	7	0	5	0	45
	16.0610	Social Service Aides	3	20	8	5	5	4	45
	16.0112	Instrumentation Technology	23	0	8	5	5	4	45
	17.1003	Heavy Equipment	16	7	12	0	10	0	45
	17.1901	Composition, Makeup & Typesetting	11	1	14	10	5	4	45
	17.2303	Machine Tool Operation	17	0	13	0	5	10	45
	04.0200	Apparel & Accessories	21	4	14	5	0	0	44
65-68	09.0202	Clothing Mgmt., Prod. & Services	14	1	14	5	10	0	44
	16.0699	Educational Media Technicians	30	2	8	0	0	4	44
	17.1503	Radio/Television	25	2	13	0	0	4	44

PRIORITY PROGRAM AREA RANKINGS - FY 1981

Rank Order	Taxonomy	Program Area Name	Points Allocated - By Component						Total Points
			Manpower Needs	Student Availability		Program Effectiveness			
				Interest	Need	Attrition	Placement	Cost/Benefit	
69-72	01.0100	Agricultural Production	1	3	11	10	10	8	43
	07.0303	Nursing Assistance	10	0	13	10	10	0	43
	17.2306	Welding/Cutting	22	3	14	0	0	4	43
73-74	17.7001	Industrial Truck Operators	13	2	14	5	5	4	43
	01.0600	Agricultural Resources	0	20	8	10	0	4	42
	17.1200	Diesel Mechanics	4	2	11	5	10	10	42
75	17.1402	Line Installers	4	0	12	5	10	10	41
76-81	01.0502	Floriculture	0	12	12	10	5	0	39
	04.0403	Finance & Credit-Agri-Banking	26	0	13	0	0	0	39
	16.0121	Industrial Hygiene/Safety	16	0	9	5	5	4	39
	17.1304	Structural Drafters	17	2	10	0	0	10	39
	17.1599	Radio/TV Broadcasting	1	20	10	0	0	8	39
82-91	17.2903	Meat Cutters	7	2	15	10	5	0	39
	01.0200	Agricultural Supplies & Services	1	1	10	10	10	6	38
	01.0301	Agricultural Power & Machinery	4	1	13	10	10	0	38
	04.1300	Insurance	26	1	11	0	0	0	38
	07.0301	Nursing (Associate Degree)	5	1	7	5	10	10	38
	07.0801	Mental Health Technicians	5	7	12	5	5	4	38
	16.0120	Fluid Power Technicians	17	0	7	5	5	4	38
	17.0600	Business Machine Maintenance	11	1	12	5	5	4	38
	17.1906	Bookbinding	9	1	14	5	5	4	38
	17.2307	Tool & Die Making	12	1	10	0	5	10	38
92-93	17.7300	Manufacturing Inspection	13	1	10	5	5	4	38
	14.0202	Key punch Operators	9	2	16	5	5	0	37
	14.0302	General Office Clerks	12	3	12	5	5	0	37
94-99	07.0401	Occupational Therapy	0	3	13	10	10	0	36
	16.0111	Industrial Technology	14	1	7	5	5	4	36
	16.0113	Mechanical Technicians	13	0	8	0	5	10	36
	17.1100	Custodians	5	1	15	10	5	0	36
	17.1303	Mechanical Drafters	11	1	10	5	5	4	36
100-103	17.3500	Upholstering	18	1	13	0	0	4	36
	04.1100	Hotel & Lodging	1	6	13	0	5	10	35
	07.0200	Medical Laboratory Technology	13	5	7	0	0	10	35
	07.0903	Respiratory Therapy	13	0	13	0	5	4	35
	17.0301	Auto Body Repair	11	0	14	5	5	0	35

PRIORITY PROGRAM AREA RANKINGS - FY 1981

Rank Order	Taxonomy	Program Area Name	Points Allocated - By Component						Total Point
			Manpower Needs	Student Availability		Program Effectiveness			
				Interest	Need	Attri- tion	Place- ment	Cost/ Benefit	
104-	07.0305	Surgical Technicians	5	1	13	5	10	0	34
105	14.0805	Office Managers	2	0	8	10	10	4	34
	04.0400	Finance & Credit-Banking	18	2	13	0	0	0	33
106-	07.0101	Dental Assisting	1	3	14	5	10	0	33
109	14.0601	Educ. Assistants & Trng. Spec.	1	7	11	10	0	4	33
	17.2902	Cook/Chef	10	2	12	5	0	4	33
	04.1000	Home Furnishings	0	20	12	0	0	0	32
110-	07.0910	Orthopedic Assisting	0	10	7	5	0	10	32
113	17.0900	Commercial Photography	8	16	11	5	0	0	32
	17.1007	Plumbing & Pipefitting	15	3	9	0	5	0	32
	04.0401	Finance & Credit- Cons. Credit	3	1	13	5	5	4	31
	07.0302	Practical (Vocational) Nurse	8	1	12	0	10	0	31
	16.0107	Electrical Technology	10	0	7	5	5	4	31
114-	16.0110	Environmental Control Technology	9	1	7	5	5	4	31
122	17.0302	Auto Mechanics	8	1	12	5	5	0	31
	17.2101	Instruments	0	0	13	0	10	8	31
	17.2602	Cosmetology	1	2	13	5	10	0	31
	17.2901	Bakers	5	6	12	0	0	8	31
	17.3100	Small Engine Repairers	11	2	13	0	5	0	31
	07.0904	Medical Assistants	0	0	15	5	10	0	30
	14.0703	Stenographers	13	3	10	0	0	4	30
123-	16.0105	Chemical Technicians	8	0	8	5	5	4	30
127	16.0106	Civil Technology	14	2	8	0	0	6	30
	17.1301	Architectural Drafters	2	4	10	0	10	4	30
128-	14.0203	Programmers	4	4	11	0	0	10	29
130	17.2800	Public Service Occupations	0	0	10	5	5	4	29
	17.2801	Firefighter Training	0	1	14	5	5	4	29
	01.0511	Landscape Nursery & Gdn. Ctr.	5	3	10	5	5	0	28
	07.0907	Medical Emergency Technician	0	1	13	5	5	4	28
131-	14.0102	Bookkeepers	8	3	13	0	0	4	28
136	17.0700	Commercial Art Occupations	9	6	13	0	0	0	28
	17.1900	Graphic Art Occupations	9	1	13	0	5	0	28
	17.2810	Urban Planning Aides	3	0	11	5	5	4	28
137-	07.0908	Food Service Supervisor (Diet Tech.)	6	10	11	0	0	0	27

PRIORITY PROGRAM AREA RANKINGS - FY 1981

Rank Order	Taxonomy	Program Area Name	Points Allocated - By Component						Total Points
			Manpower Needs	Student Availability		Program Effectiveness			
				Interest	Need	Attrition	Placement	Cost/Benefit	
138	09.0201	Care & Guidance of Children	4	5	13	5	0	0	27
139-	07.0203	Medical Laboratory Assisting	5	0	11	5	5	0	26
141	14.0204	Systems Analyst	14	5	7	0	0	10	26
	17.1013	Cement Masons	0	0	12	5	5	4	26
	04.0801	General Merchandise Specialists	3	2	12	0	0	8	25
142-	04.2100	Tool & Equipment Rental	3	3	10	0	5	4	25
145	09.0204	Home Furn., Equip., & Svcs.	8	2	10	5	0	0	25
	14.0201	Computer & Console Operators	10	0	15	0	0	0	25
146-	07.0900	Health Care Facility Administration	6	4	10	0	0	4	24
147	17.0401	Aircraft Maintenance	0	2	12	5	5	0	24
148	07.0103	Dental Laboratory Technicians	4	0	9	0	0	10	23
149-	01.0101	Animal Science	0	0	12	0	10	0	22
150	07.0501	Radiologic Technology	0	2	12	0	0	8	22
151-	14.0101	Accountants	5	3	8	0	0	4	20
152	14.0702	Secretaries	6	4	10	0	0	0	20
153	16.0108	Electronic Technology	0	2	7	0	0	10	19
154	16.0109	Electromechanical Technology	0	0	8	0	0	10	18
155	16.0504	Food Service Supervisors	4	4	9	0	0	0	17
156	14.0701	Executive Secretary	4	0	8	0	0	4	16
157	07.0701	Environmental Health Assistants	0	1	9	0	0	0	10

APPENDIX

PRIORITY PROGRAM AREA COMPONENT RATINGS

Manpower Needs - pp. 9-18
Student Interests - pp. 19-22
Student Needs - pp. 23-34
Program Effectiveness
Attrition and Placement Rate - pp. 35-38
Cost/Benefit - pp. 39-45

Manpower Needs - 30 Points Maximum

Data Source-CENIS III or comparable data source

Procedure: Take the labor demand for 1982, sub-divide into the expansion/replacement factors, derive the percentage relationship between the two factors, and apply the percentage against the labor supply (training output). Subtract the supply factors from the need factors to obtain the net need. Find the relationship of the net need factor to the total current employment in this occupation and show these percentages. Since expansion needs are much more significant for training considerations than are replacements, a three-to-one weighting factor is used. Expansion percentages are multiplied by three, replacements by one, and the resulting percentages summed. This summed percentage factor is multiplied by 30 (the total point value allowed for this section) to derive the final point allocation.

