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These curriculum studies were intended to determine the feasibility of new career programs in public service and aviation and to set priorities in improving or establishing them. The investigators visited administrators at selected institutions, employed consultants from many public and private agencies, and studied current literature. After study of objectives, manpower needs, costs, curriculum, staffing, and special problems, the participants in the study recommended: a police science program; a fire science program; the first phase of a teacher aide program; the postponement of a program for social work case aides; continuation of the current program in aviation with additions to the introductory and orientation courses, but not facilities for commercial pilot training; and an occupational journalism program with all transferable courses. Details are given for each step in the examination of all programs. (HH)

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# A Study Of PUBLIC SERVICE PROGRAMS College Level

- AVIATION
- FIRE SCIENCE
- MASS COMMUNICATION
- POLICE SCIENCE
- SOCIAL WORKER AIDE
- TEACHER AIDE

ROCHESTER STATE JUNIOR COLLEGE  
ROCHESTER, MINNESOTA

SUMMER 1969

JC 690350

## ACKNOWLEDGEMENTS

For their most generous help and guidance throughout the duration of this study, the workshop committee wishes to convey its special thanks to the representatives of our cooperating institution, the University of Minnesota.

In addition, the committee wishes to thank the great many consultants and resource persons from public service agencies and from the institutions visited for their kind cooperation and advice during the investigative phases of this study. The specific names of individuals, institutions and agencies participating are listed at the beginning of each section of this study.

## INTRODUCTION

### I. PURPOSE OF THE STUDY

Briefly stated, the intent of this series of curriculum studies in various college-level career programs is two-fold:

- A. To determine the feasibility of implementing new career programs in public service and aviation fields.
- B. To recommend an over-all priority of actions to be taken by the college, the Minnesota State Junior College Board and ultimately by the Minnesota Legislature in improving or establishing new career programs.

### II. METHODS EMPLOYED

As will be evident in Part I of each section, a variety of techniques was used to gather information for the writing of this study:

- A. A selected group of institutions were visited by members of the curriculum workshop. Department heads, deans and directors were interviewed using a check list to record data.
- B. Consultants were employed from various colleges and universities, federal and state agencies and from public service agencies in Minnesota and the local area.
- C. A great variety of publications were studied by workshop members in order to become as knowledgeable as possible in the general field of public service and aviation and in their specific area of responsibility.

### III. SUPPORT

This study was made possible by a federal grant under Title III of the Higher Education Act of 1965. Title III of this act provides funds for "Strengthening Developing Institutions".

# WORKSHOP STRUCTURE

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# POLICE SCIENCE



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## I. INVESTIGATIVE TECHNIQUES:

### A. Consultants:

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#### 2. Local

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St. Paul, Minnesota

Mr. James Macken, Chief, Rochester Police Department, Rochester,  
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Mr. Gerald Cunningham, Sheriff, Olmsted County, Rochester, Min-  
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Mr. Thomas Houle, Director of Social Services, Red Wing Training  
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 Mr. Casimir Zantek, Superintendent, Youth Vocational Center,  
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B. Investigative Trips:

Diablo Valley College, Pleasant Hill College Campus, Pleasant  
 Hill, California  
 College of San Mateo, San Mateo, California  
 Tarrant County Junior College, Hurst, Texas, Fort Worth, Texas  
 San Jacinto College, Pasadena, Texas  
 Chicago City College, Chicago, Illinois  
 Miami-Dade Junior County College, Miami, Florida  
 Long Beach City College, Long Beach, California  
 Pasadena City College, Pasadena, California  
 Red Wing Training School, Department of Correction, Red Wing,  
 Minnesota  
 Youth Vocational Center, Rochester, Minnesota

C. Materials Examined:

1. Catalogs and various publication from the above named institutions.
2. Law Enforcement Education Program Preliminary Report, Office of Academic Assistance, Law Enforcement Assistance of Justice, U. S. Department of Justice, Washington, D. C.
3. Policeman-Policewoman; Duties and Responsibilities, 1967, International Associations of Chiefs of Police, 1319 18th St. N. W., Washington, D. C.
4. Occupational Education in Illinois Junior College, Illinois Association of Community & Junior College, Chicago, Illinois, 1969.
5. Law Enforcement Education Program Manual, 1969, Office of Academic Assistance, Law Enforcement Assistance Administration, U. S. Department of Justice, Washington, D. C.
6. Task Force Report: The Police, President's Commission on Law Enforcement and Administration of Justice, Washington, D. C.
7. The Role of the Community College in Developing Traffic Specialists & Technicians, Richard Bishop and Gordon Sheehe, American Association of Junior College, Washington, D. C.
8. Guidelines for Work Experience Programs in Criminal Justice System, Jimmie C. Styles and Denny F. Pace, American Association of Junior Colleges, Washington, D. C.
9. Highway Safety Manpower & Training, Traffic Education and Training Committee, (Traffic Conference, National Safety Council, Chicago, Illinois)

10. Guidelines for Law Enforcement Education Programs in Community and Junior Colleges, Thompson S. Crockett and James D. Stinchcomb, American Association of Junior Colleges, Washington, D. C.
11. The Municipal Year Book 1968, The International City Manager's Association, Washington, D. C.
12. "Semi-Final Draft of Guideline for Correction Education," Vernon Fox, American Association of Junior Colleges, Washington, D. C.
13. The Challenge of Crime in a Free Society, A Report by the President's Commission on Law Enforcement and Administration of Justice, Washington, D. C.
14. Civil Service Rules and Regulations for the Rochester Police Department, (Adopted September 28, 1961), Rochester, Minnesota
15. Curriculums Studied:
  - Law Enforcement - Tarrant County Junior College, Fort Worth, Texas
  - Law Enforcement - Miami-Dade Junior College, Miami, Florida
  - Police Science Administration - Triton College, Northlake, Illinois
  - Police Science, Business & Industrial Security - Pasadena City College, Pasadena, California
  - Law Enforcement - Chicago City College, Chicago, Illinois
  - Dawson College, Glendive, Montana
  - Lakewood State Junior College, White Bear, Minnesota
16. Regional Colleges & Universities offering Enforcement Programs:
  - Iowa - U. of Iowa, Iowa City, M. A. (Law Enforcement & Corrections)
  - Minnesota - U. of Minnesota, B. A. (Law Enforcement Science & Criminal Justice)
  - North Dakota - Minot State College, Minot, N. D. (Degree Program being organized)
  - South Dakota - None
  - Wisconsin - Kenosha Technical Institute, Kenosha, Wisconsin, (Associate in Law Enforcement)
  - Milwaukee Institute of Technology (A. S. Police Science)

## II. FEASIBILITY OF IMPLEMENTING A POLICE SCIENCE PROGRAM:

### A. Description of the Occupation:

Police officers employed by federal, state and local agencies are charged with the responsibility of protecting life and property and preserving the peace. Although various agencies may be assigned

to specialized fields of law enforcement, their basic mission of public protection is common to all. Policemen and policewomen carry out the activities through which protection is achieved. These activities include preventive patrol, detection, arrest and prosecution of criminal offenders, traffic enforcement, juvenile work, and many other specialized enforcement tasks.

The organization of law enforcement today is a result of the many responsibilities which have been assigned to police agencies in an effort to combat crime and perform various "public safety" functions. The purpose of originally employing watchmen to guard the city's streets has resulted in a present day demand for a trained, comprehensive police service. The policeman stands as a symbol of this service.

The specific duties of a policeman or policewoman may vary substantially in various sections of the country, and further relate to the level of government involved. The officer in most departments is first assigned to patrol operations, which may be by vehicle or foot. If assigned to motorized patrols, he will respond to calls for assistance from citizens, to crimes in progress and to any emergency situation requiring police service. He will perform preventive activities when not actually engaged in more urgent assignments, checking security of property, ascertaining the identity of suspicious persons, and enforcing various laws and ordinances. He may be assigned additionally to traffic law enforcement, observing traffic movement and taking appropriate enforcement action. He will encounter a variety of problems presented by citizens on his beat and he will be expected to find solutions or refer the citizen to the proper sources.

Police officers, on foot or motor patrol, are usually assigned preliminary investigation of crimes occurring in their areas. They will protect the scene of a crime, attempt to apprehend the offenders, and complete the necessary reports for follow-up action by detectives.

A limited number of policemen may be assigned to special investigative functions, such as vice control, intelligence and internal investigations.

Policewomen may perform a variety of duties, including some patrol work, especially in areas of high juvenile crime. Many departments use policewomen extensively in juvenile aid work, and to a lesser degree, in records and communications and custodial duties.

Policemen and policewomen may possess aptitudes or training which qualify them for specialized assignments to staff services within the organization of larger departments. Criminalistics, personnel work, training, crime analysis, and planning and research are examples of these staff services.

Policemen employed by state agencies are most often assigned responsibility for traffic law enforcement, including driver's license regulations, administrative laws, accident investigations and the like. Many state police agencies are granted full police powers, and carry out functions similar to those of municipal police departments.

B. What Are the Manpower Needs?

As of 1967 and the writing of The Challenge of Crime in a Free Society, (a report by the President's Commission on Law Enforcement and the Administration of Justice), approximately two-thirds of the police departments in medium-sized and larger cities were below their authorized personnel

strength. On a national level, cities are 10% below strength. The reasons for this is "not due principally to a shortage of police candidates, but to a shortage of successful ones." According to George W. O'Connor's "Survey of Selection Methods" (Washington: International Association of Chiefs of Police, 1962), the eligibility among police applicants dropped from 29.9 in 1956 to 22.3 in 1961 on a national level. The following chart indicates the applicant success rates for middle America:

Region:	1956			1961		
	Applicants	Eligible	A.S.R.* %	Applicants	Eligible	A.S.R.* %
East North Central	7,111	1,211	17.0	5,939	879	14.8
West North Central	1,538	522	33.9	2,641	577	21.8

\* Applicant Success Rate

This situation is further complicated by the large number of retirements. Experts have found that the present rate at which police officers depart the service for all reasons, including retirement, resignation, disability, dismissal and death, has now reached 5.4% rate for the five years prior to 1967. The explanation for the need of an increasing number of men in 1967 can be attributed to the fact that, immediately after World War II, a large number of personnel were recruited and are now reaching retirement age. Consequently, many departments are now facing severe recruiting needs. For example, 41 percent of the existing Los Angeles Police Department and 10 percent of the 83 man force in Joliet, Illinois, were eligible for retirement in 1967. With this fact in mind and authorized strength raises of about 3%, the President's Commission calculated that in 1967 all of the police departments needed 50,000 men to bring them up to authorized strength.

Typical positions which the law enforcement graduate might expect to



enter or be promoted to are:

Local: (1) City Police; (2) Rochester Patrol & Guard Service; (3) Olmsted County Sheriff's Office; (4) Criminal Investigator (District Attorney's Office)

State: (1) Highway Patrol; (2) Crime Control Commission; (3) Narcotics Bureau; (4) Crime Laboratories; (5) Bureaus of Criminal Investigation and Identification; (6) Liquor Control Commission; (7) Fish and Wildlife Agencies; (8) Department of Motor Vehicles; (9) Campus Security Officers

Correctional: (1) Probation Officer; (2) Parole Officer; (3) Prison Security Officer (4) Juvenile Court Officer (5) Juvenile Institution Security Officer

Private: (1) Plant Protection and Industrial Security; (2) Railroad, Bus and Airlines

Federal: (1) Central Intelligence Agency; (2) Secret Service; (3) Internal Revenue Service; (4) Bureau of Narcotics & Drug Abuse Control; (5) National Park Service Police; (6) Border Patrol; (7) Bureau of Prisons; (8) U. S. Park Police; (9) Immigration and Naturalization Service; (10) Military Police

The following statistics indicate a national view of the manpower needs in the area of law enforcement. As of 1966, there were approximately 40,000 federal, state and local law enforcement agencies in the United States. Of this number 50 were federal agencies, 200 state and 39,750 on the county, city, town and village level. It is to this latter group that this study is of particular concern. More specifically, this group may be broken down into the following agencies: 3,050 on the county level; 3,700 in cities; and 33,000 agencies in boroughs, towns and villages.

Within these agencies we find 420,000 full and part-time law enforcement officers and civilians. Of this number, 371,000 are full-time employees and approximately 63,000 are employed in federal and state agencies, the remaining 308,000 (83%) are found among the county and local police agencies.

Of these 308,000 law enforcement officers, we find 197,500 serving in 39,685 county and local agencies, with the remaining 110,500 police personnel serving in 55 law enforcing agencies in 55 cities with populations over 250,000.

In the latter part of July, 1969, the University of Minnesota conducted a series of seminars on law enforcement. On July 26, the Rochester Post-Bulletin quoted David Geary, chief of police in Ventura, California, as having said that his department hired only college graduates, and he urged the hiring of college trained people in police departments. Thus it would seem that not only is there a need for great numbers of law enforcement personnel, there is additionally, a growing desire to upgrade the caliber of people who are employed in law enforcement agencies.

State and local needs: As of 1966, there were 623 different police departments in the state of Minnesota. Within these agencies there were 4,308 personnel with an additional 200 new employees to be added during the 1966-67 period.

In the southeastern part of the state of Minnesota (the area which Rochester State Junior College might service), we find the following information as of 1966:

<u>County</u>	<u>Departments</u>	<u>Personnel</u>	<u>Estimate of New Men for 1966-67 period</u>
Dakota County	14	120	7
Dodge County	7	8	0
Faribault County	11	27	0
Filmore County	10	14	1
Freeborn County	8	33	4
Goodhue County	9	39	3
Houston County	4	10	0
Le Sueur County	7	25	0
Mower County	8	53	1
Olmsted County*	7	102	4
Rice County	6	47	2
Scott County	7	30	1
Steele County	4	26	2
Wabasha County	10	20	0
Waseca County	5	14	0
Winona County	7	56	3
Total:	<u>124</u>	<u>624**</u>	<u>28</u>

\* location of Rochester State Junior College (situated geographically in the center of these 16 counties) (See Appendix I)

\*\* It is estimated as of the writing of this report (1969) by Mr. Carl Pearson, President of the Minnesota Peace Officers Association, that this number should be increased by 10%.

It might be pointed out that the above chart does not include other sources of law enforcement and private agencies in southeastern Minnesota. Consequently, it is necessary to consider such other areas as security guards at various businesses, state and federal agents and other interested civilians. Furthermore, due to the geographic proximity, consideration might be given to potential students from southeastern Wisconsin and northeastern Iowa.

Although there are no specific figures as to projected increase of needed law enforcement personnel in the counties of southeastern Minnesota (other than Olmsted County, which are listed below) an approximate number might be obtained by using the national yearly average of increase (3.0 to 3.5%) on each county complement.

As of the writing of this report the following information was available

regarding the projection of law enforcement needs in Olmsted County, which includes the Sheriff's Office and the Rochester Police Department.

<u>Office</u>	<u>Olmsted County</u>	<u>Rochester Police Department</u>	<u>Total</u>
Present Complement	22	98	120
1975 Complement	36	141	177
1980 Complement	42	166	208
1985 Complement	48	190	238
1990 Complement	51	210	261
1995 Complement	54	229	283

See Appendix I.

In connection with the breakdown presented above, the Rochester Post-Bulletin (July 26, 1969) quoted a nationally known police administrator, E. Wilson Purdy, director of public safety and Sheriff of Dade County, Florida, as having said that he viewed as inevitable the consolidation of small town police departments into large, regional units. The motivating factor here seems to be primarily economic. But in addition to being more economical, the larger regional departments would, he said, be more efficient and make possible the more rapid advancement of people with talent.

C. How Are These Needs Currently Being Met?

1. Departments advertise for officers.
2. Civil service examinations are given.
3. Top-scoring candidates are screened and offered employment.
4. Training: (a) Local departments train their recruits according to the minimum standards set up by the State Police Officers Training Board; (b) Local departments send their recruits to the state training schools at Alden Hills; (c) Local departments provide continuing in-service training for their officers; (d) Local departments send officers to the state training school for special courses and refresher courses.

See Item #9 of Special Problems.

D. Law Enforcement Curriculums:

## 1. Proposed Curriculum for Rochester State Junior College

		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
<u>Freshman Year</u>				
English 117-118-119	Freshman English	4	4	4
Physical Education	General Physical Education	1	-	1
Sociology 114	Man in Society	3	-	-
Mathematics		5	-	-
Elective		4	-	-
Sociology 115	American Society	-	3	-
Introduction to Law Enforcement		-	3	-
Science	Biology or Physical Science	-	5	-
Music-Art-Literature		-	2-3	-
Political Science 214	American Gov't & Politics	-	-	3
Police Administration		-	-	3
Business Education 114	Beginning Typing	-	-	3
Sociology 116	Social Problems	-	-	3
		<u>17</u>	<u>17-18</u>	<u>17</u>
<u>Sophomore Year</u>				
		<u>F</u>	<u>W</u>	<u>S</u>
Psychology 214-215	General Psychology	3	3	-
Criminal Law		3	-	-
Physical Education	General Physical Education	1	-	-
Speech 114	Fundamentals of Speech	3	-	-
Political Science 215	American Gov't & Politics	3	-	-
Humanities 111	Humanities in th Modern World	3	-	-
Criminal Evidence and Procedures		-	3	-
Speech 115	Public Speaking	-	3	-
Police Role in Crime and Delinquency		-	4	-
Elective		-	3	-
Logic and Problem Solving		-	-	3
Introduction to Criminalistics		-	-	3
Health 114	First Aid	-	-	3
Psychology 226	Development Psychology	-	-	3
*Recruit Training		-	-	3
		<u>16</u>	<u>16</u>	<u>15</u>

\* Upon successful completion of this training, the three hours would be granted toward the A. A. Degree in Law Enforcement. This, however, would be contingent upon the quality of the training.

## Suggested Electives:

History 114-115-116      Western Civilization (or) History 124-125-126      U. S.  
     History  
 Business 211      Introduction to Data Processing

2. See Appendix II for examples of law enforcement curriculums.



E. Student Admission Requirements:

Before considering the specific requirements and suggestions for admission to a law enforcement program, it would be highly beneficial to consider the following from the President's Commission on Law Enforcement & Administration of Justice Task Force Report: The Police:

SELECTION OF PERSONNEL:

Until recently, the dominant concern in the screening of applicants for the job of a police officer has been to assure that they met the rigid physical standards that were established. Such standards are still applied in many jurisdictions, despite the fact that they do not bear directly on the most difficult problems faced by the police officer today. Emphasis upon physical strength and aggressiveness reflects the popular image of what the police do rather than a careful analysis of job requirements.

There has been a failure to stress important characteristics which relate directly to the ability of an officer to perform the police function well, namely intelligence and emotional stability. The adequate performance of the complex task given the patrolman in highly congested urban areas requires a great deal of talent. Perhaps this is not so with respect to some police functions like enforcement of parking and traffic regulations. This suggests that there may be need for job classifications which will reflect the different needs.

Certainly, many of the duties required of patrolmen and supervisory officers in urban areas require a person of above average intelligence and a high degree of emotional stability. This is necessary if the officer is to function adequately in an organization which assumes policymaking responsibility, and which leaves to the individual officer sufficient flexibility to make appropriate decisions under the varying and complex circumstances which characterize crime and threats to public order today.

There is need for careful reassessment of the assumption that the highly aggressive individual makes the best police officer. If, as it appears, there is need for mediation and conciliation more often than there is need for the use of force or the making of an arrest, it would seem to follow that the emphasis should be placed upon getting

officers who are able to understand the problems of the community and who relate well to its members. This would increase their ability to participate effectively in the solution of the social and behavioral problems which confront the police officer.

There is need for educated police officers. Certainly a liberal education would be a prerequisite for those police officers who aspire to positions of leadership in the police service. Encouraging the educated young man to enter the field of law enforcement is increasingly important. Most intelligent, well-adjusted high school graduates now go on to college. Unless law enforcement attracts individuals from this group, it will be forced to recruit from among those who lack either the ability or the ambition to further their education.

#### Specific Requirements:

Applicants for admission to the law enforcement program must have graduated from an accredited high school or have passed an equivalent examination.

In addition, it will be necessary for law enforcement applicants to consider the specific requirements that might be demanded by the agency that the individual is considering, whether this is private, local, state, or federal. Most departments require an individual who intends to enter a law enforcement department to be between the ages of 20 and 33. However, there will be an exception for the individual who already holds a position in law enforcement. Furthermore, the applicant must meet height requirements, generally, between 5'8" and 6'4". The applicant will also be required to pass medical examinations and very likely some form of psychological examination.

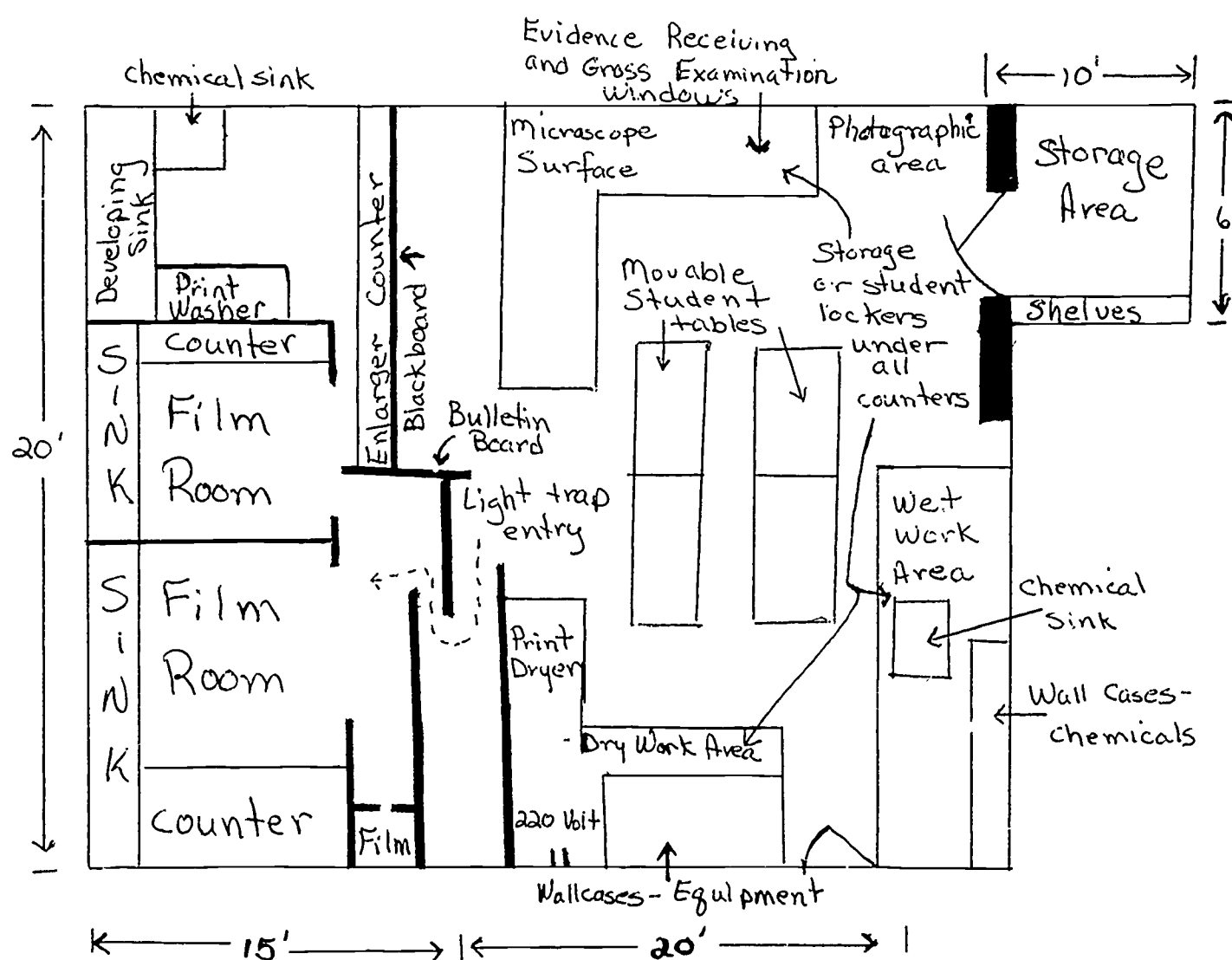
#### F. Costs:

##### 1. Room

The Law Enforcement Associate in Arts Degree Program requires

very little in the line of specialized facilities. The course in Criminalistics requires facilities beyond the normal college classroom. The laboratory illustrated below could be constructed for a cost of approximately \$5600. This cost could be avoided or delayed by utilizing existing college laboratories or nearby police crime laboratories.

\$5600.00



## 2. Equipment

Elementary instructional crime laboratory\*

2148.00

## 3. Supplies

Elementary instructional crime laboratory\*

780.00

## 4. Staff

1969-1970: Employ a person to teach two or three courses in Law Enforcement and co-ordinate the efforts of the college and advisory board in setting up a two-year A. A. Degree program in Law Enforcement

7500.00

1970-1871: Employ full-time person to teach the A. A. program 10,000.00  
courses and coordinate the program

5. Total cost first year (1969-1970) 7500.00
  - a. coordinator and instructor for in-service courses
  - b. no costs the first year of instructional labs or equipment, etc.
6. Total cost second year (1970-1971) 18,828.00
  - a. equipment 2148.00
  - b. supplies 780.00
  - c. laboratory construction 5600.00
  - d. coordinator 10,000.00
  - e. misc. costs 300.00
7. Total cost second year if we utilize existing labs or local crime labs 10,300.00
8. Total cost first two years
  - a. including construction of elementary crime laboratory \$26,328.00
  - b. instead of constructing own lab we would utilize local crime labs if available \$17,800.00

\*Guidelines for Law Enforcement Education Programs in Community and Junior Colleges, Thompson S. Crockett and James D. Stinchcomb  
Suggested initial inventory for the elementary instructional crime laboratory

G. Special Problems:

1. Because of the geographic area which might be served by a law enforcement program, the commuting distance might call for special class arrangements.
2. Problems relating to the police officer who might be interested in taking either day or evening courses: (a) the problems of duty rotation, that is, the possibility of being on duty during the assigned class period; (b) the specific demands on the police officers, such as court appearances, etc.
3. Initial difficulty in determining the interest and number of young men in the law enforcement profession. This problem would be directly related to the image of the present day law enforcement officer, the working hours, the type of duty, salaries, etc.

4. There exists at the present time within the law enforcement occupation a large number of experienced officers. Their degree of interest and involvement is difficult to ascertain at this time since there are many factors outside the college that would effect their enrollment in a future law enforcement program. For example: incentive pay, age, retirement, cost of school, interest, etc.
5. The problem of identifying and measuring the potential law enforcement individual; this will necessitate extensive testing and counseling.
6. Although not specifically a college problem, the circumstance of age, physical condition, emotional stability, residency, etc. as required by various federal, state and local agencies, will certainly influence the type of individual who might enter a college law enforcement program.
7. The relatively low income of the law enforcement officer requires that the college involved encourage those communities directly responsible for law enforcement agencies to develop some form of incentive pay system.
8. The college will find, for a period of time, that it will be difficult to hire degreed instructors in the field of law enforcement, and will therefore have to rely upon men with practical experience, but lacking in formal academic degrees. The question then arises as to whether these courses would be transferable; which would certainly be a major objective of such a program.
9. Relative to the question of how the needs are currently being met, it should be observed that locally, policemen are hired and then receive in-service training. This raises a question as to how we should proceed in the future: Should policemen be trained before



actively engaging in their occupation? An additional problem is raised if a high school graduate enrolls in an Associate of Arts program at age 18 and completes it at age 20, but cannot be employed by the police department until age 21.