MANPOWER NEEDS RATING SCALE

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
01.0100	Agricultural Production	Expan. -2,768	0	0	-2,768	0	0	1
		Repl. 6,163	100	1,842	4,321	3	3	
01.0101	Animal Science	Expan. 1	14	48	-47	0	0	0
		Repl. 6	86	292	-286	0	0	
01.0200	Agricultural Supplies & Svcs.	Expan. 517	67	507	10	1	3	1
		Repl. 252	33	250	2	0	0	
01.0301	Agricultural Power & Machinery	Expan. 655	79	558	97	4	12	4
		Repl. 169	21	148	21	1	1	
01.0401	Food Products	Expan. 97	53	7	90	6	18	10
		Repl. 85	47	5	80	5	15	
01.0502	Floriculture	Expan. 16	33	16	0	0	0	0
		Repl. 33	67	32	1	0	0	
01.0506	Turf Management	Expan. 43	31	6	37	7	21	11
		Repl. 95	69	14	81	16	16	
01.0511	Landscape Nursery & Grdn. Ctr.	Expan. 73	59	63	10	5	15	5
		Repl. 51	41	51	0	0	0	
01.0600	Agricultural Resources	Expan. 5	50	46	-41	0	0	0
		Repl. 5	50	47	-42	0	0	
04.0100	Advertising Services	Expan. 88	57	10	78	24	72	27
		Repl. 67	43	8	59	18	18	
04.0200	Apparel & Accessories	Expan. 308	42	105	203	16	48	21
		Repl. 424	58	145	279	22	22	
04.0300	Automotive	Expan. 1,008	70	116	892	19	57	20
		Repl. 431	30	49	382	8	8	

MANPOWER NEEDS RATING SCALE, Page 2

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
04.0400	Finance & Credit-Banking	Expan. 1,265	55	138	1,127	16	48	18
		Repl. 1,035	45	112	923	13	13	
04.0401	Finance & Credit-Cons. Credit	Expan. 18	86	12	6	3	9	3
		Repl. 3	14	2	1	1	1	
04.0402	Finance & Credit-Securities	Expan. 291	87	23	268	64	192	30
		Repl. 45	13	4	41	10	10	
04.0403	Finance & Credit-Agri.-Banking	Expan. 73	86	17	56	27	81	26
		Repl. 12	14	3	9	4	4	
04.0600	Food Distribution	Expan. 607	49	108	499	10	30	12
		Repl. 627	51	112	515	11	11	
04.0800	General Merchandise	Expan. 1,232	56	286	946	11	33	13
		Repl. 969	44	225	744	9	9	
04.0801	General Merchandise Specialist	Expan. 174	37	74	100	2	6	3
		Repl. 291	63	127	164	4	4	
04.0900	Hdwe., Bldg. Mtls., Farm/Garden Supplies	Expan. 630	72	75	555	12	36	12
		Repl. 240	28	29	211	5	5	
04.1000	Home Furnishings	Expan. 2	67	13	-11	0	0	0
		Repl. 1	33	6	-5	0	0	
04.1100	Hotel and Lodging	Expan. 2	8	2	0	0	0	1
		Repl. 23	92	17	6	2	2	
04.1200	Industrial Marketing	Expan. 1,303	69	48	1,255	20	60	21
		Repl. 580	31	22	558	9	9	
04.1300	Insurance	Expan. 623	86	117	506	28	84	26
		Repl. 98	14	19	79	4	4	
04.1600	Petroleum	Expan. 484	25	14	470	12	36	22
		Repl. 1,415	75	42	1,373	36	36	
04.1700	Real Estate	Expan. 797	85	114	683	31	93	30
		Repl. 144	15	20	124	6	6	
04.1800	Recreation and Tourism	Expan. 84	57	2	82	24	72	27
		Repl. 63	43	1	62	18	18	
04.1900	Transportation	Expan. 29	26	5	24	3	9	5
		Repl. 84	74	15	69	8	8	
04.2100	Tool & Equipment Rental	Expan. 35	100	32	3	3	9	3
		Repl. 0	0	0	0	0	0	
07.0101	Dental Assisting	Expan. 113	48	107	6	1	3	1
		Repl. 122	52	116	6	1	1	
07.0102	Dental Hygiene	Expan. -18	0	0	-18	0	0	0
		Repl. 13	100	48	-35	0	0	
07.0103	Dental Laboratory Technology	Expan. 30	42	19	11	3	9	4
		Repl. 41	58	27	14	4	4	

MANPOWER NEEDS RATING SCALE, Page 3

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
07.0200	Medical Laboratory Techn.	Expan.	179	63	81	98	12	36
		Repl.	106	37	47	59	7	7
07.0203	Medical Laboratory Assisting	Expan.	30	50	20	10	4	12
		Repl.	30	50	20	10	4	4
07.0301	Nursing (Associate Degree)	Expan.	1,063	42	696	367	4	12
		Repl.	1,476	58	961	515	6	6
07.0302	Practical (Vocational) Nurse	Expan.	642	40	438	204	6	18
		Repl.	963	60	657	306	9	9
07.0303	Nursing Assistance	Expan.	1,289	24	697	592	5	15
		Repl.	4,196	76	2,208	1,988	18	18
07.0305	Surgical Technicians	Expan.	56	42	42	14	4	12
		Repl.	76	58	58	18	5	5
07.0307	Home Health Aides	Expan.	105	69	14	91	40	120
		Repl.	47	31	6	41	18	18
07.0401	Occupational Therapy	Expan.	18	62	19	-1	0	0
		Repl.	11	38	12	-1	0	0
07.0402	Physical Therapy	Expan.	25	61	0	25	10	30
		Repl.	46	39	0	46	19	19
07.0410	Recreational Therapy	Expan.	157	71	0	167	33	99
		Repl.	63	29	0	63	12	12
07.0501	Radiologic Technology	Expan.	68	46	88	-20	0	0
		Repl.	80	54	104	-26	0	0
07.0502	Radiation Therapy	Expan.	6	67	0	6	50	50
		Repl.	3	33	0	3	25	25
07.0503	Nuclear Medical Technology	Expan.	10	63	0	10	40	120
		Repl.	6	37	0	6	24	24
07.0603	Optometrist Assistants	Expan.	87	59	22	65	41	123
		Repl.	61	41	16	45	29	29
07.0701	Environmental Health Techn.	Expan.	0	0	0	0	0	0
		Repl.	0	0	6	-6	0	0
07.0801	Mental Health Technicians	Expan.	14	18	0	14	2	6
		Repl.	64	82	0	64	9	9

MANPOWER NEEDS RATING SCALE, Page 4

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
07.0810	Alcoholism Counselors	Expan. 24	75	0	24	23	69	23
		Repl. 8	25	0	8	8	8	
07.0900	Health Care Facility Admin.	Expan. 24	65	1	23	6	18	6
		Repl. 13	35	0	13	3	3	
07.0903	Respiratory Therapy	Expan. 53	39	36	17	5	15	13
		Repl. 84	61	57	27	9	27	
07.0904	Medical Assistants	Expan. 48	51	118	-65	0	0	0
		Repl. 46	49	113	-67	0	0	
07.0907	Medical Emergency Techn.	Expan. 19	50	10	-9	0	0	0
		Repl. 19	50	9	-10	0	0	
07.0908	Food Service Supervisors	Expan. 8	31	2	6	4	12	6
		Repl. 18	69	6	12	8	8	
07.0910	Orthopedic Assisting	Expan. 0	0	0	0	0	0	0
		Repl. 0	0	15	-15	0	0	
07.0914	E.E.G./E.K.G. Technicians	Expan. 19	42	2	17	22	66	29
		Repl. 26	58	3	23	30	30	
09.0201	Care & Guidance of Children	Expan. 83	23	54	29	2	6	4
		Repl. 284	77	182	102	6	6	
09.0202	Clothing Mgmt., Prod. & Svcs.	Expan. 240	29	24	216	9	27	14
		Repl. 582	71	58	524	21	21	
09.0203	Food Mgmt., Prod. & Svcs.	Expan. 755	13	16	739	6	18	17
		Repl. 5,050	87	108	4,942	38	38	
09.0204	Home Furn. Equip. & Svcs.	Expan. 92	67	36	56	7	21	8
		Repl. 46	33	17	29	4	4	
09.0205	Instit. & Home Mgmt. Supplies & Services	Expan. 410	25	8	402	9	27	17
		Repl. 1,237	75	25	1,212	28	28	
14.0101	Accountants	Expan. 331	65	215	116	5	15	5
		Repl. 181	35	116	65	3	3	
14.0102	Bookkeepers	Expan. 1,189	57	197	992	7	21	8
		Repl. 898	43	149	749	5	5	
14.0201	Computer & Console Operators	Expan. 193	48	53	140	8	24	10
		Repl. 213	52	57	161	9	9	
14.0202	Key punch Operators	Expan. 170	44	85	85	6	18	9
		Repl. 216	56	108	108	8	8	

MANPOWER NEEDS RATING SCALE, Page 5

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
14.0203	Programmers	Expan. 203	61	174	29	4	12	4
		Repl. 132	39	112	20	2	2	
14.0204	System Analysts	Expan. 93	69	35	58	13	39	14
		Repl. 41	31	16	25	6	6	
14.0303	General Office Clerks	Expan. 2,922	40	264	2,658	9	27	12
		Repl. 4,405	60	395	4,010	14	14	
14.0400	Info. Communication Occup.	Expan. 49	20	6	43	4	12	9
		Repl. 200	80	23	177	17	17	
14.0410	Medical Records Clerks	Expan. 42	42	0	42	9	27	12
		Repl. 57	57	0	57	12	12	
14.0503	Shipping & Receiving Clerks	Expan. 528	49	21	507	13	39	16
		Repl. 558	51	22	536	14	14	
14.0601	Educ. Asst. & Training Spec.	Expan. -31	0	0	-31	0	0	1
		Repl. 219	100	13	206	2	2	
14.0701	Executive Secretary	Expan. 84	23	15	69	2	6	4
		Repl. 288	77	52	236	8	8	
14.0702	Secretaries	Expan. 1,317	49	457	860	5	15	6
		Repl. 1,366	51	476	890	5	5	
14.0703	Stenographers	Expan. 200	62	30	170	12	36	13
		Repl. 122	38	19	103	7	7	
14.0805	Office Managers	Expan. 83	46	35	48	2	6	2
		Repl. 98	54	42	56	2	2	
14.0901	Clerk Typists	Expan. 699	35	82	617	12	36	17
		Repl. 1,307	65	153	1,154	22	22	
16.0105	Chemical Technicians	Expan. 52	37	2	50	6	18	8
		Repl. 88	63	4	84	10	10	
16.0106	Civil Technology	Expan. 204	67	45	159	13	39	14
		Repl. 101	33	22	79	6	6	
16.0107	Electrical Technology	Expan. 36	77	7	29	10	30	10
		Repl. 11	23	2	9	3	3	
16.0108	Electronics Technology	Expan. 58	57	222	-164	0	0	0
		Repl. 43	43	168	-125	0	0	
16.0109	Electromechanical Technology	Expan. 12	57	15	-3	0	0	0
		Repl. 9	43	11	-2	0	0	

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
16.0110	Environmental Control Techn.	Expan. 76	40	11	65	7	21	9
		Repl. 116	60	16	100	10	10	
16.0111	Industrial Technology	Expan. 456	60	45	411	13	39	14
		Repl. 309	40	30	279	9	9	
16.0112	Instrumentation Technology	Expan. 44	72	4	40	22	66	23
		Repl. 17	28	1	16	9	9	
16.0113	Mechanical Technology	Expan. 335	68	141	194	12	36	13
		Repl. 158	32	66	92	6	6	
16.0120	Fluid Power Technology	Expan. 7	54	0	7	15	45	17
		Repl. 6	46	0	6	13	13	
16.0121	Industrial Hygiene/Safety	Expan. 15	63	0	15	15	45	16
		Repl. 9	37	0	9	9	9	
16.0200	Agri. Related Technology	Expan. 115	94	3	112	34	102	30
		Repl. 8	6	0	8	2	2	
16.0504	Food Service Supervisor	Expan. 143	41	34	109	3	9	4
		Repl. 210	59	50	160	5	5	
16.0605	Police Science Technology	Expan. 3,557	54	166	3,391	47	141	30
		Repl. 3,016	46	141	2,875	40	40	
16.0610	Social Service Aides	Expan. 13	10	3	10	1	3	3
		Repl. 114	90	29	85	8	8	
16.0699	Educational Media Techn.	Expan. 27	93	10	17	61	183	30
		Repl. 2	7	1	1	4	4	
17.0100	Air Conditioning	Expan. 553	66	113	440	28	84	30
		Repl. 289	34	58	231	15	15	
17.0200	Appliance Repair	Expan. 59	67	9	50	5	15	5
		Repl. 28	33	5	23	3	3	
17.0301	Auto Body Repair	Expan. 353	48	168	185	9	27	11
		Repl. 375	52	181	194	10	10	
17.0302	Auto Mechanics	Expan. 1,465	61	963	502	7	21	8
		Repl. 956	39	616	340	5	5	
17.0401	Aircraft Maintenance	Expan. 20	63	52	-32	0	0	0
		Repl. 12	37	30	-18	0	0	
17.0600	Business Machine Maint.	Expan. 18	69	0	18	11	33	11
		Repl. 8	31	0	8	5	5	

MANPOWER NEEDS RATING SCALE, Page 7

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
17.0700	Commercial Art Occupations	Expan. 122	58	39	83	8	24	9
		Repl. 87	42	28	59	6	6	
17.0900	Commerical Photography	Expan. 54	81	53	1	0	0	0
		Repl. 13	19	12	1	0	0	
17.1001	Carpentry	Expan. 2,702	68	636	2,066	27	81	28
		Repl. 1,296	32	299	997	13	13	
17.1002	Electricity	Expan. 426	74	55	371	17	51	17
		Repl. 152	26	19	133	6	6	
17.1003	Heavy Equipment (Constr.)	Expan. 773	59	28	745	14	42	16
		Repl. 544	41	19	525	10	10	
17.1004	Masonry	Expan. 296	67	50	246	17	51	18
		Repl. 149	33	24	125	9	9	
17.1005	Painting & Decorating	Expan. 198	45	1	197	18	54	23
		Repl. 239	55	2	237	22	22	
17.1007	Plumbing & Pipefitting	Expan. 314	75	56	258	15	45	15
		Repl. 104	25	19	85	5	5	
17.1008	Dry Wall Installation	Expan. 104	32	2	102	16	48	25
		Repl. 220	68	3	217	34	34	
17.1009	Glaziers	Expan. 72	80	1	71	30	90	29
		Repl. 18	20	0	18	8	8	
17.1010	Roofing	Expan. 208	26	0	208	14	42	25
		Repl. 602	74	0	602	41	41	
17.1011	Floor Covering Mechanics	Expan. 130	68	0	130	25	75	26
		Repl. 61	32	0	61	12	12	
17.1012	Siding Applicators	Expan. 32	100	0	32	23	69	21
		Repl. 0	0	0	0	0	0	
17.1014	Structural Steel Workers	Expan. 283	35	0	283	24	72	30
		Repl. 529	65	0	529	45	45	
17.1015	Mobile Home Servicer	Expan. 84	98	0	84	67	201	30
		Repl. 2	2	0	2	2	2	
17.1016	Building Maintenance	Expan. 313	28	31	282	6	18	10
		Repl. 796	72	81	715	16	16	
17.1100	Custodial Services	Expan. 339	14	10	329	2	6	5
		Repl. 2,130	86	58	2,072	13	13	

MANPOWER NEEDS RATING SCALE, Page 8

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
17.1200	Diesel Mechanics	Expan.	167	66	145	22	4	12
		Repl.	85	34	75	10	2	2
17.1301	Architectural Drafting	Expan.	87	66	79	8	2	6
		Repl.	45	34	41	4	1	1
17.1303	Mechanical Drafting	Expan.	178	66	77	101	10	30
		Repl.	91	34	39	52	5	5
17.1304	Structural Drafting	Expan.	44	59	6	38	15	45
		Repl.	31	41	4	27	11	11
17.1401	Industrial Electrician	Expan.	144	66	55	89	8	24
		Repl.	73	34	28	45	4	4
17.1402	Line Installers	Expan.	112	69	55	57	4	12
		Repl.	50	31	25	25	2	2
17.1403	Motor Repair	Expan.	73	74	0	73	22	66
		Repl.	25	26	0	25	8	8
17.1501	Electronic Communications	Expan.	283	89	158	125	12	36
		Repl.	34	11	20	14	1	1
17.1503	Radio/Television	Expan.	121	67	38	83	24	72
		Repl.	59	33	18	41	12	12
17.1599	Radio & TV Broadcasting	Expan.	-35	0	0	-35	0	0
		Repl.	20	100	13	7	2	2
17.1900	Graphic Arts Occupations	Expan.	356	59	97	259	8	24
		Repl.	243	41	67	176	6	6
17.1901	Composition, Makeup & Typesetting	Expan.	132	49	9	123	9	27
		Repl.	139	51	9	130	10	10
17.1906	Bookbinding	Expan.	35	51	2	33	8	24
		Repl.	33	49	1	32	7	7
17.2101	Instruments	Expan.	27	44	40	-13	0	0
		Repl.	35	56	51	-16	0	0
17.2102	Watchmaking & Repair	Expan.	33	100	0	33	39	117
		Repl.	0	0	0	0	0	0
17.2301	Foundry	Expan.	276	45	0	276	17	51
		Repl.	343	55	0	343	21	21
17.2302	Machine Shop	Expan.	940	72	235	705	15	45
		Repl.	357	28	91	266	6	6

MANPOWER NEEDS RATING SCALE, Page 9

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
17.2303	Machine Tool Operation	Expan.	1,652	46	90	1,562	14	42
		Repl.	1,915	54	105	1,810	16	16
17.2304	Metal Trades (Combined)	Expan.	1,684	52	56	1,628	17	51
		Repl.	1,546	48	51	1,495	16	16
17.2305	Sheet Metal	Expan.	109	63	12	97	16	48
		Repl.	65	37	7	58	10	10
17.2306	Welding & Cutting	Expan.	1,653	67	434	1,219	21	63
		Repl.	832	33	213	619	10	10
17.2307	Tool & Die Making	Expan.	203	64	78	125	11	33
		Repl.	114	36	44	70	6	6
17.2602	Cosmetology	Expan.	460	53	442	18	1	3
		Repl.	404	37	392	12	1	1
17.2700	Plastics	Expan.	129	40	2	127	18	54
		Repl.	190	60	4	186	26	26
17.2800	Public Service Occupations	Expan.	-1	0	0	-1	0	0
		Repl.	10	100	6	4	1	1
17.2801	Firefighting Training	Expan.	32	27	21	11	0	0
		Repl.	87	73	56	31	1	1
17.2810	Public Service Occup., Other	Expan.	0	0	0	0	0	0
		Repl.	11	100	0	11	10	10
17.2901	Bakers	Expan.	39	16	2	37	2	6
		Repl.	207	84	9	198	10	10
17.2902	Cook/Chef	Expan.	164	27	42	122	6	18
		Repl.	442	73	114	328	16	16
17.2903	Meat Cutter	Expan.	100	29	9	91	4	12
		Repl.	240	71	23	217	10	10
17.2904	Waiter/Waitress	Expan.	131	16	10	121	11	33
		Repl.	687	84	52	635	55	55
17.3100	Small Engine Repair	Expan.	144	62	92	52	10	30
		Repl.	87	38	56	31	6	6
17.3300	Textile Production & Fabric.	Expan.	1,147	51	17	1,130	35	105
		Repl.	1,092	49	16	1,070	34	34
17.3400	Leather Working	Expan.	40	91	0	40	22	66
		Repl.	4	9	0	4	2	2

-1/-

Program Number	Program Name	Ratio No.	%	Supply	Net Need	Weighted % of Need in Occupation	Percentage of Need x Maximum Points	Points
17.3500	Upholstering	Expan. 104	64	5	99	17	51	18
		Repl. 58	36	3	55	10	10	
17.3600	Woodworking Occupations	Expan. 224	51	18	206	14	42	17
		Repl. 211	49	18	193	14	14	
17.6001	Fluid Power	Expan. 26	52	0	26	16	48	19
		Repl. 24	48	0	24	15	15	
17.7001	Industrial Truck Operator	Expan. 347	34	4	343	9	27	13
		Repl. 666	66	8	658	17	17	
17.7002	Truck Driving	Expan. 2,756	44	226	2,530	16	48	20
		Repl. 3,440	56	287	3,153	20	20	
17.7100	Miscellaneous Repair Occup.	Expan. 27	48	0	27	27	81	30
		Repl. 29	52	0	29	29	29	
17.7300	Manufacturing Inspection	Expan. 258	43	0	258	10	30	13
		Repl. 342	57	1	341	14	14	

STUDENT INTEREST RATING SCALE

(20 Points Maximum)

Rating Procedures: From the most recent Student Interest Survey, locate the number representing primary student interest. Divide this number by the sum of the average section size plus the total training output.

$$P = \frac{Si}{Ss + T}$$

P = Points
 Si = Student Interest
 Ss = Average Section Size
 T = Training Output

The result of the computation comprises the point assignment for that program area.