10. Consider the fact that the Rochester Vocational School is considering establishing a program in Law Enforcement.

#### H. Recommendations:

1. Based upon available information, we recommend that Rochester State Junior College initiate an in-service education program for the law enforcement agencies of southeastern Minnesota with the ultimate goal of establishing an Associate of Arts degree in law enforcement.
2. To meet in part the immediate needs of the law enforcement agencies of southeastern Minnesota, we suggest that by the spring of 1969-70 school year, Rochester State Junior College offer one or more specific law enforcement classes. Examples are Criminal Law, Juvenile Code and Procedures, Deviant Psychology and Alcohol, Drug and Narcotics. (See Appendix No. 1 for questionnaires submitted to the Rochester Police Department on July 14, 1969.)
3. We suggest the immediate appointment of an advisory committee with representatives from all of the law enforcement agencies of southeastern Minnesota, state and federal agencies as well as business, education and religious institutions.
4. We suggest the appointment of a coordinator in the area of law enforcement in the very near future, preferably by January, 1970.
5. We suggest the appointment of a full-time placement director working in conjunction with other recommended public service programs. This individual would work closely with the coordinator and advisory

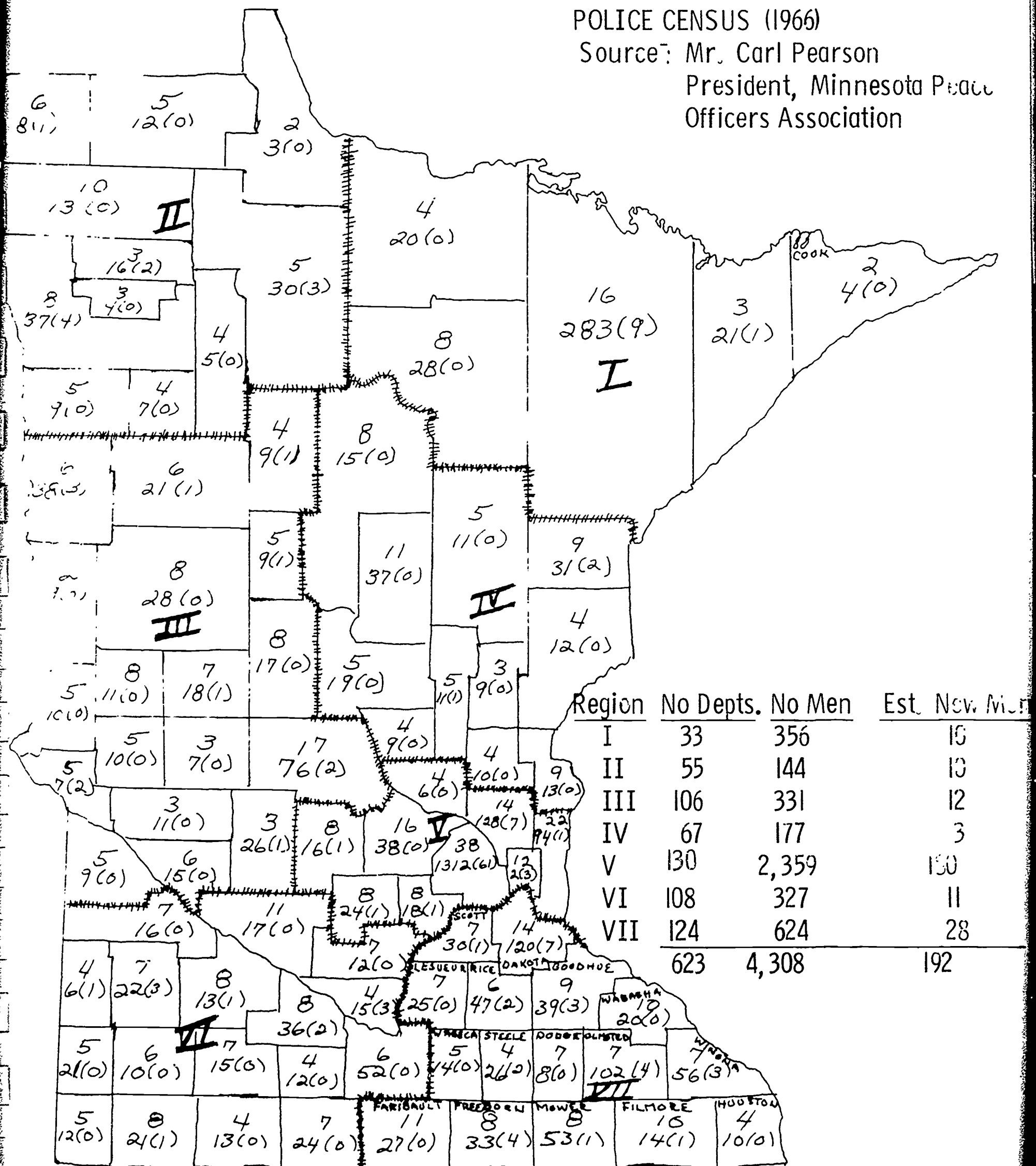
committee in determining course needs, changes, etc.

6. We urge that the advisory committee, the law enforcement coordinator and the junior college administration work towards the establishment of a two-year, Associate of Arts curriculum in Law Enforcement.
7. We would suggest that the junior college work with local, state and federal agencies in the preparation of short (1-3 hour) lectures, demonstrations, etc. in the area of law enforcement to be used by the area agencies for in-service training.
8. We suggest continued and further cooperation with area law enforcement agencies and the junior college in attempting to obtain additional grants, i.e. LEEP, Omnibus Crime Bill, Safe Streets Bill of 1968, and other State of Minnesota assistance to the law enforcement agencies of Minnesota.
9. We would suggest a close coordination between the University of Minnesota (with their newly instituted four year law enforcement program) and Rochester State Junior College on any in-service education and two year curriculum established.
10. We strongly urge the establishment of a junior college-supported public relations program with regional schools and communities to advertise the entire law enforcement program, noting courses, law enforcement needs, grants available, pay incentives, etc.
11. We strongly urge that the junior college work closely with the local law enforcement agencies and their community leaders in establishing an incentive pay program in addition to those already in effect. (See Appendix IV for examples of incentive programs in education, incentive pay, etc.)
12. See Appendix V for statements made by national, state and local law enforcement officials.

POLICE CENSUS (1966)

Source: Mr. Carl Pearson

President, Minnesota Peace  
Officers Association



Top figure in each county show number of Departments

Bottom figure in each county shows number of men.

Figures in ( ) show number of new men anticipated between  
June 1, 1966 and June 1, 1967.

## APPENDIX II

## LAW ENFORCEMENT CURRICULA

1. The following are examples of two-year Associate in Arts Degree Programs:

a. Pasadena City College - Pasadena, California  
Curriculum is Business and Industrial Security

<u>Freshman Year</u>	<u>Credits</u>	
	<u>Sem. I</u>	<u>Sem. II</u>
Physical Education Elective	$\frac{1}{2}$	$\frac{1}{2}$
Health Education	2	-
*Introduction to Law Enforcement	3	-
*Criminal Law	-	3
*Business and Industrial Security	3	3
Industrial Organization and Management	-	3
Basic Psychology for Supervision	-	2
Elements of Supervision	2	-
Oral Communication for Supervisors	3	-
Written Communication	-	3
Electives	3	2
	<u>16<math>\frac{1}{2}</math></u>	<u>16<math>\frac{1}{2}</math></u>

<u>Sophomore Year</u>	<u>Credits</u>	
	<u>Sem. I</u>	<u>Sem. II</u>
Physical Education Elective	$\frac{1}{2}$	$\frac{1}{2}$
*Criminal Evidence	3	-
Administration of Justice	-	3
*Criminal Investigation	3	-
Defensive Tactics	-	1
*Human Relations	2	-
American Institutions	3	-
Math/Science	3	3
Electives	-	7
	<u>14<math>\frac{1}{2}</math></u>	<u>14<math>\frac{1}{2}</math></u>

\* Requirements for the Certificate in Business and Industrial Security (20 units).

b. Miami-Dade Junior College - Miami, Florida  
Curriculum in Law Enforcement

		<u>Credits</u>	
		<u>Sem. I</u>	<u>Sem. II</u>
<u>Freshman Year</u>			
ORI 101	Orientation	1	-
COM 101-102	*Communications	3	3
SSC 101-102	Social Sciences	3	3
BUA 105	Business Mathematics	3	-
PSC 101	Introduction to Criminology	3	-
PED 121,122 or 123	Physical Education	1	-
PSC 102	Police Organization and Administration	-	3
PSC 103	Psychology for Law Enforcement Officers	-	3
PED 140	Judo	-	1
	Elective	3	3
		<u>17</u>	<u>16</u>

		<u>Credits</u>	
		<u>Sem. I</u>	<u>Sem. II</u>
<u>Sophomore Year</u>			
PSC 207-208	Criminal Law I and II	3	3
PSC 203	Police Patrol Functions	3	-
PSC 211-212	Forensic Science I and II	4	4
PED 209	First Aid	2	-
	Elective	3	-
PSC 204	Criminal Investigation	-	3
PSC 214	Police Arsenal Weapons and Laboratory	-	3
PED 208	Health Education	-	3
		<u>15</u>	<u>16</u>

\* Students may substitute ENG 111 and 112 for COM 101 and 102

RECOMMENDED ELECTIVES: PSC 209, Juvenile Delinquency; and SPE 105, Public Speaking; PSC 220, Police Field Service for specially selected students. Participation in PSC 220 is based upon academic performance and recommendation by the Director of Technical, Vocational and Semi-professional studies and the department chairman.

c. Dawson College - Glendive, Montana  
Curriculum in Police Science

The curriculum in Police Science would offer a two-year program for students who plan to enter the law enforcement area and to help those already in the field to prepare for promotion. Individuals completing this course would receive the Associate Degree.

<u>Freshman Year</u>		<u>Credits</u>
*Police Cadet Corps		3
Police Drill		2
Introduction to Law Enforcement		6
Self Defense Tactics (PE)		2
Weapons and Equipment		2
First Aid and Safety		1



Freshman Year (continued)		<u>Credits</u>
Driver Training		1
Traffic Laws		3
Police Patrol		6
English		9
Orientation		1
Speech		3
Applied Math		6
Typing		4
<u>Sophomore Year</u>		<u>Credits</u>
*Police Cadet Corps		3
Self Defense Tactics (PE)		2
Weapons & Equipment		2
Criminal Law		3
Laws of Arrest, Search and Seizure		3
Criminal Investigation and Criminalistics		6
Traffic Control and Accident Investigation		3
Specialized Police Problems		9
Police Drill		1
Psychology		6
General Science		9
State and Local Government		6
Total for the two years		<u>105</u>

\* Not required of those already employed in law enforcement.

d. Lakewood State Junior College - White Bear, Minnesota  
Curriculum in Law Enforcement

<u>Freshman Year</u>		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
English 101-102-103 or GS 101-102-103		3.4	3.4	3.4
Electives (any subject)		2.3	3.4	2.3
Sociology 101	Introduction to Sociology	3	-	-
Math/Science		5	5	-
Orientation 101	College Orientation	1	-	-
Sociology 102	Social Problems	-	3	-
Political Science 134	Introduction to American Gov't.	-	-	3
Health 107	Personal and Community Health	-	-	3
*Introduction to Law Enforcement		-	-	3
		<u>15</u>	<u>15</u>	<u>15</u>
<u>Sophomore Year</u>		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
#Police Academy Training		3	3	6
Psychology 101-102		3	3	-
*Police Administration		3	-	-
*Police Operation		3	-	-
Cultures of Minority Groups		3	-	-

Sophomore Year (continued)

	<u>Credits</u>		
	<u>F</u>	<u>W</u>	<u>S</u>
*Criminal Law	-	3	-
*Criminal Evidence & Procedure	-	3	-
Speech 121 (or) GS 260 Speech	-	3	-
*Criminal Investigation	-	-	3
*Introduction to Criminalistics	-	-	3
Elective Course in Humanities	-	-	3
	<u>15</u>	<u>15</u>	<u>15</u>

## SUGGESTED ELECTIVES:

	<u>Credits</u>
American History	3
Natural Science (Biology)	5
Statistics	3
Psychology of Supervision	3
Human Behavior in Occupational Groups	3
Introduction to Data Processing	3
Typing	3
Audio-Visual Equipment and Materials	3

\* Special courses for law enforcement program

# Depends upon acceptance of credits from academy

## APPENDIX III

Results of a questionnaire given to the Rochester Police Department on July 14, 1969.

1. Would you be interested in in-service training for: credit.....63  
non-credit....6
2. Would you be interested in in-service training if it was subsidized?  
  
Yes....27  
No.....28
3. Would you be interested in acquiring a two year A. A. degree in Police Science?  
Yes....56  
No.....7
4. Would you be only interested in obtaining a two-year A. A. degree in Police Science if the course was subsidized?  
  
Yes....34  
No.....22
5. Would you take approved college courses if incentive pay was authorized upon completion of the courses?  
  
Yes....50  
No.....5
6. Would you take approved college courses if the courses were subsidized but incentive pay was not authorized?  
  
Yes....46  
No.....11

## APPENDIX IV

## INCENTIVE PAY PROGRAMS

## 1. Incentives for law enforcement officers to further their education in the Twin Cities Area:

a. Brooklyn Center	40¢ per month per credit
b. Minneapolis	full tuition
c. St. Paul	will pay full tuition up to \$150.00
d. Bloomington	tuition and books
e. Richfield	tuition and books
f. Crystal	40¢ per month per credit
g. Bayport	time and expenses
h. Golden Valley	50% of tuition
i. New Hope	50% of tuition and books
j. St. Anthony	full tuition and expenses
k. Anoka	full tuition and expenses
l. Hastings	full tuition and expenses
m. Shakopee	full tuition and expenses
n. Forest Lake	\$8. a day and salary for short courses of up to two weeks
o. Hennepin County	3/4 of tuition
p. Ramsey County	full tuition up to \$150.00
q. Anoka County	\$50.00 of the tuition

2. Police Incentive Pay Program, Police Officers Federation of Minneapolis

The recruitment of college-trained people into law enforcement will require higher salaries as well as a more intelligent and aggressive recruiting program by the Civil Service Commission.

In order to up-grade and maintain high standards of proficiency, a program should be adopted which would provide the incentive for all police officers to develop and continue a self-study program. A program should be developed to insure the appointment of those individuals who through initiative, desire, and ability place near the top of each promotional list.

We recommend the following incentive program:

(1) "Employee" as used in this recommendation will be a sworn member of the Minneapolis Police Department. This program to be known as the Police Educational Achievement Program (P. E. A. P.).

(2) No employee will become eligible to receive incentive pay through P. E. A. P. until such time as he has completed two years of service as a patrolman with the Minneapolis Police Department.

(3) Satisfactory continuance in the program will be construed to mean that each employee must earn a minimum of six credits in any calendar year. Failure to attain such minimums will be cause for a reviewal by the Superintendent of Police and/or the City Coordinator, tending toward eliminating said employee's incentive pay.

(4) Incentive pay for each employee would begin (after two years service at such time as he would have acquired 15 credits and would continue as long as he maintains minimum standards in the educational program. The incentive pay would be allocated monthly on the basis of the schedule as established in paragraph 5, below. The incentive pay would increase one percent upon completion of each block of 15 credits.

(5) Schedule of monthly incentive pay awards is as follows:

<u>Incentive Pay Grade</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
Credits	15	30	45	60	75	90
Percentage Rate	1%	2%	3%	4%	5%	6%
Amount	\$7.23	14.46	21.69	28.92	36.15	43.38

<u>Incentive Pay Grade</u>	<u>G</u>	<u>H</u>	<u>I</u>	<u>J</u>	<u>K</u>	<u>L</u>
Credits	105	120	135	150	165	180
Percentage Rate	7%	8%	9%	10%	11%	12%
Amount	\$50.61	57.84	65.07	72.53	79.53	86.76

(6) Evaluation for adjustment of incentive pay based on additional blocks of credits earned under schedule in paragraph 5, will be on a semi-annual basis only. Suggested times to be August 15th and February 15th of each calendar year.

(7) Upon attaining 90 credits, or upon being granted an Associate of Arts degree by an accredited college or university; the incentive pay at the rate as indicated in Grade F will become a permanent part of the employee's basic salary whether or not he continues with P. E. A. P. and will continue at all promotional levels attained by said employee.

(8) Employees continuing in P. E. A. P. beyond Grade F or the Associate of Arts degree will continue to receive additional incentive pay at the rate indicated in Grades G through L for a total of 180 credits. No additional incentive pay will be authorized at this time for credits earned beyond a total of 180.

(9) Upon having attained 180 credits or a B. A. degree, the incentive pay at Grade level L will become a permanent part of the employee's basic salary and will continue at all promotional levels attained by the employee.

3. Challenge of Crime in Free Society (A report by the President's Commission on Law Enforcement and Administration of Justice)

No officer should be eligible to qualify for promotion to police agent, supervisor, or administrator until he has acquired a baccalaureate degree. Based upon the current level of educational achievement, however, it is obvious that such a requirement would be unattainable at the present time.

Until such a goal is attainable, however, departments should progressively increase educational standards for these positions at the earliest opportunity. Such a concept is not new to the police field. For example; in 1962, a consultant to the St. Paul, Minnesota, department made the following recommendation: "Patrolmen should not be appointed to the rank of



sergeant until they have had one year of college work; 2 years should be required for promotion to lieutenant; 3 to captain; and 4 years to positions above this rank..."

In addition to requiring high educational standards for such advanced positions, all departments should provide pay incentives for college education. For example, a pay increase could be provided for each year of college education completed, with a substantial increase for personnel completing the work required for a degree. The California Commission on Peace Officers Standards and Training has suggested an education incentive program which certifies officers who attain specified levels of education and experience, and thereby qualifies such officers for pay increases:

4. Suggested Education Incentive Program, California Commission on Peace Officers Standards and Training

1. Must possess the P. O. S. T. Basic Certificate to qualify for the final step in the pay scale for police officer, deputy sheriff or high ranks.

2. Possession of P. O. S. T. Intermediate Certificates shall qualify the officer for a 5 percent pay increase.

3. Possession of P. O. S. T. Advance Certificates shall qualify for a 10 percent increase.

4. To remain eligible to receive the incentive program pay increase, the applicant must requalify each year by completing no less than 50 hours of education or training which would be recognized by P. O. S. T. as courses credited toward intermediate or advanced certificates or by completing a project approved by the department head. All education, training or projects approved under this section (annual qualification) shall be completed on the officer's own time unless otherwise approved by the department head.

For the purpose of annual qualification, the department head may specify and approve credit courses other than those recognized by P. O. S. T. when in his judgement the course has added to the professional development of the training or education specified.

## APPENDIX V

## QUOTATIONS TAKEN FROM CONSULTANTS AND REPORTS

Carl Pearson - President, Minnesota Peace Officers Association

"Would like to have R. S. J. C. set up both an in-service and two-year A. A. Program."

"We will recruit from your program."

"Would like to help you with your advisory board."

"Would like to have the junior colleges act as feeder programs into the four-year Law Enforcement Programs."

"Sociology and Psychology courses should be included."

James D. Stinchcomb - Specialist in Public Service, American Association of Junior Colleges

"Federal government will take more of Law Enforcement graduates than any other group."

Need coordinator for Law Enforcement program to teach courses and gain community support.

"In-service should be first concern."

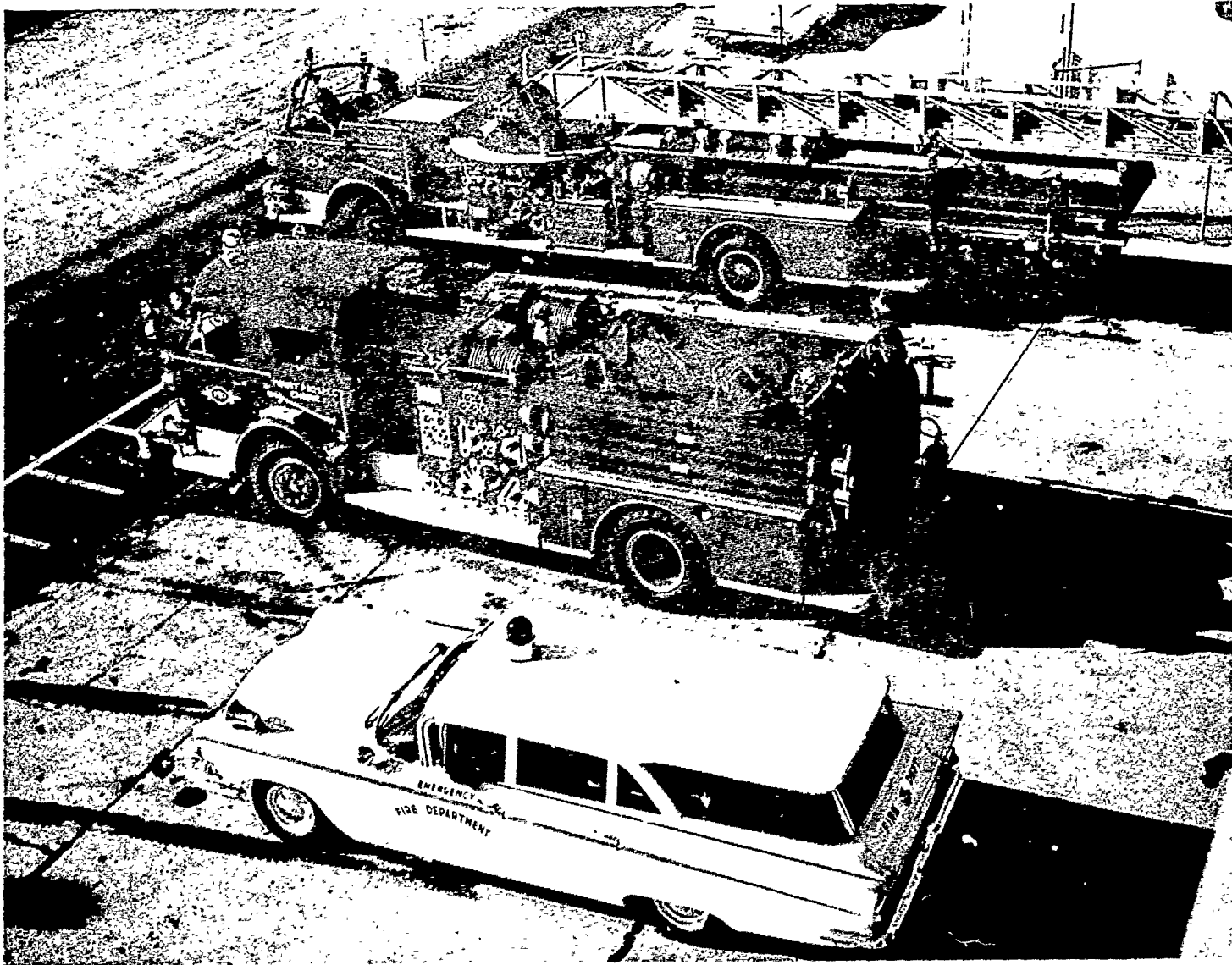
Challenge of Crime in Free Society (A report by the President's Commission on Law Enforcement and Administration of Justice):

"The ultimate aim of all police departments should be that all personnel with general enforcement powers have baccalaureate degrees."

"Police department should take immediate steps to establish a minimum requirement of a baccalaureate degree for all supervisory positions."

"Police department should recruit far more actively than they now do, with special attention to college campuses and inner-city neighborhoods."

# FIRE SCIENCE



## SUBCOMMITTEE

Irwin P. Plitzuweit

Norman Reopelle

## I. INVESTIGATIVE TECHNIQUES:

### A. Consultants:

#### 1. Out-of-State

Mr. John S. Kreider, Administrative Dean, Instruction, Gendale College, Glendale, California  
 Dr. Donald Scott, Long Beach City College, Long Beach, California  
 Mr. James D. Stinchcomb, Public Affairs Specialist, American Association of Junior Colleges, Washington, D. C.  
 Mr. Victor Stephens, Fire Science Coordinator, Engineering and Technology, Pasadena City College, Pasadena, California  
 Mr. John R. Toothaker, Director Occupational Education, Pasadena City College, Pasadena, California  
 Mr. Carle Davidsen, Metropolitan State Junior College, Minneapolis, Minnesota  
 Mr. James Nichols, Coordinator & Instructor in Fire Technology, Tarrant County Junior College, Fort Worth, Texas

#### 2. Local

Dr. Donald Woods, Chairman of University Advisory Study Committee on Fire Protection & Fire Prevention, 554 Portland Avenue, St. Paul, Minnesota  
 Dr. Wilbur Wakefield, Director of University of Minnesota Extension at Rochester, North Campus, Rochester State Junior College, Rochester, Minnesota  
 Mrs. Antona Richardson, Staff Member, Training Consultant, League of Minnesota Municipalities, University of Minnesota, Minneapolis, Minnesota  
 Dr. Howard E. Bergstrom, Assistant to the Chancellor for Instructional Services, Minnesota State Junior College System, Administrative Offices, Capitol Square Building, 550 Cedar Street, St. Paul, Minnesota  
 Chief Orville N. Mertz, Chief of Rochester Fire Department, 521 South Broadway, Rochester, Minnesota  
 Mr. Frank Oberg, Chairman, Board of Directors, Minnesota Fire Chief's Association, 1396 Bayard Avenue, St. Paul, Minnesota  
 Mr. Allen V. Hanson, Dean of Instruction, Metropolitan State Junior College, 50 Willow Street, Minneapolis, Minnesota



B. Investigative Trips:

Glendale College, Glendale, California  
 Long Beach City College, Long Beach, California  
 Pasadena City College, Pasadena, California  
 Metropolitan Junior College, Minneapolis, Minnesota  
 Rochester Fire Department, Rochester, Minnesota

C. Materials Examined:

1. Uniform Fire Science Curriculum, California State Department of Education, Sacramento, California, 1965.
2. Proposed Fire Technology Program for Tarrant County Junior College, Fort Worth, Texas, 1969.
3. Educational Incentive Plan, Contra Costa Junior College Fire Science Advisory Committee, San Mateo, California, 1969.
4. Fire Chief, August 1968, An incentive pay plan by Ralph McGraw, Madison, Wisconsin.
5. Minnesota Fire Science Educational Needs, 1968, A program for Minnesota and recommendations.
6. Minnesota Municipalities, September, 1968, An evaluation of educational and training programs throughout the United States and a proposal for a Minnesota program.
7. Advisory Study Committee on Fire Protection and Fire Prevention Education, General Extension Division, University of Minnesota, 1968.
8. Fire Science Curriculum at the following colleges:  
 (a) Metropolitan State Junior College; (b) Pasadena City College;  
 (c) College of San Mateo; (d) Tarrant County Junior College;  
 (e) Long Beach City College; (f) San Jacinto College; (g) Contra Costa Junior College.

II. FEASIBILITY OF IMPLEMENTING A FIRE SCIENCE PROGRAM:

A. Description of the Occupation:

1. Nationally

Fire Fighters: 373,884. (Firemen). Controls and extinguishes fires, protects life and property, and maintains equipment as volunteer or employee of city, township, or industrial plant:  
 Responds to fire alarms and other emergency calls. Selects hose nozzle, depending on type of fire, and directs stream of water



or chemicals onto fire. Positions and climbs ladders to gain excess to upper levels of buildings or to assist individuals from burning structures. Creates openings in buildings for ventilation or entrance, using axe, chisel, and crowbar. Protects property from water and smoke by use of waterproof salvage covers, smoke ejectors, and deodorants. Administers first aid and artificial respiration to persons overcome by fire and smoke. Inspects building for fire hazards and compliance with fire prevention ordinances. Performs assigned duties in maintaining apparatus, quarters, buildings, equipment, grounds, and hydrants. Participates in drills, demonstrations, courses in hydraulics, pump operation and maintenance and fire fighting techniques. May drive fire truck. May fill fire extinguishers in institutions or industrial plants. \*

\* Dictionary of Occupational Titles.

## 2. Locally

In addition to the duties listed for firemen by the Dictionary of Occupational Titles, firemen employed by the City of Rochester spend considerable time in the area of fire prevention. Some specific duties in the realm of fire prevention include: dwelling inspection, school education, hospital education and hotel education.

## B. What Are the Manpower Needs?

### 1. Nationally

"Several thousand openings for fire fighters are expected to arise each year through the mid-1970's. Most openings--probably more than 5,000 a year--will arise from the need to replace men who retire, die, or otherwise leave the occupation.