Program Number	Program Name	Computation	Points
01.0100	Agricultural Production	5593 ÷ (1842 + 12) = 3.02	3
01.0101	Animal Science	21 ÷ (340 + 12) = .06	0
01.0200	Agricultural Supplies & Services	670 ÷ (757 + 12) = .87	1
01.0301	Agricultural Power & Machinery	383 ÷ (706 + 10) = .53	1
01.0401	Food Products	0 ÷ (12 + 10) = 0	0
01.0502	Floriculture	690 ÷ (48 + 12) = 11.50	12
01.0506	Turf Management	206 ÷ (20 + 10) = 6.87	7
01.0511	Landscape Nursery & Garden Center	311 ÷ (106 + 12) = 2.64	3
01.0600	Agricultural Resources	3750 ÷ (93 + 12) = 35.71	20
04.0100	Advertising Services	648 ÷ (18 + 12) = 21.60	20
04.0200	Apparel & Accessories	955 ÷ (250 + 12) = 3.65	4
04.0300	Automotive	205 ÷ (165 + 12) = 1.16	1
04.0400	Finance & Credit-Banking	620 ÷ (250 + 12) = 2.37	2
04.0401	Finance & Credit-Cons. Credit	15 ÷ (14 + 12) = .58	1
04.0402	Finance & Credit-Securities	0 ÷ (27 + 12) = 0	0
04.0403	Finance & Credit-Agri-Banking	0 ÷ (20 + 12) = 0	0
04.0600	Food Distribution	619 ÷ (220 + 12) = 2.67	3
04.0800	General Merchandise	1187 ÷ (511 + 12) = 2.27	2
04.0801	General Merchandise Specialist	530 ÷ (201 + 12) = 2.49	2
04.0900	Hdwe., Bldg. Mtls., Farm & Grdn. Supp.	118 ÷ (104 + 12) = 1.02	1
04.1000	Home Furnishings	783 ÷ (19 + 12) = 25.26	20
04.1100	Hotel & Lodging	176 ÷ (19 + 12) = 5.68	6
04.1200	Industrial Marketing	61 ÷ (70 + 12) = .74	1

STUDENT INTEREST RATING SCALE, Page 2

Program Number	Program Name	Computation	Points
04.1300	Insurance	$124 \div (136 + 12) = .84$	1
04.1600	Petroleum	$101 \div (56 + 12) = 1.49$	1
04.1700	Real Estate	$391 \div (134 + 12) = 2.68$	3
04.1800	Recreation & Tourism	$467 \div (3 + 12) = 31.13$	20
04.1900	Transportation	$1890 \div (20 + 12) = 59.06$	20
07.0101	Dental Assisting	$614 \div (223 + 16) = 2.57$	3
07.0102	Dental Hygiene	$505 \div (48 + 12) = 8.42$	8
07.0103	Dental Lab. Tech.	$28 \div (46 + 12) = .48$	0
07.0200	Medical Laboratory Technology	$697 \div (128 + 12) = 4.98$	5
07.0203	Medical Laboratory Assisting	$0 \div (40 + 12) = 0$	0
07.0301	Nursing (Associate Degree)	$2210 \div (1657 + 16) = 1.32$	1
07.0302	Practical Nurse	$1004 \div (1095 + 16) = .90$	1
07.0303	Nursing Assistance	$586 \div (2905 + 10) = .20$	0
07.0305	Surgical Technician	$159 \div (99 + 10) = 1.46$	1
07.0307	Homemaker-Home Health Aide	$27 \div (20 + 12) = .84$	1
07.0401	Occupational Therapy	$143 \div (31 + 12) = 3.33$	3
07.0402	Physical Therapy	$987 \div (0 + 10) = 98.70$	20
07.0410	Recreational Therapy	$71 \div (0 + 12) = 5.92$	6
07.0501	Radiologic Technology	$436 \div (192 + 6) = 2.20$	2
07.0502	Radiation Therapy	$0 \div (0 + 6) = 0$	0
07.0503	Nuclear Medical Technology	$20 \div (0 + 6) = 3.33$	3
07.0603	Optometrist Assistant	$158 \div (38 + 12) = 3.95$	4
07.0701	Environmental Health Assistant	$14 \div (6 + 10) = .88$	1
07.0801	Mental Health Technician	$84 \div (0 + 12) = 7.00$	7
07.0810	Alcoholism Counselor	$60 \div (0 + 12) = 5.00$	5
07.0900	Health Care Facility Administration	$55 \div (1 + 12) = 4.23$	4
07.0903	Respiratory Therapy	$26 \div (93 + 12) = .25$	0
07.0904	Medical Assistant	$0 \div (231 + 10) = 0$	0
07.0907	Medical Emergency Technician	$37 \div (19 + 10) = 1.28$	1
07.0908	Food Service Supervisor (Diet. Tech.)	$165 \div (8 + 8) = 10.31$	10
07.0910	Orthopedic Assisting	$204 \div (15 + 6) = 9.71$	10
07.0914	E.E.G./E.K.G. Technician	$18 \div (5 + 6) = 1.64$	2
09.0201	Care and Guidance of Children	$1237 \div (236 + 12) = 4.99$	5
09.0202	Clothing Mgmt., Prod. & Services	$132 \div (82 + 12) = 1.40$	1
09.0203	Food Mgmt., Prod. & Services	$138 \div (124 + 12) = 1.01$	1
09.0204	Home Furnishings, Equipment & Services	$147 \div (53 + 12) = 2.26$	2
09.0205	Instit./Home Mgmt., & Supportive Svcs.	$229 \div (33 + 12) = 5.09$	5
14.0101	Accountants	$910 \div (331 + 12) = 2.66$	3
14.0102	Bookkeepers	$1134 \div (346 + 12) = 3.17$	3
14.0201	Computer & Console Operators	$0 \div (110 + 12) = 0$	0
14.0202	Keypunch Operators	$335 \div (193 + 12) = 1.63$	2
14.0203	Programmers	$1093 \div (286 + 12) = 3.67$	4
14.0204	System Analysts	$340 \div (51 + 12) = 5.40$	5
14.0303	General Office Clerks	$1751 \div (659 + 12) = 2.61$	3
14.0400	Information Communications Occup.	$288 \div (29 + 12) = 7.02$	7
14.0503	Shipping & Receiving Clerks	$13 \div (43 + 12) = .24$	0

STUDENT INTEREST RATING SCALE, Page 3

Program Number	Program Name	Computation	Points
14.0601	Educ. Assistants & Trng. Spec.	$171 \div (13 + 12) = 6.84$	7
14.0701	Executive Secretary	$0 \div (67 + 12) = 0$	0
14.0702	Secretaries	$4057 \div (933 + 12) = 4.29$	4
14.0703	Stenographers	$186 \div (49 + 12) = 3.05$	3
14.0805	Office Managers	$14 \div (77 + 12) = .16$	0
14.0901	Clerk Typists	$643 \div (235 + 12) = 2.60$	3
16.0105	Chemical Technicians	$0 \div (6 + 12) = 0$	0
16.0106	Civil Technology	$147 \div (67 + 16) = 1.77$	2
16.0107	Electrical Technology	$0 \div (9 + 16) = 0$	0
16.0108	Electronic Technology	$1007 \div (390 + 16) = 2.48$	2
16.0109	Electromechanical Technology	$0 \div (26 + 12) = 0$	0
16.0110	Environmental Control Technology	$42 \div (27 + 16) = .98$	1
16.0111	Industrial Technology	$57 \div (75 + 16) = .63$	1
16.0112	Instrumentation Technology	$0 \div (5 + 16) = 0$	0
16.0113	Mechanical Technicians	$62 \div (207 + 16) = .28$	0
16.0120	Fluid Power Technicians	$1 \div (0 + 16) = .06$	0
16.0200	Agricultural Related Technology	$0 \div (3 + 16) = 0$	0
16.0504	Food Service Supervisors	$368 \div (84 + 12) = 3.83$	4
16.0605	Police Science Technology	$1009 \div (307 + 16) = 3.12$	3
16.0610	Social Service Aides	$1235 \div (32 + 12) = 28.07$	20
16.0699	Educational Media Technicians	$43 \div (11 + 16) = 1.59$	2
17.0100	Air Conditioning	$139 \div (171 + 12) = .76$	1
17.0200	Appliance Repair	$675 \div (14 + 12) = 25.96$	20
17.0301	Auto Body Repair	$0 \div (349 + 12) = 0$	0
17.0302	Auto Mechanics	$2162 \div (1579 + 12) = 1.36$	1
17.0401	Aircraft Maintenance	$180 \div (82 + 12) = 1.91$	2
17.0600	Business Machine Maintenance	$6 \div (0 + 12) = .50$	1
17.0700	Commerical Art Occupations	$464 \div (67 + 12) = 5.87$	6
17.0900	Commercial Photography	$1195 \div (65 + 12) = 15.52$	16
17.1000	Construction/Maintenance Trades	$1479 \div (112 + 12) = 11.93$	12
17.1001	Carpentry	$1880 \div (935 + 12) = 1.99$	2
17.1002	Electricity (Construction)	$477 \div (74 + 12) = 5.55$	6
17.1003	Heavy Equipment (Construction)	$421 \div (47 + 12) = 7.14$	7
17.1004	Masonry	$342 \div (74 + 12) = 3.98$	4
17.1005	Painting & Decorating	$145 \div (3 + 12) = 9.67$	10
17.1007	Plumbing/Pipefitting	$246 \div (75 + 12) = 2.83$	3
17.1008	Dry Wall Installation	$0 \div (5 + 12) = 0$	0
17.1009	Glaziers	$0 \div (1 + 12) = 0$	0
17.1010	Roofing	$0 \div (0 + 12) = 0$	0
17.1011	Floor Covering Mechanics	$13 \div (0 + 12) = 1.08$	1
17.1012	Siding Applicators	$0 \div (0 + 12) = 0$	0
17.1014	Structural Steel Workers	$74 \div (0 + 12) = 6.17$	6
17.1015	Mobile Home Serviccers	$0 \div (0 + 12) = 0$	0
17.1100	Custodians	$58 \div (68 + 12) = .73$	1
17.1200	Diesel Mechanics	$545 \div (220 + 12) = 2.35$	2