The replacement rate is higher than that for many occupations, largely because fire fighters are often permitted to retire at an earlier age than people in many other occupations. New jobs will also become available as city fire departments enlarge their staffs and as new departments replace volunteer fire companies in smaller growing communities. In addition, some openings will probably be created as city fire departments continue to shorten the scheduled hours that individual firemen are on duty

"The number of young men who qualify for fire fighter jobs in large cities is usually greater than the number of job openings even though the written examination and physical requirements eliminate many applicants. Competition among candidates is apt to be particularly keen when there is considerable unemployment, since employment in this occupation is very stable.

"The number of fire fighters is expected to increase very rapidly during the next 10 years to meet the needs for fire protection in growing urban communities. As cities become more crowded, however, officials will give more emphasis to activities associated with fire prevention and many firemen will spend a greater amount of their time inspecting buildings for compliance with fire regulations and participating in fire prevention campaigns." \*

\* The Occupational Outlook Handbook, U. S. Department of Labor

## 2. Locally

The Rochester City Fire Department employs 88 firemen. A survey of local firemen shows that they tend to remain with the depart-

ment once hired. Sixteen per cent have been with the force twenty-one years or more. Thirty-one percent have been employed eleven years or more. Vacancies in the department result from retirement and expansion of the department. In 1968 only two new members were added to the fire department. They were high school graduates with no courses or experience in fire science. From the above facts one can conclude that there is little need for a program to be initiated solely for training new recruits in the fire department.

In order to improve the proficiency of local firemen a program of in-service training courses seems to be a logical plan. As stated by Rochester Mayor Dewey Day, the city encourages all city employees to improve their proficiency by additional training. In September 1966, the city established a program to pay tuition for courses which would improve the ability of city employees to function more efficiently on their jobs.

Although employed firemen receive on-the-job training in reports, public relations in emergencies, and mechanical aspects of fire fighting, they receive no formal training in fire prevention and fire fighting as a science.

C. How Are These Needs Currently Being Met?

1. Nationally

In many metropolitan areas such as Los Angeles, Miami, Fort Worth and Chicago, a two-year Associate of Arts degree in Fire Science is offered and recommended for individuals interested in a career in Fire Science.

Most instruction of firemen is on-the-job training with a few members of departments sent for special training at meetings and demonstrations.

## 2. Locally

Individuals employed by the Rochester City Fire Department receive the following on-the-job training:

- |                                                                                                                                                                                                                             |           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| (a.) Recruit training - familiarity with equipment used, first aid, general personnel requirements, etc.                                                                                                                    | 160 hours |
| (b.) Alarm systems, report writing, fire extinguishers, communications.                                                                                                                                                     | 300 hours |
| (c.) Forcible entry, rope work and knot tying, service ladder practice, fire apparatus practices, rescue practices, protective breathing equipment, inspection practices, hose and ladder work, hydraulics, company drills. | 750 hours |
| (d.) Salvage practices, overhaul practices, aerial ladders.                                                                                                                                                                 | 225 hours |
| (e.) Fire hose practices, fire ventilation procedures, pumping engine work, response to alarms, dealing with public in emergencies.                                                                                         | 485 hours |

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1920 hours

The above total hours are based on the firemans schedule of 80 working days per year on a basis of twenty-four hours per "day", (normal working assignment). Item (a) must be completed first after which reasonable adherence to the sequential arrangement is expected; however some variance may of necessity occur.

D. Description of Proposed Curriculum:

## ASSOCIATE OF ARTS PROGRAM

		<u>Credits</u>		
<u>Freshman Year</u>		<u>F</u>	<u>W</u>	<u>S</u>
English 117-118-119	Freshman English (or)	4	4	4
English 327-328 and English 411	Technical English and Technical Writing	(3)	(3)	(3)
Physical Science 121	Elements of Physics	3	-	-
Physical Science 122	Elements of Chemistry	-	3	-
Biological Science 111	Elements of Biology	-	-	3
Physical Education 101-102-103	General Physical Education	1	1	1
Mathematics 110	Mathematical Methods in Solution of Physical Problems	1	-	-
Speech 114	Fundamentals of Speech	3	-	-
*Introduction to Fire Protection		3	-	-
Health 112	Community Hygiene	-	2	-
Sociology 114	Man in Society (or)	-	3	-
Sociology 311	Modern Society	-	(3)	-
Speech 115	Public Speaking	-	3	-
Health 115	American Red Cross First Aid	-	-	2
	Instructors Course			
*Fire Safety Concepts in Building Design		-	-	3
Electives		-	-	3
		<u>15</u>	<u>16</u>	<u>16</u>
		(16)	(17)	(17)

		<u>Credits</u>		
<u>Sophomore Year</u>		<u>F</u>	<u>W</u>	<u>S</u>
Mathematics 111	Higher Algebra (or)	5	-	-
Mathematics 311	Business Mathematics	(5)	-	-
Political Science 214-215	American Government and Politics	3	3	-
Economics 311	The American Economy	3	-	-
Psychology 214	General Psychology (or)	-	3	-
Psychology 314	Elementary Psychology	-	(3)	-
	Electives	4	-	-
Business 111	Introduction to Business	-	4	-
*Introduction to Fire Prevention		-	3	-
*Institutional and Industrial Fire Protection		-	3	-
*Hazardous Materials (new course)		-	-	3
*Fire Department Management		-	-	3
Business 432	Principles of Insurance	-	-	3
Business 411	Human Relations	-	-	3
History 112	Minnesota History	-	-	3
		<u>15</u>	<u>16</u>	<u>15</u>

\* New courses in Fire Science to be taught through cooperation with Metropolitan State Junior College



E. Student Admission Requirements:

The basic admission requirements at Rochester State Junior College is a high school diploma or its equivalency. It must be kept in mind that employing agencies have their own requirements such as physical, mental and personality qualifications. By the very nature of the work, the Fire Science program is primarily for men.

F. Costs:

1. Room

This program utilized existing facilities already at the college.

2. Equipment

No special equipment is needed to implement the program. So that the library may have special reference books available, a sum of \$300.00 should be added to their budget. In order to publish recruitment brochures, for advertising, and public relations a sum of \$250 should be budgeted for.

3. Staff

Verbal agreements were made with Metropolitan State Junior College to furnish an instructor to teach the five specialized Fire Science courses in Rochester in the evening, with credit given by Metropolitan State Junior College. The cost would be \$1,000 for each of the five courses.

G. Special Problems:

1. Lack of an incentive pay plan.
2. Small number of recruits hired by the fire department each year.
3. Over half (52%) of the department's personnel are over 41 years of age.
4. Scheduling classes to coincide with non-working hours of firemen.
5. Recruitment of qualified instructors.

6. Establishment of closed circuit television system for instruction.
7. Establishment of a public relations program to show the need and advantages of increased training in Fire Science.

H. Recommendations:

The need for a Fire Science program was determined mainly by personal interviews with people in the area of fire science, a list of which is contained in the section listing consultants. The program and implementation was discussed in detail at a meeting attended by representatives from the Minnesota Fire Science Advisory Committee, Metropolitan State Junior College and the Minnesota State Junior College Chancellor's Office.

Oral approval for implementation of the Rochester program, beginning in the spring of 1970 was made at the meeting; however, finalized approval is pending the hiring of a part-time Fire Science instructor at Metropolitan State Junior College and the authorization for him to teach the first of five (5) specialized Fire Science courses in Rochester. In considering the above information the following recommendations are made:

1. A Fire Science Program of an in-service nature be established at Rochester State Junior College.
2. Five specialized Fire Science courses be taught at Rochester State Junior College according to the following schedule:

Spring 1970 - Introduction to Fire Protection

Fall 1970 --- Fire Safety Concepts in Building Design

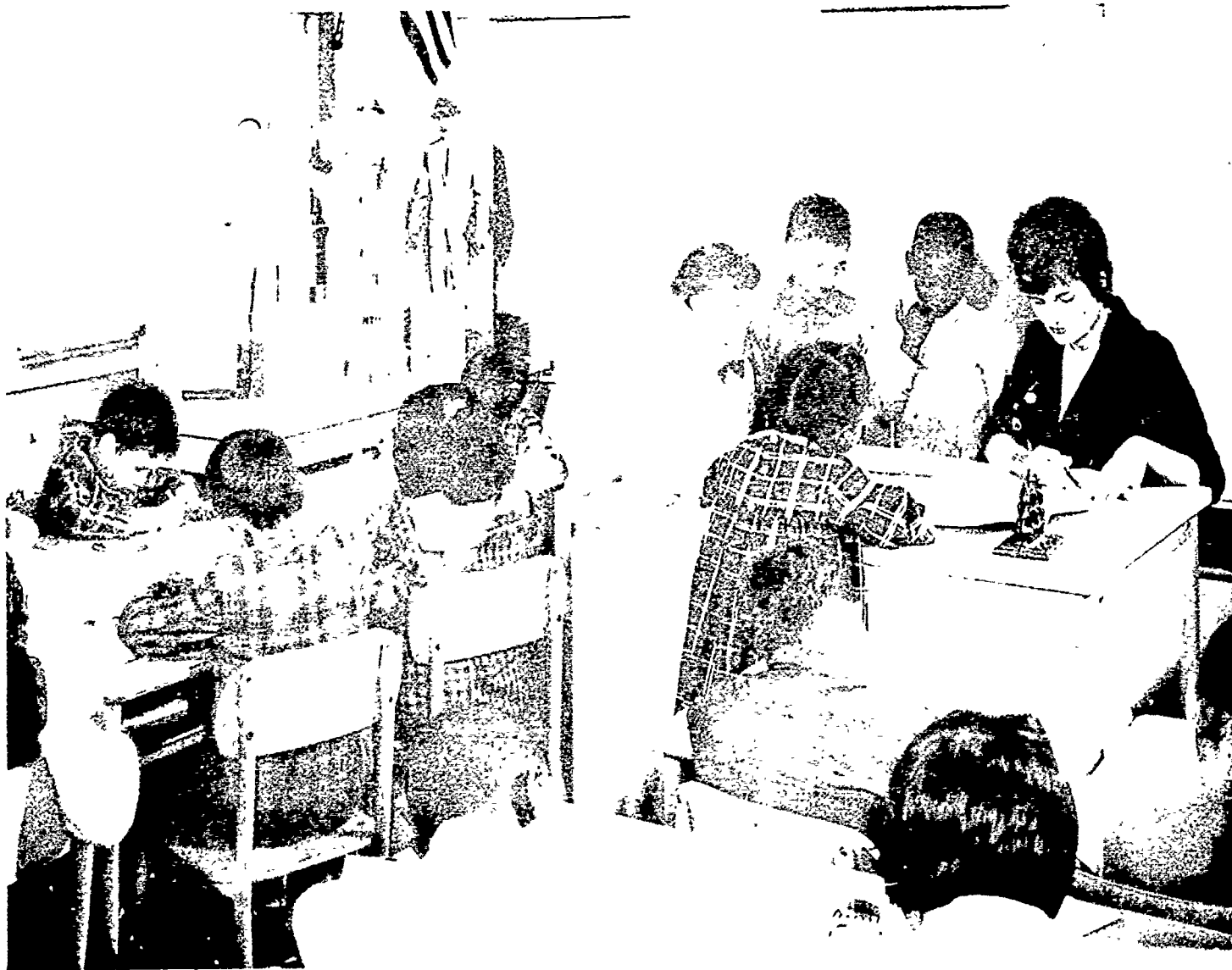
Spring 1971 - Introduction to Fire Prevention

Fall 1971 --- Institutional and Industrial Fire Protection

Spring 1972 - Fire Department Management

3. The above courses be taught by a part-time instructor in cooperation with Metropolitan Junior College. The courses would carry Metropolitan Junior College numbers and credits which would be transferable to Rochester State Junior College.
4. Special Fire Science courses in addition to the recommended courses in the curriculum would entitle a student to an Associate of Arts Degree.
5. The specialized Fire Science courses should be taught in blocks of time and scheduled when most convenient for firemen presently employed.
6. Because the liberal art courses to be taken to meet the requirements for a degree will have to be taken when convenient for firemen, the director of the Extended Day Program should be made aware of liberal arts courses required.
7. Recruitment for the five specialized fire protection courses be in the city of Rochester, Austin, Winona, Albert Lea, and volunteer firemen from the southeastern part of Minnesota as well as fire underwriters, building inspectors, safety officers, and city managers.
8. Consideration be given to change the title of the program from Fire Science to Fire Protection to be consistent with state terminology.
9. If enrollment in the five specialized fire protection courses is good, consideration be given to offering three additional Metropolitan Fire Protection courses in Rochester.
10. A local advisory board should not be formed, but an effort should be made to have a representative from Rochester on the State Fire Service Advisory Council.
11. Efforts should be made to inform all potential enrollees about the Fire Science Program.

# TEACHER AIDE



## SUBCOMMITTEE

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#### 2. In-state and Local

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Mr. Alan Sweet, Supervisor and Coordinator for Secondary School Aides, Minneapolis Public Schools

Dr. Ralph E. Wright, Principal of Mayo High School, Rochester Public Schools

Dr. Fred King, Assistant Superintendent in charge of Curriculum and Instruction, Rochester Public Schools

Mr. Robert Otto, Administrative Assistant to the Superintendent, Rochester Public Schools

Mr. Warren Zimmerman, Principal of Jefferson Elementary School, Rochester Public Schools

Sister Fidelis Logan, Elementary School Visitor and Advisor for the Sisters of St. Francis in Minnesota and neighboring states, Assisi Heights Convent, Rochester, Minnesota

### B. Investigative Trips:

Miami-Dade Junior College, Miami, Florida

Minneapolis Public Schools, School Administration Building, Office of Auxiliary School Personnel

### C. Materials Examined:

1. Catalogs and various publications of many schools throughout the United States.

2. Alexander, S. Kern, "What Teacher Aides Can-and Cannot-do", Nations Schools, Vol. 82, No. 2, August 1968.

3. Auxiliary School Personnel, National Commission on Education and Professional Standards, National Education Association, 1967.

4. "Auxiliary School Personnel" National Elementary Principal, Vol. 46, May 1967.



5. Baudreau, Sister Phyllis, "Teachers Aides" N. C. E. A. Bulletin, August 1967.
6. Bautwell, W. D., "Teachers aides - What They Do" P. T. A. Magazine, Vol. 63, December 1968.
7. DeLara, Lane, E. "Teachers Aides in the Junior High Schools" Clearing House, Vol. 42, December 1967.
8. Hale, Helen E. "Teachers Aides for the Science Program," American Biology Teacher, Vol. 30, April 1968.
9. "How the Profession Feels About Teacher Aides," N. E. A. Journal, November 1967.
10. Jensen, LaMant. "The Instructional Aide in the Open Biology Laboratory," The American Biology Teacher, December 1967.
11. Newlin, Wayne. "It Can Be Done," Illinois Education Association Journal, Vol. 30, No. 5, January 1968.
12. Ostrowiak, Laurie N. "Teacher Aide Trainees," Illinois Education Association Journal, Vol. 57, December 1968.
13. Richmond, Charlotte. "The Teacher Aide," Occupational Outlook Quarterly, Vol. 12, No. 4, December 1968.
14. "A Sample Teacher Aide Program," Occupational Education Bulletin, Vol. 3, No. 16, November 15, 1968.
15. Shipp, Mary D. "Teacher Aides: A Survey," The National Elementary Principal, Vol. 46, No. 6, May 1967.
16. Tanner, Laurel N. and Daniel. "The Teacher Aide: A National Study of Confusion," Educational Leadership, May 1969.
17. Teacher Aides at Work, National Commission of Education and Professional Standards, National Education Association, 1969.
18. "S. 721: Teacher Aide Program Support Act of 1967," National Elementary Principal, Vol. 46, May 1967.
19. "Use of Teacher Aides," N. E. A. Research Bulletin, Vol. 47, No. 2, May 1969.
20. "Working With Teachers Aides," Croft Leadership Action Folio, No. 7.

## II. FEASIBILITY OF IMPLEMENTING A TEACHERS AIDE PROGRAM:

### A. Description of the Occupation:

The Dictionary of Occupational Titles published by the United States Department of Labor does not include "Teacher Aide". Thus a nationally accepted job description has not been printed. Also, from all the material examined, one can readily note that there has been a significant rise in the number of teachers aides throughout the country, but there is still no clear-cut definition of a teacher aide. Ostensibly, the function of such personnel is to relieve teachers of non-teaching duties, but the literature indicates growing confusion as to their legal roles in the school and classroom, and what constitutes an act of teaching or instruction as contrasted with a non-teaching act.

Of the fifty states, eleven have laws regarding duties of aides and twelve have policy statements or guidelines regarding duties of aides. Obviously then the definition of an aide will vary, but from the many expressed definitions examined, one can make a composite generalization: Teacher aides may perform those activities assigned by and under the direct control and supervision of a certified teacher and designed to assist that teacher in the instruction of children. Teacher aides shall not be given independent responsibility for classroom management and organization, and they may not function in a normal classroom helping role if a certified teacher is not available for direction and guidance. In the absence of the professional, the nonprofessional may not assume or be assigned the responsibilities for professionals.

According to the position statement of the Minnesota State Board of Education, the professional responsibilities of the teacher include:

- 1.) The organization and management of the classroom.
- 2.) The planning of teaching strategies.
- 3.) The direction of learning experience of all assigned pupils.
  - a) The assessment of the individual need of the pupils.
  - b) The selection of materials to meet pupil needs.
  - c) The evaluation of pupil progress.
- 4.) The assessment of the skills and abilities of the para-professional and assignment of duties within the limits of the aide's competence.

The responsibility of the para-professional is to assist the teachers by performing tasks which are assigned and directed by that teacher. These tasks cannot infringe upon the professional responsibilities reserved for teachers, but aides may assist (not take over) in meeting his responsibilities.

The principal is responsible for the assignment of para-professional personnel to his staff and delegation of appropriate supervisory function.

Also, the Minneapolis school board adopted the following guide for teachers in the use of non-professional personnel:

The responsibilities that are reserved for teachers involve: (1) analyzing the instructional needs of his pupils, (2) prescribing educational activities to meet the pupil's needs and (3) certain supervisory responsibilities consistent with established school policy and directed by the school principal.

Teachers working with nonprofessional helpers, either in or out of the classroom,

must rely upon their own professional judgment when assigning duties to nonprofessional helpers. Their duties should not infringe upon the responsibilities reserved for teachers, but nonprofessionals may assist the teacher in meeting his responsibilities.

Thus, the role and duties of the aide will vary accordingly to the specific needs of the particular school system. However, the aide contributes to at least two basic improvements in the classroom: greater freedom for the professional, who can devote more time to lesson planning and teaching, and more individual attention for the student.

From the examination of materials, one could list over one hundred of the many duties commonly performed by teachers aides throughout the country. Also, from discussions with administrators who are using teacher aides in their schools one must conclude that a most important fringe benefit of the use of such aides is the improved communication between the school and the community. Some administrators strongly believe that the use of aides from the community has prevented strife within their schools.

B. Manpower Needs:

The interest in and expressed need for teachers aides among educators is indeed generally enthusiastically positive. Perhaps any particular reservations and doubts in the mind of teachers and administrators have come about because of the lack of an effective definition of the role and function of the aide, in relation to the professional teacher. Even though aides have been used throughout the country for many years to fill special individual needs (lay readers, housekeeping and monitoring personnel), there is little evidence to indicate that a concerted effort to provide

nonprofessional aides as part of the educational program existed before the middle 1960's. It is fairly safe to assume that there were expressed needs for aides many years ago, but certain critical factors have arisen which make the need for a paraprofessional staff increasingly significant. These primary factors are the increased size of school population, the increasing complexity of the instructional role in education today, and the cost of the professional staff.

Thus this significant movement in education is so new that it can still be considered to be in the frontier or exploratory stage. For example, nearly half the teacher aide programs now operating in large public schools are less than three years old. Forty percent of all teacher aide programs got their start in the 1965-66 school year. The need for teacher aides, however, became so important that federal legislation (The Economic Opportunity Act of 1964, The Elementary and Secondary Education Act of 1965, and the Education Professions Development Act of 1967) has provided the financial means for employing "teacher aides," "paraprofessionals," or "auxiliary personnel" in schools throughout the United States. According to the N. E. A. Research Bulletin (May, 1969) a total of 40,295 teacher aides were reported for 1968-69 by 799 school systems with enrollments of 6,000 or more. This compares with 29,938 aides reported by 743 systems for the previous year.

The Teacher aides programs are more firmly entrenched in metropolitan areas than in outlying regions. For example, the Minneapolis Aide Program was initiated in 1965 with 200 aides in 16 elementary schools and 7 secondary schools. This has been expanded in numbers to its present level of 800 aides in approximately half of the 100 schools



in the city. Duluth has 100 teachers aides.

Even though aides are employed outside the metropolitan area, the numbers are few, (Rochester has 10; Austin, 35; Mankato, 6; Winona, 4; Red Wing, 10) but investigation has revealed that there is a need and the need will increase in the future. The main obstacle is money. Nearly all administrators have indicated that there must and will be a restructuring of the role of the professional person so that he can perform his professional responsibilities; then the need for paraprofessional personnel will indeed be great. Minneapolis, with aid from Federal Project, Title I has employed approximately one aide for each three teachers on the staff. Thus educated speculation indicates that there will be a future for the teacher aide in the overall educational structure in other areas besides metropolitan centers. \*

C. How Are These Needs Currently Being Met?

Throughout the country, machinery is being set up to provide training for the teacher aide. Even though the need is great, the educational structure of the public school system and funding capabilities prevent, at the present, the inclusion of teacher aides in a pyramidal structure of the educational organization to any large degree. However, in the metropolitan areas, where there are always so many complex and diverse problems, the teacher aide personnel is well in the door of the educational structure. The teacher aide program in cities like Minneapolis has been quite clearly defined and the structure becomes clearer each year. As one of the consul-

\* See Appendix I

tants stated: "When you have big problems, you have to do something about it. And when communities recognize these problems they want to do something to alleviate the situation." In Metropolitan areas the greatest concentration of teacher aides is found in the lower socio-economic areas where social unrest is most prevalent.

Even though the problems are not as yet so dramatically apparent in communities of lesser size, educators have recognized that education can be improved with aides, and are trying to initiate programs in their schools. In communities such as Rochester, Austin, Winona, Mankato, and St. Cloud, few aides have been employed, and have primarily been trained on the job, but all these schools recognize the need for better training, especially to meet the inevitable needs of the future.

Although the administrators reported that they could use more teachers aides now, they cannot because of inadequate funds. Thus the teacher aides employed have been financed, for the most part, by federal projects. Significantly, however, many of the schools are locally financing aides. Rochester, for example, has hired five aides through local financing for the next academic year. Other schools of similar size are doing the same. This hardly appears as any overwhelming trend, but it is important in that advances and breakthroughs are being made. The administrators report that this is the beginning of a new career in education, and they foresee more aides each year.

D. Description of Proposed Curriculum:

Because of the present financial situation and the anticipated needs, this committee finds it necessary to propose a three phase graduated program which will ultimately lead to an A. A. degree.

1. In order to plan for the current needs, the most feasible plan to implement is an in-service program by which a teacher aide can work on the job and have released time to take basic core courses, which may be offered only during the day at the college. If the course is offered at night, it would then be the teacher aide's responsibility to take the course at that time. Credits earned in these courses can be applied to the Associate Degree program when it is implemented and even credited toward a B. A. degree if the aide decides he wants to earn a degree in education.

Investigation has revealed that a beginning teacher aide should as soon as possible acquire such skills as typing, operating duplicating machines, the setting up and operating of audio visual machines and preparing materials for these machines. He should have a basic knowledge of library practice, communications of English composition, child and adolescent psychology, first aid, personal health, recreation and games and perhaps speech. The teacher aides presently employed in Rochester could benefit by taking the present offerings at the Rochester State Junior College.

SUGGESTED IN-SERVICE BASIC CORE COURSES FOR TEACHER AIDES WHICH WILL LEAD TO A ONE YEAR CERTIFICATE, AN A. A. DEGREE OR TRANSFER FOR A B. A. DEGREE.

<u>Course</u>	<u>Credits</u>
114 Beginning Typing (or)	3 (or)
115 Intermediate Typing	4
123 Duplicating	2

<u>Courses</u> (continued)	<u>Credits</u>
311 Elementary Psychology	3
211-212-213 Recreational Games and Sports (1 credit each)	3
317-318-319 Communications (4 credits each) (or)	12
117-118-119 Freshman English	12
111 Personal Health	2
114 First Aid	3
114 Speech: Fundamentals of Speech	3
124 Art I	3
121 Filing and Records Management	3
000 A-V Equipment	3
000 Library Practices	3

(000 courses not a part of curriculum offered at this time)

2. The second phase of the program is a one-year certificate.  
As the financial conditions become more favorable and the educational structure becomes more clearly defined, it appears logical to offer the following plan:

#### ONE-YEAR CERTIFICATE PROGRAM

		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
English 317-318-319	Communication (or)	4	4	4
English 117-118-119	Freshman English	4	4	4
Physical Education 101-102-103	General Physical Education	1	1	1
Business Education 114	Beginning Typewriting (or)	3	-	-
Business Education 115	Intermediate Typewriting	3	-	-
Art 124	Commercial Arts I (or)	3	-	-
Arts & Crafts 000		3	-	-
Business Education 121	Filing and Records Management	3	-	-
Business Education 123	Duplicating	-	2	-
Library Practices 000		-	3	-
Child & Adolescent Psychology 000		-	3	-
	*Electives	-	3	3
Audio-visual Equip- ment 000		-	-	3
	**Social Science Elective	-	-	3
		<u>15</u>	<u>17</u>	<u>15</u>

\* Laboratory science recommended

\*\* Sociology 114 - Man in Society or History 112 - Minnesota History

(000 courses not a part of curriculum offered at this time)

## 3. The third phase of the program is the Associate Degree.

This committee recommends that the plan be implemented when the funds and the teacher aide program is definitely established throughout the region.

## A. A. DEGREE PROGRAM

		<u>Credits</u>		
<u>Freshman Year</u>		<u>F</u>	<u>W</u>	<u>S</u>
English 117-118-119	Freshman English (or)	4	4	4
English 317-318-319	Communication	4	4	4
Physical Education 101-102-103	General Physical Education	1	1	1
Physical Education 211-212-213	Recreational Games and Sports	1	1	1
Business Education 114	Beginning Typewriting (or)	3	-	-
Business Education 115	Intermediate Typewriting	3	-	-
Geography 114	Human Geography	5		
Art 112	Art Appreciation (or)	-	3	-
Arts & Crafts 000		-	3	-
Business Education 121	Filing and Records Management	-	3	-
Business Education 123	Duplicating	-	-	2
Speech 114	Fundamentals of Speech	-	-	3
History 112	Minnesota History (or)	-	-	3
Sociology 114	Man in Society	-	-	3
	Electives	3	2	3
		<u>17</u>	<u>17</u>	<u>17</u>
<u>Sophomore Year</u>		<u>Credits</u>		
Library Methods 000		3	-	-
Child & Adolescent Psychology 000		3	-	-
Audio-visual Equipment 000		3	-	-
Political Science 311	Introduction to American Gov't. (or)	3	-	-
	Social Science Elective			
Child Literature 000		-	3	-
Physical Science 123	Elements of Earth Science	-	4	-
Audio-Visual Productions 000		-	3	-
Psychology 311	Elementary Psychology (or)	-	3	-
Sociology 114	Man in Society	-	3	-
Audio-visual Graphics 000		-	-	3
Music 123	Music Appreciation	-	-	2
Internship 000		-	-	3
Speech 135	Stagecraft I	-	-	3
Educational Organization 000		-	-	3
	Electives	5	2-5	3
		<u>17</u>	<u>15-18</u>	<u>17</u>

The above program meets all requirements for granting the A. A. Degree.  
(000 courses not a part of curriculum offered at this time.)



### E. Student Admission Requirements:

The usual basic admission requirements to earn credits at the Rochester State Junior College is a high school diploma or its equivalency. Administrators and teachers generally agree that a high school diploma or its equivalency is very important. Locally, the public school officials have stressed that teacher aides must have at least a high school diploma. In addition, a fundamental requirement is that the teacher aide have a feeling for and an understanding of youngsters. Also, and not by any means the least important, a teacher aide must be willing to follow directions and accept duties outlined by the supervising teachers and must have the integrity to keep the confidence of the professional staff.