STUDENT INTEREST RATING SCALE, Page 4

Program Number	Program Name	Computation	Points
17.1301	Architectural Drafters	$496 \div (120 + 16) = 3.65$	4
17.1303	Mechanical Drafters	$126 \div (116 + 16) = .95$	1
17.1304	Structural Drafters	$62 \div (10 + 16) = 2.38$	2
17.1401	Industrial Electricians	$74 \div (83 + 12) = .78$	1
17.1402	Line Installers	$0 \div (80 + 12) = 0$	0
17.1403	Electric Motor Repairer	$26 \div (0 + 12) = 2.17$	2
17.1501	Communications	$0 \div (178 + 12) = 0$	0
17.1503	Radio/Television	$130 \div (56 + 12) = 1.91$	2
17.1599	Radio/TV Broadcasting	$708 \div (13 + 16) = 24.31$	20
17.1900	Graphic Arts Occupations	$164 \div (164 + 12) = .93$	1
17.1901	Composition, Makeup & Typesetting	$17 \div (18 + 12) = .57$	1
17.1906	Bookbinding	$14 \div (3 + 12) = .93$	1
17.2101	Instruments	$44 \div (91 + 12) = .43$	0
17.2102	Watchmaking & Repair	$1 \div (0 + 12) = .08$	0
17.2301	Foundry	$42 \div (0 + 12) = 3.50$	4
17.2302	Machine Shop	$134 \div (326 + 12) = .40$	0
17.2303	Machine Tool Operator	$23 \div (195 + 12) = .11$	0
17.2304	Metal Trades (Combined)	$50 \div (107 + 12) = .42$	0
17.2305	Sheet Metal	$101 \div (19 + 12) = 3.26$	3
17.2306	Welding/Cutting	$2027 \div (646 + 12) = 3.08$	3
17.2307	Tool & Die Making	$147 \div (122 + 12) = 1.10$	1
17.2602	Cosmetology	$2027 \div (834 + 12) = 2.40$	2
17.2700	Plastics	$2 \div (6 + 12) = .11$	0
17.2800	Public Service Occupations	$7 \div (6 + 12) = .39$	0
17.2801	Firefighter Training	$47 \div (77 + 12) = .53$	1
17.2810	Urban Planning Aides	$1 \div (0 + 12) = .08$	0
17.2901	Bakers	$134 \div (11 + 12) = 5.83$	6
17.2902	Cook/Chef	$346 \div (156 + 12) = 2.06$	2
17.2903	Meat Cutters	$102 \div (32 + 12) = 2.32$	2
17.2904	Waiter/Waitress	$320 \div (62 + 12) = 4.32$	4
17.3100	Small Engine Repairers	$286 \div (148 + 12) = 1.79$	2
17.3300	Textile Production & Fabrication	$34 \div (33 + 12) = .76$	1
17.3400	Leather Working	$8 \div (0 + 12) = .67$	1
17.3500	Upholstering	$13 \div (8 + 12) = .65$	1
17.3600	Woodworking Occupations	$120 \div (36 + 12) = 2.50$	3
17.6001	Fluid Power Occupations	$35 \div (0 + 12) = 2.92$	3
17.7001	Industrial Truck Operators	$41 \div (12 + 12) = 1.71$	2
17.7002	Truck Driving	$1035 \div (513 + 12) = 1.97$	2
17.7100	Miscellaneous Repair Occupations	$19 \div (0 + 12) = 1.58$	2
17.7300	Manufacturing Inspection	$17 \div (1 + 12) = 1.31$	1

STUDENT NEEDS RATING SCALE

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required 8 Points	Occasionally Required 6 Points	Usually Required 4 Points	Critical to Performance 2 Points	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	4-19	20-47	48-72	73-96	
														weeks 4	weeks 3	weeks 2	weeks 1	
01.0100	Agricultural Production			4			2				2					3		11
01.0101	Animal Science			4			3				2					3		12
01.0200	Agri. Supplies & Services			4				2			2					2		10
01.0301	Agri. Power & Machinery		6					2			3					2		13
01.0401	Food Products			4			3				2					2		11
01.0502	Floriculture			4			3				2					3		12
01.0506	Turf Management		6					2			3							12
01.0511	Landscape Nursery & Garden Center			4				2			3							10
01.0600	Agri. Resources				2		3				2							8
04.0100	Advertising Services			4		4					2							11
04.0200	Apparel and Accessories		6				3				2					3		14
04.0300	Automotive Sales		6				3				3					2		14
04.0400	Finance & Credit Banking		6				3				2					2		13
04.0401	Finance & Credit Consumer Credit		6				3				2					2		13

STUDENT NEEDS RATING SCALE, Page 2

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required 8 Points	Occasionally Required 6 Points	Usually Required 4 Points	Critical to Performance 2 Points	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	4-19 weeks 4 Points	20-47 weeks 3 Points	48-72 weeks 2 Points	73-96 weeks 1 Point	
04,0402	Finance & Credit Securities		6				3					2				2		13
04,0403	Finance & Credit Agri-Banking		6				3					2				2		13
04,0600	Food Distribution		6					2				2			3			13
04,0800	General Merchandise		6				3					2			3			14
04,0801	General Merchandise Specialist		6				3					2					1	12
04,0900	Hdwe., Bldg. Mtls., Farm & Grdn. Supp.		6					2				2				2		12
04,1000	Home Furnishings		6				3					2					1	12
04,1100	Hotel & Lodging		6				3					2				2		13
04,1200	Industrial Marketing			4			3					2				2		11
04,1300	Insurance			4			3					2				2		11
04,1600	Petroleum		6					2				2			3			13
04,1700	Real Estate			4			3					2				2		11
04,1800	Recreation & Tourism		6					2				2				2		12
04,1900	Transportation			4			3					2					1	10

STUDENT NEEDS RATING SCALE, Page 3

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	4-19 weeks	20-47 weeks	48-72 weeks	73-96 weeks	
		8 Points	6 Points	4 Points	2 Points	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	
04,2100	Tool & Equip. Rental			4			2				2					2		10
07,0101	Dental Assisting		6				3				2			3				14
07,0102	Dental Hygiene		6			4					2					2		14
07,0103	Dental Laboratory Technology			4				2			2						1	9
07,0200	Medical Laboratory Technology				2			2			2						1	7
07,0203	Medical Laboratory Assisting			4			3				2					2		11
07,0301	Nursing (Assoc. Degree)				2		3						1				1	7
07,0302	Practical Nursing		6					2			2					2		12
07,0303	Nursing Assistance Surgical		6					2			2				3			13
07,0305	Technician		6				3				2					2		13
07,0307	Home Health Aide Occupational		6				3				2			4				15
07,0401	Therapy		6				3				2					2		13
07,0402	Physical Therapy		6				3				3				3			15
07,0410	Recreational Therapy		6					2			2					2		12

STUDENT NEEDS RATING SCALE, Page 4

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	4-19 weeks	20-47 weeks	48-72 weeks	73-96 weeks	
		8 Points	6 Points	4 Points	2 Points	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	
07.0501	Radiologic Technology		6				2				2					2		12
07.0502	Radiation Therapy			4		4					2					2		12
07.0503	Nuclear Med. Technology			4			3					1				2		10
07.0603	Optometrist Assistant			4				2			2					2		10
07.0701	Environ. Health Tech.			4				2				1				2		9
07.0801	Mental Health Tech.		6					2			2					2		12
07.0810	Alcoholism Counselors			4			3					1				2		10
07.0900	Health Care Facility Administration			4			3				2						1	10
07.0903	Respiratory Therapy		6				3				3						1	13
07.0904	Medical Assistant		6				3				3					3		15
07.0907	Medical Emerg. Tech.		6					2					1	4				13
07.0908	Food Service Supr.			4			3					2				2		11
07.0910	Orthopedic Assisting				2		3						1				1	7
07.0914	EEG/EKG Tech.			4				2			2					2		10

STUDENT NEEDS RATING SCALE, Page 5

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	4-19 weeks	20-47 weeks	48-72 weeks	73-96 weeks	
		8 Points	6 Points	4 Points	2 Points	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	
09,0201	Care & Guid. of Children		6				3					2				2		13
09,0202	Clothing Mgmt., Prod. & Services		6				3				3					2		14
09,0203	Food Mgmt., Prod. & Services		6				3						1			2		12
09,0204	Home Furnishings, Equip. & Services			4				2				2				2		10
09,0205	Instit. & Home Mgmt. & Supp. Services			4			3					2				2		11
14,0101	Accountants				2		3					2					1	8
14,0102	Bookkeepers			4			3					3			3			13
14,0201	Computer & Console Operators		6				3					3				3		15
14,0202	Keypunch Operators		6				3					3		4				16
14,0203	Programmers			4			3					2				2		11
14,0204	Systems Analysts				2		3						1				1	7
14,0303	General Office Clerks			4			3					2				3		12
14,0400	Information Comm. Occupations		6				3					3				3		15
14,0410	Medical Records Clerks			4			3					3				3		13

STUDENT NEEDS RATING SCALE, Page 6

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	4-19 weeks	20-47 weeks	48-72 weeks	73-96 weeks	
		8 Points	6 Points	4 Points	2 Points	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	
14,0503	Shipping & Receiving Clerks		6				2				3			4				15
14,0601	Educ. Asst. & Training Spec.			4			3					1		3				11
14,0701	Executive Secretary				2		3					1				2		8
14,0702	Secretaries			4			3				2						1	10
14,0703	Stenographers			4				2			2					2		10
14,0805	Office Managers				2		3				2						1	8
14,0901	Clerk Typist			4			3				3			3				13
16,0105	Chemical Tech.				2		3				2						1	8
16,0106	Civil Technology				2		3				2						1	8
16,0107	Electrical Tech.				2			2			2						1	7
16,0108	Electronic Tech.				2			2			2						1	7
16,0109	Electromechanical Technology				2		3				2						1	8
16,0110	Environmental Controls Tech.				2			2			2						1	7
16,0111	Industrial Tech.				2			2			2						1	7

STUDENT NEEDS RATING SCALE, Page 7

Ratings Indicate the Program's Potential for Meeting the Specified Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	4-19 weeks	20-47 weeks	48-72 weeks	73-96 weeks	
		8 Points	6 Points	4 Points	2 Points	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	
16.0112	Instrumentation Technology				2		3					2					1	8
16.0113	Mechanical Technology				2		3					2					1	8
16.0120	Fluid Power Tech.				2			2				2					1	7
16.0121	Industrial Hygiene Safety				2		3					2			2			9
16.0200	Agri. Related Tech.				2			2				2					1	7
16.0504	Food Service Supervisor				2		3					2				2		9
16.0605	Police Science Tech.				2			2					1		2			7
16.0610	Social Service Aides				2		3									2		8
16.0699	Educational Media Tech.				2			2				2				2		8
17.0100	Air Conditioning								1				2			2		9
17.0200	Appliance Repair				4							2				3		11
17.0301	Auto Body Repair														3	3		14
17.0302	Auto Mechanics												1		3		2	12
17.0401	Aircraft Maintenance																1	12

STUDENT NEEDS RATING SCALE, Page 8

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required 8 Points	Occasionally Required 6 Points	Usually Required 4 Points	Critical to Performance 2 Points	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	4-19	20-47	48-72	73-96	
														weeks 4 Points	weeks 3 Points	weeks 2 Points	weeks 1 Point	
17.0600	Business Machine Maintenance			4			3				2				3			12
17.0700	Commercial Arts Occupations		6					2			3					2		13
17.0900	Commercial Photography			4				2			3					2		11
17.1000	Construction & Maintenance Trades			4				2			3						1	10
17.1001	Carpentry			4					1			2					1	8
17.1002	Electricity			4					1		3						1	9
17.1003	Heavy Equipment Construction		6					2			3						1	12
17.1004	Masonry		6						1			2					1	10
17.1005	Painting and Decorating		6					2			3					2		13
17.1007	Plumbing and Pipefitting			4					1			2				2		9
17.1008	Dry Wall Installation		6					2			3				3			14
17.1009	Glaziers		6					2				2				2		12
17.1010	Roofing		6					2				2				2		12
17.1011	Floor Covering Mech.		6					2				2				2		12