### F. Costs:

#### 1. Room

This program will make no special requirements as to space as students enrolled in the program will utilize classrooms and laboratories which are shared with students from other programs.

#### 2. Equipment

As the program develops, several new courses will be added to the curriculum offerings. The audio-visual courses will necessitate the purchase of additional equipment for instructional purposes. Additional books for reference will also be needed in the library for this and other new courses which may be offered.

Equipment.....\$2500.00

Library.....2500.00

\$5000.00

### G. Special Problems:

1. The implementation of any kind of teacher aide program is depen-

✓

dent upon funds. Investigation has revealed that there is a need for teachers aides, but the lack of funds has prevented the employment of needed aides in nearly all areas.

2. Another special problem is the role and status of the teacher aide in the educational structure. If a person should enter the teacher aide program he should have some assurance that he will have a defined place in the structure with all benefits.
3. Even though there is a recognized need among nearly all educators, the public will have to be thoroughly informed, since the funds will have to come from the taxpayer. If the federal funds are cut in any degree the burden will come to the attention of the local area. Thus it is important to make the need clear to all the public. The public must be made to see that because of the diverse and complex instructor's role the professional teacher is expected to perform, the teacher aide will facilitate the educational process so that their children will be given the quality education they are entitled to.

#### H. Recommendations:

This committee has found that there is an expressed need for teacher aides, especially in the near future, but since the teacher aide program is relatively new and since the actual employment in districts outside metropolitan areas is quite small due to lack of funds and the lack of a definite stature in the educational structure, this committee makes the following recommendations:

1. (a) Implement the first phase of the program: The (on-the-job) in-service program. The teacher aide can take the basic core subjects while working on the job. At this stage the teacher aide can learn the basic skills required of

teacher aides. This plan can be implemented now.

(b) Secondly, when financial and structural conditions become more favorable, implement the one-year certificate program.

(c) When the teacher aide is firmly established throughout the region, then the proposed Associate Degree plan should be implemented.

2. In order to implement and sustain a successful teacher aide program, this committee strongly recommends that the hiring educational agency offer motivational and financial incentives. If the trainee knows that he will have some status in the overall educational structure he will then view his training more worthwhile. If this is not determined, the interest of the teacher aide for further formal training will never materialize. Closely related is financial status. The future teacher aide should know that there will be incremented teacher aide salary schedules, based on training and experience.
3. Even though educators indicate that teacher aides are needed and the need will become greater in the future, the public must be fully informed. Therefore a good public information program relative to the need and value of teacher aides should be organized and implemented by public school administrators and school boards.

Suitable publicity, such as flyers and brochures should be sent out to all schools in the area to inform officials employing or planning to employ teachers aides that Rochester State Junior College can now offer basic core courses for teacher aide training, and that these courses will be applied to the one-year certificate or Associate Degree Programs when they are implemented.

## APPENDIX I

On the eve of the publication of this work, it was observed in the Minneapolis Tribune (August 4, 1969), that the Citizens League, a non-partisan Twin City (Minneapolis-St. Paul) organization which concerns itself with questions of government planning and finance, had conducted a seven month study entitled "Stretching the School Salary Dollar." Among other things, the 42 man committee examined the feasibility of expanded use of the teacher aide. According to the committee, "Extensive use of teacher aides, now in limited use, would free teachers of much time--perhaps one-fifth to two-thirds, according to one study--spent on such non-teaching chores as keeping records, supervising lunch periods, and putting on over-shoes, the report said."

The key statement, however, seems to be the following: "The use of teacher aides, 'may be the best opportunity now available for making better use of the school personnel dollar.'"

# SOCIAL WORKER AIDE



## SUBCOMMITTEE

Curtis D. Jacobsen

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## I. INVESTIGATIVE TECHNIQUES:

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Dr. Donald Scott, History & Social Science Division Chairman,  
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#### 2. State

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Warren Schauer, Personnel Officer, Ramsey County Welfare, St.  
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Robert Speltz, Staff Training Director, Ramsey County Welfare,  
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## 3. Local

Mrs. Ninnia Hoel, Social Welfare Supervisor, Rochester, Minnesota  
 Lester Stiles, Director, Olmsted County Welfare Department, Rochester, Minnesota

Mr. Casimer Zantek, Superintendent, Youth Vocational Center, Rochester, Minnesota

B. Investigative Trips:

Augsburg College, Minneapolis, Minnesota, Minnesota Conference on  
 Social Work Education

Chicago City College, Chicago, Illinois

County Welfare Merit System, State of Minnesota, St. Paul, Minnesota

Glendale College, Glendale, California

Long Beach City College, Long Beach, California

Olmsted County Welfare Department, Rochester, Minnesota

Pasadena City College, Pasadena, California

Ramsey County Welfare Department, St. Paul, Minnesota

Red Wing Training School, Department of Correction, Red Wing, Minnesota

St. Thomas College, St. Paul, Minnesota, Minnesota Conference on  
 Social Work Education

San Jacinto College, Pasadena, Texas

Tarrant County Junior College, Hurst, Texas, Fort Worth, Texas

University of Minnesota, Minneapolis, Minnesota, School of Social  
 Work

Youth Vocational Center, Rochester, Minnesota

C. Materials Examined:

1. Catalogs and various publication from the above named institutions.
2. The Catholic Charities Review, February, 1969.
3. "Case Aide Job Description," Minnesota Public Welfare Manual.
4. "Child Care Proposed Curriculum for the Tarrant County Junior College District," September, 1968.
5. Epstein, Laura, "Differential Use of Staff: A Method to Expand Social Services," Social Work, October, 1962: 66-72.
6. Feldstein, Donald, "Community College & Other Associate Degree Programs for Social Welfare Areas," Council on Social Work Education.
7. Minnesota Welfare, Summer - Fall, 1968.
8. "New Careers Program," Room 209, Clay School, University of Minnesota, Minneapolis, Minnesota.
9. Occupational Outlook Handbook, U. S. Department of Labor, 1968-69.
10. Olmsted County Welfare Department Policy Manual

11. "Outline of Pre-service & In-service Training and Task Assignments for School Social Worker Aides in New Careers and Title I Programs," Donald S. Rinkenberger, Coordinator, Minneapolis Public Schools, Minneapolis, Minnesota 55413.
12. "Progress Report on Title IV Amendments With Particular Emphasis on A. F. D. C.," Minnesota Department of Public Welfare.
13. Russell, Ellery C., "Case Aides Free Casework Time," Child Welfare, April 1958; 22-25.
14. Russell, Ellery C., "The Real Case Aide is Standing Up," Child Welfare, April 1966: 202-205.
15. "Senior Case Aide Job Description," Minnesota Public Welfare Manual.
16. Weed, Verne and William H. Denham, "Toward More Effective Use of the Nonprofessional Worker: A Recent Experiment," Social Work, October, 1961: 29-36.

## II. FEASIBILITY OF IMPLEMENTING A PROGRAM IN CASE AIDES:

### A. Description of the Occupation:

One of the most difficult tasks in determining a description of this occupation is the proliferation of titles. In our surveys, we encountered over twenty different descriptive titles, such as: case aide, social worker aide, social worker trainee, neighborhood aide, mental-health worker, etc. Additional confusion exists among social welfare agencies themselves as to job descriptions because of recent changes in state and federal legislation. Its newness is supported by no entry in the Occupational Outlook Handbook. However, in our studies, we found the most common usage to be case aide. Therefore in this report we will use this term as a common denominator. This is supported also by usage in Minnesota's Public Welfare Manual job description.

The case aide fills a growing gap between the clerical worker and the professional in social service occupations. Many career ladder

preprofessional opportunities are becoming available. Depending on agency assignment, the case aides may be employed as an eligibility worker, a welfare assistant, an intake counselor, a group counselor, or a program development assistant.

Examples of the wide range of possible obligations and responsibilities for a case aide are: client declaration of need, determination of eligibility and acceptance or rejection for money grants, referrals for services, maintenance of financial records, contact with individuals to encourage participation in the services offered, recruiting foster homes and working with foster parents; visiting nursing home patients and providing them with needed assistance and information, dealing with food stamp applications, explaining welfare and other community programs to groups and individuals, transporting clients, shops for or with clients, etc.

The following types of knowledge, skills, and experience would be helpful to a case aide:

- (1.) knowledge of human behavior; (2.) belief that people can be helped to use their potential; (3.) ability to express ideas clearly;
- (4.) ability to be objective; (5.) ability to use good judgement;
- (6.) ability to establish good working relationships; (7.) ability to organize work effectively; (8.) some knowledge about social and economic conditions; (9.) knowledge of practical economics, home and money management; (10.) knowledge of office procedures.

Case aides need the same basic qualifications of intelligence, sensitivity, warmth and emotional maturity as do graduate case workers.

They must be able to accept the limitations of their role as case

aides as well as to respect the kind of responsibility the caseworker carries. A personality capable of accepting and using supervisory help is necessary as is the ability to become part of the team which makes up the staff of an agency and which functions within the agency structure.

- B. What are the manpower needs? C. How are these needs currently being met?

To determine the need for Social Case aide, we felt that we should keep our perspective on two different levels: national and regional.

It is our impression that the general field of social workers will continue to be in great demand. The changing occupational structure of the economy has created severe problems for many unskilled workers and others whose jobs have been replaced by machines. At the same time, the conflict between the aspirations of many members of minority groups and the discrimination they face in housing, education, and employment has led to considerable social unrest. Family life has been affected by various social changes. All of these factors will contribute to the need for more social workers to maintain existing programs and to inaugurate new programs for the elderly, for children, for the handicapped, and for delinquents, and to plan new social welfare programs at the community level. Included in this is the interest in the indigenous community worker and the examination of the special skills he brings to the job. On a broader scale, the idea of restructured services has led to experiments in separation of service functions into different levels for the same client, and the move to separate payments and service in public welfare. All of the above implies some tasks being defined, in an improved total system,



for personnel other than the professionally educated social worker.

This total system approach suggests that social case aide, correctional aide, community aide, teacher aide, etc., will be in great demand in the near future. Already more than one-half of the American work force is employed in service occupations rather than in manufacturing and farming. The greatest increase in demand for workers in the coming years will be in the service industries, and the human services occupations are the ones least likely to be automated out of existence in the near future.

In 1968 there were programs training case aides or their counterparts in approximately 50 junior and community colleges throughout the nation with an approximate 4,000 students involved. The Council on Social Work Education estimates that by the early 1970's there will be programs in over 200 schools with over 20,000 students. Many of these programs will be initiated in the larger metropolitan areas and will attract disadvantaged and minority people in increasing numbers.

We realize that the above statements are ambiguous and not very definite but our limited investigation has produced little that is concrete in terms of need. The state of flux in government agencies, the emergence of many new social oriented programs, the semantical struggle over job classification titles and others, have made it difficult to pinpoint a definite statistical need.

However, our investigations have produced some examples, the Ramsey County Welfare Department employs 40 case aides, this represents a ratio of 4.5 - 1 to professional social workers on the staff, with an annual turnover of approximately 20%. These resultant vacancies

are often filled from within the agency from clerical staff with expertise in the various programs carried on.

In Olmsted County, where five case aides are employed, the same ratio of case workers to professional staff exists and the turnover is approximately the same.

The State of Minnesota has also recognized the need for case aides in State and local government agencies by having in its Public Welfare Job Classification Manual the following job titles: Senior Case Aide and Case Aide.

Under the New Careers and Title I programs, the Minneapolis Public Schools have initiated a broad program involving school social worker aides. This represents a different approach to the subject because it involves primarily a program where the aides are hired and then go through in-service and in-depth training programs. Aides are recruited from the neighborhood without restriction as to education or previous work experience. Training is adjusted to the educational level of each aide and the program provides for upgrading as the aide progresses in both experience and training. Encouragement to advance by attending General College of the University of Minnesota or other institutions of higher learning is also offered. We would recommend that the methods used by the Minneapolis Public Schools be further investigated.

We also found that employers in many occupations where interest in Public Service graduates is high, are not chiefly interested in "terminal" programs. They want an employee with: (1) two years of college; (2) a few specialized courses to make the employee useful

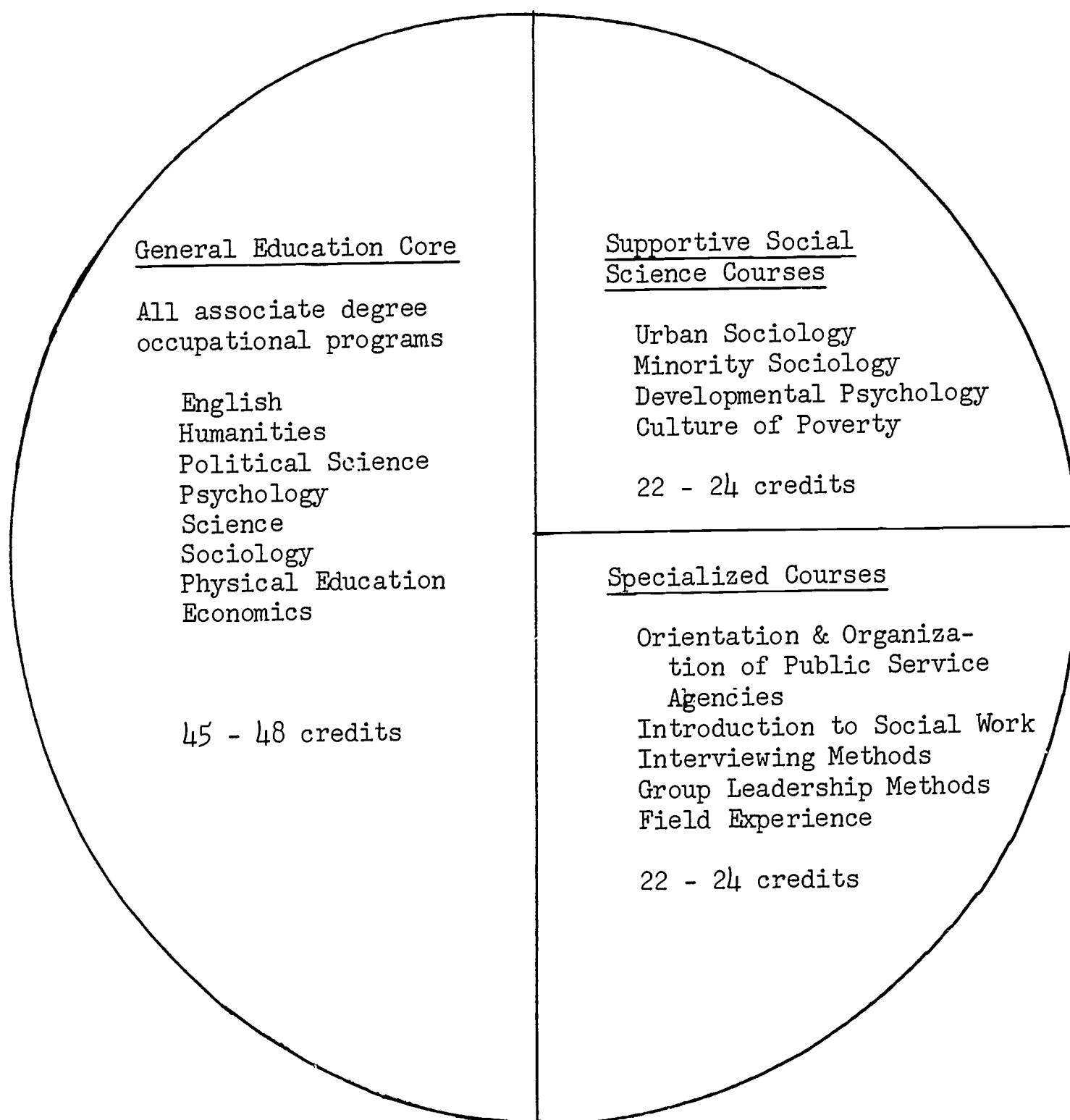
on the job, and (3) with one to two years of transfer capability toward a bachelor's degree.