STUDENT NEEDS RATING SCALE, Page 9

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledge (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	4-19 weeks	20-47 weeks	48-72 weeks	73-96 weeks	
		8 Points	6 Points	4 Points	2 Points	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	
17.1012	Siding Applicators		6				2				2					2		12
17.1013	Cement Masons		6				2				2					2		12
17.1014	Structural Steel Workers		6				2				2					2		12
17.1015	Mobile Home Servicers		6				2				2					2		12
17.1100	Custodial Services		6				2						3	4				15
17.1200	Diesel Mechanics		6						1		3						1	11
17.1301	Arch. Drafting			4				2					2				2	10
17.1303	Mechanical Drafting			4				2					2				2	10
17.1304	Structural Drafting			4				2					2				2	10
17.1400	Electrical Occupations		6					2					2				2	12
17.1402	Line Erectors		6						1				3				2	12
17.1403	Motor Repairers		6					2					3				2	13
17.1501	Communications		6					2					3				2	13
17.1503	Radio/Television		6					2					2		3			13

STUDENT NEEDS RATING SCALE, Page 10

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required 8 Points	Occasionally Required 6 Points	Usually Required 4 Points	Critical to Performance 2 Points	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	4-19 weeks 4 Points	20-47 weeks 3 Points	48-72 weeks 2 Points	73-96 weeks 1 Point	
17.1599	Radio/TV Broadcasting			4			3				2						1	10
17.1900	Graphic Arts Occupations		6					2			3					2		13
17.1901	Composition, Makeup & Typesetting		6					2			3				3			14
17.1906	Bookbinding		6								3					2		14
17.2101	Instruments		6									2				2		13
17.2102	Watchmaking and Repair		6								3					2		14
17.2301	Foundry		6						1		3					2		12
17.2302	Machine Shop			4				2					1			2		9
17.2303	Machine Tool Operation		6					2				2			3			13
17.2304	Metal Trades, Combined		6					2				2			3			13
17.2305	Sheet Metal		6						1		3					2		12
17.2306	Welding & Cutting		6					2			3				3			14
17.2307	Tool & Die Making			4				2				2				2		10
17.2602	Cosmetology		6					2				2			3			13

STUDENT NEEDS RATING SCALE, Page 11

Ratings Indicate the Program's Potential for Meeting the Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledge (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points
		Not Required 8 Points	Occasionally Required 6 Points	Usually Required 4 Points	Critical to Performance 2 Points	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	Not Required 4 Points	Occasionally Required 3 Points	Usually Required 2 Points	Critical to Performance 1 Point	4-19	20-47	48-72	73-96	
														weeks 4	weeks 3	weeks 2	weeks 1	
17.2700	Plastics	8					3				3				3			17
17.2800	Public Service Occupations			4				2			2					2		10
17.2801	Fireman Training		6						1		3		4					14
17.2810	Public Service Occupations, Other			4			3				2					2		11
17.2901	Baker		6					2			3						1	12
17.2902	Cook/Chef		6					2			2					2		12
17.2903	Meat Cutter		6				3				3				3			15
17.2904	Walter/Waitress		6					2			2		4					14
17.3100	Small Engine Repair		6					2			3					2		13
17.3300	Textile Production & Fabrication		6					2			3				3			14
17.3400	Leather Working		6				3				2					2		13
17.3500	Upholstering		6					2			3					2		13
17.3600	Woodworking Occupations			4			3				2					2		11
17.6001	Fluid Power Occupations			4					1		3					2		10

STUDENT NEEDS RATING SCALE, Page 12

Ratings Indicate the Program's Potential for Meeting the Specified Student Needs as Expressed in Terms of Worker Requirements

Program Number	Program Name	Prerequisite Skills and Knowledges (Math, Reading, etc.)				Physical Demands				Worker Temperaments				Specific Voc. Preparation (Length of Programs)				Total Points		
		Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	Not Required	Occasionally Required	Usually Required	Critical to Performance	4-19 weeks	20-47 weeks	48-72 weeks	73-96 weeks			
		8 Points	6 Points	4 Points	2 Points	4 Points	3 Points	2 Points	1 Point	4 Points	3 Points	2 Points	1 Point	Points	Points	Points	Point			
17,7001	Industrial Truck Operator		6					2								3				14
17,7002	Truck Driving		6					2						4						15
17,7100	Miscellaneous Repair Occupations			4				2										2		10
17,7101	Bicycle Repair			4				2										2		10
17,7300	Manufacturing Inspection			4				2										2		10

PROGRAM EFFECTIVENESS - 30 POINTS

Attrition Rating Scale (10 Points)

Procedure: State average attrition rates for all programs encompassed in the 1977-1978 Annual Vocational Student Follow-up are compiled and compared with the attrition percentage for each program. Point values are assigned as follows:

No Data Available (State Average Rate Assigned)	5 Points
State Average _____ + or - 5%	5 Points
More Than 5% <u>Below</u> State Average	10 Points
More Than 5% <u>Above</u> State Average	0 Points

Placement Rating Scale (10 Points)

Procedure: State average placement rates for all programs encompassed in the 1977-1978 Annual Vocational Student Follow-up are compiled and compared with the placement percentage for each program. Point values are assigned as follows:

No Data Available (State Average Rate Assigned)	5 Points
State Average _____ + or - 5%	5 Points
More Than 5% <u>Above</u> State Average	10 Points
More Than 5% <u>Below</u> State Average	0 Points

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Program Number	Program Name	Attrition Rate				Placement Rate			
		State Average	Program Average	Difference	Points	State Average	Program Average	Difference	Points
01.0100	Agricultural Production	24%	10%	+14%	10	57%	74%	+17%	10
01.0200	Agri. Supplies/Services	24%	13%	+11%	10	57%	77%	+20%	10
01.0301	Agri. Power & Machinery	24%	18%	+6%	10	57%	69%	+12%	10
01.0400	Food Products	24%	0%	+76%	10	57%	67%	+10%	10
01.0502	Floriculture	24%	16%	+8%	10	57%	56%	-1%	5
01.0506	Turf Management	24%	18%	+6%	10	57%	63%	+6%	10
01.0511	Landscape Nursery & Gdn. Ctr.	24%	28%	-4%	5	57%	54%	-3%	5
01.0600	Ag Resources	24%	3%	+21%	10	57%	50%	-7%	0
04.0100	Advertising Services	24%	0%	+76%	10	57%	73%	+16%	10
04.0200	Apparel & Accessories	24%	20%	+4%	5	57%	51%	-6%	0
04.0300	Automotive	24%	14%	+10%	10	57%	60%	+3%	5
04.0400	Finance & Credit Banking	24%	88%	-64%	0	57%	8%	-49%	0
04.0403	Finance & Credit-Agri. Banking	24%	76%	-52%	0	57%	17%	-40%	0

Program Number	Program Name	Attrition Rate				Placement Rate			
		State Average	Program Average	Difference	Points	State Average	Program Average	Difference	Points
04.0600	Food Distribution	24%	7%	+17%	10	57%	61%	+4%	5
04.0800	General Merchandise	24%	8%	+16%	10	57%	68%	+11%	10
04.0801	General Merchandise Specialist	24%	69%	-45%	0	57%	32%	-25%	0
04.0900	Hdwe., Bldg. Mtl's, Farm & Grdn.	24%	3%	+21%	10	57%	68%	+11%	10
04.1000	Home Furnishings	24%	46%	-22%	0	57%	32%	-25%	0
04.1100	Hotel & Lodging	24%	33%	-9%	0	57%	52%	-5%	5
04.1200	Industrial Marketing	24%	56%	-32%	0	57%	27%	-30%	0
04.1300	Insurance	24%	55%	-31%	0	57%	29%	-28%	0
04.1600	Petroleum	24%	15%	+9%	10	57%	62%	+5%	5
04.1800	Recreation & Tourism	24%	0%	+76%	10	57%	33%	-24%	0
04.1900	Transportation	24%	0%	+76%	10	57%	50%	-7%	0
04.2100	Tool & Equipment Rental	24%	67%	-43%	0	57%	58%	+1%	5
07.0101	Dental Assisting	24%	24%	0%	5	57%	70%	+13%	10
07.0102	Dental Hygiene	24%	6%	+18%	10	57%	82%	+25%	10
07.0103	Dental Laboratory Technology	24%	58%	-34%	0	57%	38%	-19%	0
07.0200	Medical Laboratory Technology	24%	41%	-17%	0	57%	48%	-9	0
07.0203	Medical Laboratory Assisting	24%	22%	+2%	5	57%	62%	+5%	5
07.0301	Nursing - Associate Degree	24%	29%	-5%	5	57%	65%	+8%	10
07.0302	Practical (Voc) Nurse	24%	31%	+7%	0	57%	63%	+6%	10
07.0303	Nursing Assistance	24%	7%	+17%	10	57%	88%	+31%	10
07.0305	Surgical Technician	24%	26%	-2%	5	57%	66%	+9%	10
07.0401	Occupational Therapy Assistant	24%	13%	+11%	10	57%	81%	+24%	10
07.0501	Radiological Technology	24%	44%	-20%	0	57%	30%	-27%	0
07.0603	Optometrist Assistant	24%	44%	-20%	0	57%	73%	+16%	10
07.0701	Environmental Health Technology	24%	53%	-29%	0	57%	36%	-21%	0
07.0900	Health Care Facility Admin.	24%	88%	-64%	0	57%	5%	-52%	0
07.0903	Respiratory Therapy	24%	31%	-7%	0	57%	56%	-1%	5
07.0904	Medical Assistant	24%	27%	-3%	5	57%	69%	+12%	10
07.0908	Food Service Supvr. (Diet Tech.)	24%	46%	-22%	0	57%	36%	-21%	0
07.0910	Orthopedic Assisting	24%	27%	-3%	5	57%	7%	-50%	0
09.0201	Care & Guidance of Children	24%	24%	0%	5	57%	40%	-17%	0
09.0202	Clothing Mgmt., Prod., & Svcs.	24%	24%	0%	5	57%	68%	+11%	10
09.0203	Food Mgmt., Prod., & Svcs.	24%	4%	+20%	10	57%	52%	-5%	5
09.0204	Home Furnishing, Equip. & Svcs.	24%	28%	-4%	5	57%	39%	-18%	0
09.0205	Institutional & Home Management	24%	0%	-24%	10	57%	73%	+16%	10
14.0101	Accounting Occupations	24%	42%	-18%	0	57%	39%	-18%	0
14.0102	Bookkeepers	24%	46%	-22%	0	57%	40%	-17%	0
14.0201	Computer/Console Operators	24%	49%	-25%	0	57%	24%	-33%	0
14.0202	Keypunch Operators	24%	21%	+3%	5	57%	58%	+1%	5
14.0203	Programmers	24%	67%	-43%	0	57%	37%	-20%	0

Program Number	Program Name	Attrition Rate				Placement Rate			
		State Average	Program Average	Difference	Points	State Average	Program Average	Difference	Points
14.0204	Programmer/Analysts	24%	49%	-25%	0	57%	39%	-18%	0
14.0303	General Office Clerks	24%	26%	-2%	5	57%	55%	-2%	5
14.0400	Information Communication Occup.	24%	0%	+76%	10	57%	86%	+29%	10
14.0500	Materials Support Occupations	24%	0%	+76%	10	57%	68%	+11	10
14.0601	Educational Assistant	24%	0%	+76%	10	57%	44%	-13%	0
14.0701	Executive Secretary	24%	68%	-44%	0	57%	32%	-25%	0
14.0702	Secretaries	24%	38%	-14%	0	57%	51%	-6%	0
14.0703	Stenographers	24%	50%	-16%	0	57%	50%	-7%	0
14.0800	Supvry. & Admin. Mgmt. Occup.	24%	0%	+76%	10	57%	67%	+10%	10
14.0900	Typing & Related Occupations	24%	12%	+12%	10	57%	67%	+10%	10
16.0106	Civil Technology	24%	51%	-27%	0	57%	51%	-6%	0
16.0108	Electronic Technology	24%	46%	-2%	0	57%	51%	-6%	0
16.0109	Electromechanical Technology	24%	30%	-6%	0	57%	44%	-13%	0
16.0113	Mechanical Technology	24%	45%	-21%	0	57%	59%	+2%	5
16.0504	Food Service Supervisor	24%	66%	-42%	0	57%	33%	-24%	0
16.0505	Police Science Technology	24%	50%	-26%	0	57%	58%	+1%	5
16.0617	Solar Energy	24%	73%	-49%	0	57%	11%	-46%	0
16.0699	Educational Media Technician	24%	42%	-18%	0	57%	50%	-7%	0
17.0100	Air Conditioning	24%	22%	+2%	5	57%	59%	+2%	5
17.0200	Appliance Repair	24%	18%	+6%	10	57%	36%	-21%	0
17.0301	Auto Body Repair	24%	23%	+1%	5	57%	59%	+2%	5
17.0302	Auto Mechanics	24%	29%	-5%	5	57%	54%	-3%	5
17.0303	Automotive Specialization	24%	0%	+76%	10	57%	62%	+5%	5
17.0401	Aircraft Maintenance	24%	29%	-5%	5	57%	53%	-4%	5
17.0700	Commercial Art	24%	36%	-12%	0	57%	38%	-19%	0
17.0900	Commercial Photography	24%	24%	0%	5	57%	48%	-11%	0
17.1000	Construction & Maintenance Trades	24%	3%	-21%	10	57%	54%	-3%	5
17.1001	Carpentry	24%	28%	-4%	5	57%	60%	+3%	5
17.1002	Electricians	24%	18%	+6%	10	57%	73%	+16%	10
17.1003	Heavy Equipment (Construction)	24%	37%	-13%	0	57%	71%	+14%	10
17.1004	Masonry	24%	21%	+3%	5	57%	60%	+3%	5
17.1005	Painting & Decorating	24%	0%	+76%	10	57%	50%	-7%	0
17.1007	Plumbing & Pipefitting	24%	40%	-16%	0	57%	57%	0%	5
17.1100	Custodial Services	24%	16%	+8%	10	57%	54%	-3%	5
17.1200	Diesel Mechanic	24%	28%	-4%	5	57%	63%	+6%	10
17.1301	Architectural Drafting	24%	36%	-12%	0	57%	64%	+7%	10
17.1303	Mechanical Drafting	24%	26%	-2%	5	57%	59%	+2%	5
17.1304	Structural Drafting	24%	40%	-16%	0	57%	46%	-11%	0
17.1400	Electrical Occupations	24%	0%	+76%	10	57%	86%	+19%	10

Program Number	Program Name	Attrition Rate				Placement Rate			
		State Average	Program Average	Difference	Points	State Average	Program Average	Difference	Points
17.1401	Industrial Electricians	24%	22%	+2%	5	57%	66%	+9%	10
17.1402	Line Installer	24%	27%	-3%	5	57%	80%	+23%	10
17.0403	Electric Motor Repair	24%	0%	+76%	10	57%	100%	+43%	10
17.1501	Communications	24%	18%	+6%	10	57%	79%	+22%	10
17.1502	Industrial Electronics	24%	44%	-20%	0	57%	52%	-5%	5
17.1503	Radio/Television	24%	32%	-8%	0	57%	48%	-9%	0
17.1599	Radio & TV Broadcasting	24%	41%	-17%	0	57%	32%	-25%	0
17.1900	Graphic Arts Occupations	24%	33%	-9%	0	57%	53%	-4%	5
17.1901	Composition Makeup & Typesetting	24%	10%	+14%	10	57%	55%	-2%	5
17.2101	Instrument Repairer	24%	34%	-10%	0	57%	71%	+14%	10
17.2302	Machine Shop	24%	9%	+16%	10	57%	83%	+26%	10
17.2303	Machine Operator	24%	33%	-9%	0	57%	56%	-1%	5
17.2304	Machine Tool Maintenance	24%	19%	+5%	5	57%	67%	+10%	10
17.2306	Welding & Cutting	24%	40%	-16%	0	57%	47%	-10%	0
17.2307	Tool & Die Making	24%	43%	-19%	0	57%	62%	+5%	5
17.2602	Cosmetology	24%	23%	+1%	5	57%	63%	+6%	10
17.2800	Public Service	24%	0%	+76%	10	57%	60%	+3%	5
17.2901	Baker	24%	50%	-26%	0	57%	43%	-14%	0
17.2902	Cook/Chef	24%	25%	-1%	5	57%	46%	-11%	0
17.2903	Meat Cutter	24%	15%	+9%	10	57%	60%	+3%	5
17.2904	Waiter/Waitress	24%	0%	+76%	10	57%	64%	+7%	10
17.3000	Refrigeration	24%	0%	+76%	10	57%	100%	+43%	10
17.3100	Small Engine Mechanic	24%	31%	-6%	0	57%	57%	0%	5
17.3500	Upholstery	24%	38%	-14%	0	57%	30%	-27%	0
17.3600	Woodworking Occupations	24%	0%	+76%	10	57%	50%	-7%	0
17.7002	Truck Driver	24%	0%	+76%	10	57%	82%	+25%	10

PROGRAM EFFECTIVENESS (Continued)

Cost/Benefit Rating Scale (10 Points Maximum)

Procedure: Locate Cost Per Contact Hour figures from the publication Summary of Cost Analysis For FY 1979, developed by the Area Schools Division. Determine average benefits by ascertaining median wages from annual follow-up data. Difference between hourly costs and hourly earnings will be considered the cost/benefit. Program cost/benefit figures will be compared with average cost/benefit to determine ranking point assignment.

Assign points according to the following scale:

\$.75 or more above average (\$2.58+)	10 Points
\$.50 - \$.74 above average (\$2.33-\$2.57)	8 Points
\$.25 - \$.49 above average (\$2.08-\$2.32)	6 Points
Average cost/benefit (\$1.83) - \$.24 <u>above</u> average (\$2.07)	4 Points
No data available - state average rate assigned (\$1.83)	4 Points
Average cost/benefit (\$1.83) - \$.24 <u>below</u> average (\$1.59)	4 Points
\$.25 or more <u>below</u> average (\$1.58-0)	0 Points

COST BENEFIT SCALE

Program Number	Program Name	Average Earnings	Avg. Cost	Difference	Dev. Fr. Avg. Cost/ Benefit	Points
01.0100	Agricultural Production	4.95	2.52	2.43	+ .60	8
01.0101	Animal Science	4.46	3.66	.80	- 1.03	0
01.0200	Agricultural Supplies & Services	5.31	3.09	2.22	+ .39	6
01.0301	Agricultural Power & Machinery	4.54	3.59	.95	- .88	0
01.0401	Food Products	INA	INA	INA	INA	4
01.0502	Floriculture	3.13	2.39	.74	- 1.09	0
01.0506	Turf Management	4.65	3.57	1.08	- .75	0
01.0511	Landscape Nursery & Garden Center	4.25	2.77	1.48	- .35	0
01.0600	Agricultural Resources	4.70	2.93	1.77	- .06	4
04.0100	Advertising Services	INA	INA	INA	INA	4
04.0200	Apparel & Accessories	3.17	1.93	1.24	- .59	0
04.0300	Automotive	4.20	3.47	.73	- 1.10	0
04.0400	Finance & Credit-Banking	3.55	2.14	1.41	- .42	0
04.0401	Finance & Credit-Consumer Credit	INA	INA	INA	INA	4
04.0402	Finance & Credit-Securities	INA	INA	INA	INA	4
04.0403	Finance & Credit-Agri-Banking	3.55	3.38	.17	- 1.66	0
04.0600	Food Distribution	5.96	2.01	3.95	+ 2.12	10
04.0800	General Merchandise	3.23	2.07	1.16	- .67	0
04.0801	General Merchandise Specialists	4.59	2.13	2.46	+ .63	8
04.0900	Hdwe., Bldg. Mtl's., Farm & Grdn. Supp.	4.53	2.38	2.15	+ .32	6
04.1000	Home Furnishings	3.18	2.03	1.15	- .68	0
04.1100	Hotel & Lodging	5.63	2.21	3.42	+ 1.59	10
04.1200	Industrial Marketing	5.85	2.31	3.54	+ 1.71	10
04.1300	Insurance	3.80	3.14	.66	- 1.17	0
04.1600	Petroleum	4.93	2.24	2.69	+ .86	10
04.1700	Real Estate	INA	3.84	INA	INA	4
04.1800	Recreation & Tourism	INA	INA	INA	INA	4
04.1900	Transportation	INA	INA	INA	INA	4
04.2100	Tool & Equipment Rental	5.00	3.08	1.92	+ .09	4

COST BENEFIT RATING SCALE, Page 2

Program Number	Program Name	Average Earnings	Avg. Cost	Difference	Dev. Fr. Avg. Cost/ Benefit	Points
07.0101	Dental Assisting	3.35	3.02	.33	- 1.50	0
07.0102	Dental Hygiene	6.73	4.85	1.88	+ .05	4
07.0103	Dental Lab. Technicians	5.63	2.67	2.96	+ 1.13	10
07.0200	Medical Laboratory Technology	4.70	1.32	3.38	+ 1.55	10
07.0203	Medical Laboratory Assisting	4.07	4.47	-.40	- 2.23	0
07.0301	Nursing (Associate Degree)	5.40	2.32	3.08	+ 1.25	10
07.0302	Practical (Vocational) Nurse	4.02	2.63	1.39	-.44	0
07.0303	Nursing Assistance	2.75	1.95	.80	- 1.03	0
07.0305	Surgical Technicians	4.17	2.86	1.31	-.52	0
07.0307	Homemaker-Home Health Aide	INA	INA	INA	INA	4
07.0401	Occupational Therapy	3.83	3.01	.82	- 1.01	0
07.0402	Physical Therapy	INA	INA	INA	INA	4
07.0410	Recreational Therapy	INA	INA	INA	INA	4
07.0501	Radiologic Technology	5.00	2.56	2.44	+ .61	8
07.0502	Radiation Technology	INA	INA	INA	INA	4
07.0503	Nuclear Medical Technology	INA	INA	INA	INA	4
07.0603	Optometrist Assistant	3.25	2.48	.77	- 1.06	0
07.0701	Environmental Health Assistant	5.20	6.48	- 1.28	- 3.11	0
07.0801	Mental Health Technician	INA	INA	INA	INA	4
07.0810	Alcoholism Counselors	INA	INA	INA	INA	4
07.0900	Health Care Facility Administration	6.16	INA	INA	INA	4
07.0903	Respiratory Therapy	4.64	3.06	1.59	-.24	4
07.0904	Medical Assistants	3.35	2.39	.96	-.87	0
07.0907	Medical Emergency Technicians	INA	INA	INA	INA	4
07.0908	Food Services Supervisors	3.33	3.02	.31	- 1.52	0
07.0910	Orthopedic Assisting	6.33	3.38	2.95	+ 1.12	10
07.0914	E.E.G./E.K.G. Technicians	INA	INA	INA	INA	4
09.0201	Care & Guidance of Children	3.19	2.76	.43	- 1.40	0
09.0202	Clothing Management, Prod. & Svcs.	3.67	3.32	.35	- 1.48	0

COST BENEFIT RATING SCALE, Page 3

Program Number	Program Name	Average Earnings	Avg. Cost	Difference	Dev. Fr. Avg. Cost/ Benefit	Points
09.0203	Food Management, Prod. & Svcs.	3.26	INA	INA	INA	4
09.0204	Home Furnishings, Equip. & Svcs.	3.19	2.18	1.01	- .82	0
09.0205	Instit. & Home Mgmt. & Supp. Svcs.	INA	INA	INA	INA	4
14.0101	Accountants	4.18	2.22	1.96	+ .13	4
14.0102	Bookkeepers	3.64	1.87	1.77	- .06	4
14.0201	Computer & Console Operators	3.47	2.92	.55	- 1.28	0
14.0202	Keypunch Operators	3.88	3.85	.03	- 1.80	0
14.0203	Programmers	5.92	2.29	3.63	+ 1.80	10
14.0204	Systems Analysts	5.44	2.30	3.14	+ 1.31	10
14.0303	General Office Clerks	3.22	2.39	.83	- 1.00	0
14.0404	Information Communication Occup.	INA	INA	INA	INA	4
14.0410	Medical Records Clerks	INA	INA	INA	INA	4
14.0503	Shipping & Receiving Clerks	INA	INA	INA	INA	4
14.0601	Educ. Assts. & Trng. Specialists	INA	INA	INA	INA	4
14.0701	Executive Secretary	3.87	2.24	1.63	- .20	4
14.0702	Secretaries	3.55	2.42	1.13	- .70	0
14.0703	Stenographers	INA	INA	INA	INA	4
14.0901	Clerk Typists	2.70	2.90	- .20	- 2.03	0
16.0105	Chemical Technicians	INA	INA	INA	INA	4
16.0106	Civil Technology	6.11	3.89	2.22	+ .39	6
16.0107	Electrical Technology	INA	INA	INA	INA	4
16.0108	Electronic Technology	5.95	2.80	3.15	+ 1.32	10
16.0109	Electromechanical Technology	6.50	2.89	3.61	+ 1.78	10
16.0110	Environmental Control Technology	INA	INA	INA	INA	4
16.0111	Industrial Technology	INA	INA	INA	INA	4
16.0112	Instrumentation Technology	INA	INA	INA	INA	4
16.0113	Mechanical Technology	6.64	3.27	3.37	+ 1.54	10
16.0120	Fluid Power Technology	INA	INA	INA	INA	4
16.0121	Industrial Hygiene/Safety	INA	INA	INA	INA	4

COST BENEFIT RATING SCALE, Page 4

Program Number	Program Name	Average Earnings	Avg. Cost	Difference	Dev. Fr. Avg. Cost/ Benefit	Points
16.0200	Agriculture-Related Technology	INA	INA	INA	INA	4
16.0504	Food Service Supervisor	4.37	3.24	1.13	- .70	0
16.0605	Police Science Technology	4.57	3.58	.99	- .84	0
16.0610	Social Services Aides	INA	INA	INA	INA	4
16.0699	Educational Media Technicians	4.75	2.96	1.79	- .04	4
17.0100	Air Conditioning	4.96	2.72	2.24	+ .41	6
17.0200	Appliance Repair	3.38	5.21	- 1.83	- 3.66	0
17.0301	Auto Body Repair	4.80	3.30	1.50	- .33	0
17.0302	Auto Mechanics	4.40	3.20	1.20	- .63	0
17.0401	Aircraft Maintenance	4.95	3.74	1.21	- .62	0
17.0600	Business Machine Maintenance	INA	INA	INA	INA	4
17.0700	Commercial Art Occupations	3.87	2.36	1.51	- .32	0
17.0900	Commerical Photography	3.50	2.34	1.16	- .67	0
17.1000	Construction & Maintenance Trades	INA	INA	INA	INA	4
17.1001	Carpentry	4.96	2.49	2.47	+ .64	8
17.1002	Electricity (Construction)	4.78	2.26	2.52	+ .69	8
17.1003	Heavy Equipment (Construction)	5.83	5.05	.78	- .95	0
17.1004	Masonry	5.21	3.00	2.21	+ .38	6
17.1005	Painting & Decorating	INA	INA	INA	INA	4
17.1007	Plumbing & Pipefitting	4.43	3.39	1.04	- .79	0
17.1008	Dry Wall Installation	INA	INA	INA	INA	4
17.1009	Glaziers	INA	INA	INA	INA	4
17.1010	Roofing	INA	INA	INA	INA	4
17.1011	Floor Covering Mechanics	INA	INA	INA	INA	4
17.1012	Siding Applicators	INA	INA	INA	INA	4
17.1014	Structural Steel Workers	INA	INA	INA	INA	4
17.1015	Mobile Home Serviccers	INA	INA	INA	INA	4
17.1100	Custodial Services	3.00	2.45	.55	- 1.28	0
17.1200	Diesel Mechanics	6.08	2.95	3.13	+ 1.30	10

COST BENEFIT RATING SCALE, Page 5

Program Number	Program Name	Average Earnings	Avg. Cost	Difference	Dev. Fr. Avg. Cost/ Benefit	Points
17.1301	Architectural Drafting	4.53	2.46	2.07	+ .24	4
17.1303	Mechanical Drafting	5.06	3.24	1.82	- .01	4
17.1304	Structural Drafting	5.43	2.82	2.61	+ .78	10
17.1401	Industrial Electricians	5.39	2.68	2.71	+ .88	10
17.1402	Line Erectors	6.00	2.70	3.30	+ 1.47	10
17.1403	Motor Repairers	INA	INA	INA	INA	4
17.1501	Communications	3.97	2.08	1.89	+ .06	4
17.1502	Industrial Electronics	5.28	2.33	2.95	+ 1.12	10
17.1503	Radio/Television	4.28	2.26	2.02	+ .19	4
17.1599	Radio & TV Broadcasting	4.60	2.10	2.50	+ .67	8
17.1900	Graphic Arts Occupations	4.48	3.78	.70	- 1.13	0
17.1901	Comp., Makeup & Typesetting	4.00	2.10	1.90	+ .07	4
17.1906	Bookbinding	INA	INA	INA	INA	4
17.2101	Instruments	4.61	2.11	2.50	+ .67	8
17.2102	Watchmaking & Repair	INA	INA	INA	INA	4
17.2301	Foundry	INA	7.54	INA	INA	4
17.2302	Machine Shop	6.34	2.89	3.45	+ 1.62	10
17.2303	Machine Tool Operator	5.73	2.91	2.82	+ .99	10
17.2304	Metal Trades (Combined)	5.33	3.78	1.55	- .28	0
17.2305	Sheet Metal	INA	INA	INA	INA	4
17.2306	Welding & Cutting	4.59	2.69	1.90	+ .07	4
17.2307	Tool & Die Making	6.29	3.06	3.23	+ 1.40	10
17.2602	Cosmetology	2.38	1.51	.87	- .96	0
17.2700	Plastics	INA	INA	INA	INA	4
17.2800	Public Service Occupations	INA	INA	INA	INA	4
17.2801	Firefighter Training	INA	INA	INA	INA	4
17.2810	Urban Planning Aides	INA	INA	INA	INA	4
17.2901	Bakers	3.70	1.24	2.46	+ .63	8

COST BENEFIT RATING SCALE, Page 6

Program Number	Program Name	Average Earnings	Avg. Cost	Difference	Dev. Fr. Avg. Cost/ Benefit	Points
17.2902	Cook/Chef	4.44	3.77	1.94	+ .11	4
17.2903	Meat Cutters	3.38	5.48	- 2.10	- 3.93	0
17.2904	Waiter/Waitress	INA	INA	INA	INA	4
17.3100	Small Engine Repair	4.72	3.52	1.20	- .63	0
17.3300	Textile Production & Fabrication	INA	INA	INA	INA	4
17.3400	Leather Working	INA	INA	INA	INA	4
17.3500	Upholstering	INA	INA	INA	INA	4
17.3600	Woodworking Occupations	INA	INA	INA	INA	4
17.6001	Fluid Power Occupations	INA	INA	INA	INA	4
17.7001	Industrial Truck Operators	INA	INA	INA	INA	4
17.7002	Truck Driving	7.50	4.55	2.95	+ 1.12	10
17.7100	Miscellaneous Repair Occupations	INA	INA	INA	INA	4
17.7300	Manufacturing Inspection	INA	INA	INA	INA	4

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