The criteria for judging salary potential is difficult to assess. The range is wide and is conditioned again by the proliferation of titles and actual job responsibility. A few illustrations will demonstrate this. Starting salaries for Senior Case Aides (Welfare Merit System, State of Minnesota) vary from \$390 to \$490 monthly, while the maximum salaries range from \$560 to \$700 per month. In the Ramsey County Welfare Department the range for Case Aide is from \$410 to \$585 monthly. In the Minneapolis Public Schools' New Career and Title I Programs the salaries range from Aide I, \$2.00 per hour, or \$3,040 for a 38 week school year, to Aide III with a probable \$4,500 for the same length of time.

D. Description of the Curriculum:

Colleges vary greatly on how the social welfare related major is structured in the curriculum. This curriculum is designed to prepare students for entry into a variety of agencies which provide social services to the community. Upon completion of the program, which leads to the Associate in Arts, the graduate is prepared for employment hopefully as a case aide in welfare agencies, social development projects, church sponsored youth programs, private or public enterprises. The chart on page 63 structures a course of study that is approximately 75% transferable. This program is designed to provide for horizontal and upward mobility.

CURRICULUM PLAN  
ASSOCIATE DEGREE EDUCATION  
FOR CASE AIDE



## CURRICULUM PLAN

## ASSOCIATE DEGREE

## CASE AIDE

<u>Freshman Year</u>		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
English 117-118-119	Freshman English	4	4	4
Physical Education 101-102-103	General Physical Education	1	1	1
Sociology 111	Marriage and the Family	3	-	-
Speech 114	Fundamentals of Speech	3	-	-
Health 112	Community Hygiene	2	-	-
	*Science Elective	4	-	-
Sociology 114	Man in Society	-	3	-
Public Service 115	Orientation to Public Service	-	2	-
Speech 132	Fundamentals of Group Communication	-	3	-
	Artistic Expression Elective	-	3	-
Sociology 115	American Society	-	-	3
Public Service 116	Organization of Public Service Agencies	-	-	3
	Electives	-	-	4-6
		<u>17</u>	<u>16</u>	<u>15-17</u>

\* Physical Science 121,122,123 - Elements of Physics, Chemistry, Earth Science  
 Biology 111 - Elements of Biology

<u>Sophomore Year</u>		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
Psychology 214	General Psychology	3	-	-
Sociology 116	Social Problems	3	-	-
Economics 214	Principles of Economics	5	-	-
Social Welfare 214	Introduction to Social Welfare	5	-	-
Psychology 215	General Psychology	-	3	-
Sociology 117	Minority Sociology	-	3	-
Political Science 214	American Government & Politics	-	3	-
Social Welfare 215	Methods in Group Leadership	-	3	-
Social Welfare 220	Community Service Field Work I	-	3	-
Psychology 226	Developmental Psychology	-	-	3
Social Welfare 216	Principles of Interviewing	-	-	3
Social Welfare 221	Community Service Field Work II	-	-	3
	Electives	-	-	7-9
		<u>16</u>	<u>15</u>	<u>15-17</u>



Vocational Oriented Electives

Business Education 114 - Beginning 3  
 Typing  
 Mathematics 126 - Business Math- 5  
 ematics  
 Business 311 - General Clerical 4  
 Practice  
 History 126 - United States His- 3  
 tory - Since 1917

Academic Oriented Electives

Political Science 215 - American 3  
 Government & Politics  
 Economics 215 - Principles of 5  
 Economics  
 Humanities 113 - Humanities in 3  
 the Modern World  
 Anthropology 118 - Anthropology 5  
 Sociology 118 - Urban Sociology 3  
 Geography 114 - Human Geography 5

We are assuming that the course of study outlined above is a vocational oriented program. Therefore the vocational oriented electives as listed are geared to this premise. However, for the student who finds after involvement in this program a desire to continue to pursue an academic degree in Social Welfare, the academic oriented electives will prepare him more fully to reach this goal.

Field experience and field supervision helps to show the student whether he does or does not belong in the program. This experience is to be one of education and should not be used as an excuse by cooperating institutions for cheap labor. The cooperating institutions must understand they are educational arms of the college and the educational goals must be spelled out before field work is assigned.

Field experience varies from the occasional observation to a required eight hours per week of supervised work for two years. Most often it does involve weekly supervised work with a report back to the school by the supervisor and some kind of seminar in which students discuss field experience. Field experience usually begins during the second year, with a course including visits to community agencies during the first year.

We wish to re-emphasize that even for the vocational oriented course

of study that for the student who wishes to continue his education, 70-75% of the courses are transferable.

E. Student Admission Requirements:

All high school graduates are eligible to apply, as are non-graduates who have passed the General Education Development Examination, and advanced students interested only in specialized courses.

F. Costs:

1. Equipment & Supplies

There are no special equipment or supply needs for this course of study. Existing facilities and visual aid equipment are satisfactory for the suggested program.

2. Staff

(a) We recommend the addition of one staff member who would serve as general instructor in social welfare and sociology courses and as director and coordinator of field services.

(b) We also recommend once a class reaches the sophomore level, that additional help be assigned for coordination and field service.

(c) If an instructor cannot be hired with a social welfare background we recommend that a resource person(s) from the local community be hired on a part-time basis.

G. Special Problems:

We foresee no problems other than those previously described.

H. Recommendations:

Social welfare related programs are instituted at the Associate Degree level in one of several ways. The school may take the initiative in setting up such a program. It may conduct a survey or do other studies of need for personnel in this particular area before setting it up. Or

a social agency may contract or arrange with a community college to develop a training program for its personnel or prospective personnel. These agencies may be community action programs, departments of welfare, or others. Most programs grow out of some mixture of the two initiatives. Several local agencies will indicate a need and the school will develop an advisory committee to guide the formulation of a program and a curriculum.

In view of the fact that none of the above agencies have clearly established the necessity for implementing a program in social worker aide, it is our recommendation that one not be instituted at Rochester State Junior College at the present time. In the event that circumstances change and the evidence for one is more clearly defined, we recommend that the following steps be taken:

1. An advisory committee be organized to study need and curriculum of this program. This committee could reflect the following cross-section of the community: (1) Olmsted County Welfare Department; (2) Rochester State Hospital; (3) Private Welfare Agencies such as Ability Building Center, Inc., Catholic Charities, Family Consultation Center, Luthern Social Service, Olmsted Day Activity Center; (4) Hotel & Motel Representatives; (5) I. B. M.; (6) Olmsted County Public Health Service; (7) Public Schools; (8) Mayo Clinic; (9) Hospitals & Rest Home Representatives; (10) Other potentially interested organizations and agencies.
2. An instructor be hired to serve as coordinator of the case aide program. It would perhaps be wise to hire this person previous to the implementation of this program. The Council on Social Work Education suggests that this person teach 9-10 quarter hours per

quarter and spend the rest of the time setting up field experience placements, field observing of the program, evaluation, planning training programs for supervisors, etc.

3. A concerted effort be made to stock adequate reference materials (books and periodicals) in the library before the start of any of the human and public service programs.
4. A director of placement be hired full or part-time to service primarily the career areas. He should arrange job interviews for graduates and conduct follow-up studies on our graduates after they leave our college.

While we cannot at this time recommend a program in Social Worker Aide, we do agree with the suggestions proposed by Dr. Bergstrom, assistant to the Chancellor for Instructional Service, Minnesota State Junior College System, and other consultants that a general Public and Human Service Program be developed. This approach is already being used by community colleges in different parts of the United States with apparent success. In support of this recommendation, we cite the following: A General Public Service Program was approved for development by the Minnesota Junior College Board with authority to begin in September 1968. These programs were supported at the meeting by representatives of the State Civil Service Department. If this is done then we would recommend that a director and coordinator for the entire program be hired.

We feel that every junior college cannot support a complete offering of the various courses of study that are contained in the Public and Human Service area; but if the freshman year is similar, then students can start a program of their choice by transferring credits. This would entail a careful study of need to decide which schools would offer the special

areas reflecting the profile of the community area.

At the same time, however, the following alternatives are suggested:

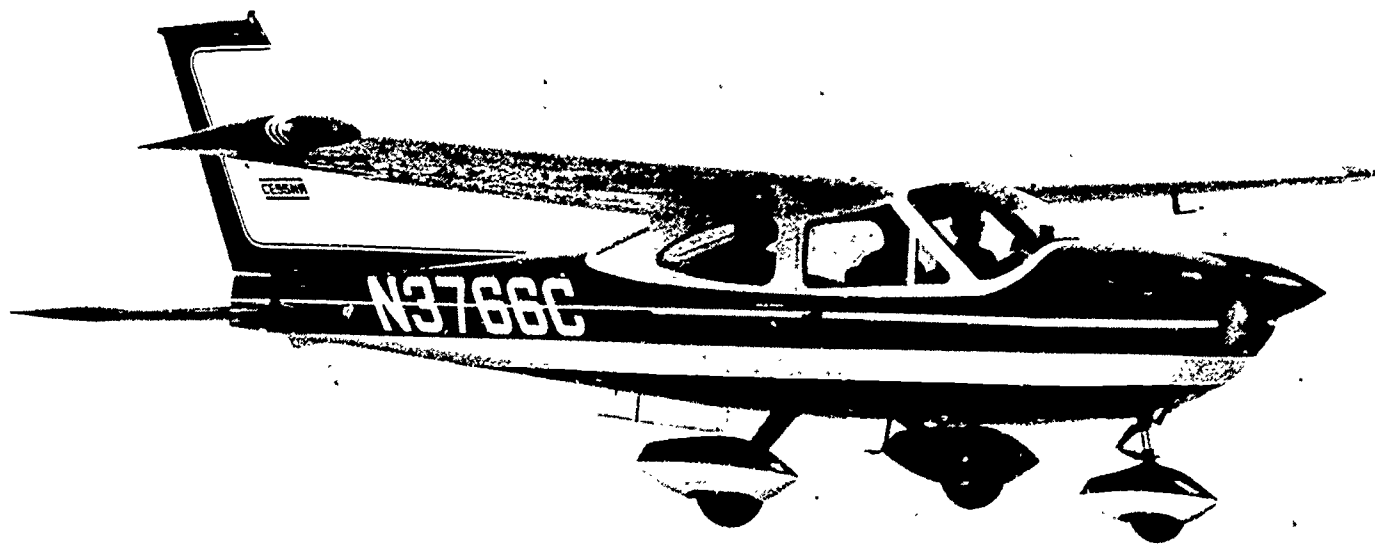
The course could fall into three patterns:

- (1) Individual courses selected or designed to meet specific "one-shot" objectives.
- (2) A two-year pattern, largely general education transferable to a bachelor's degree program in a variety of major fields along with a five-course sequence in specific Public Service areas.
- (3) "Sophomore options" added to the freshman year in general public service with sophomore sequence in: (a) Law Enforcement; (b) Case Aide; (c) Correction's Assistant; (d) Teacher Aide; (e) Fire Science; (f) Recreation Aide, and (g) Community Aide.

The specific courses be taught in each program will be the prerogative of each college faculty and administration, with approval of the final proposal given by the Junior College Board.



# AVIATION



## SUBCOMMITTEE

Lowell Fitzgerald

Russell I. Hanson

# I. INVESTIGATIVE TECHNIQUES:

## A. Consultants:

### 1. Out-of-State

Dr. George Mehallis, Director, Technical, Vocational and Semi-professional Studies, Miami-Dade Junior College, Miami, Florida  
 Mr. E. A. Bamber, Chairman, Aerospace Department, Miami-Dade Junior College, Miami, Florida  
 Mrs. Coral Bloom, Instructor, Aeronautics, Diablo Valley College, Pleasant Hill, California  
 Professor Marion B. Gentry, Chairman, Technology Division, Long Beach City College, Long Beach, California  
 Mr. John P. Nystrom, Chairman, Aeronautics Department, San Mateo Junior College, San Mateo, California  
 Professor Lee Norris, Aerospace Technologies, Glendale College, Glendale, California

### 2. Local

Mr. Charles Petersen, Chief Pilot, Rochester Aviation, Rochester, Minnesota  
 Mr. William Brant, Federal Aviation Administration, Rochester, Minnesota  
 Mr. Don Harkcom, Chairman of Business Division, Rochester State Junior College  
 Mr. Verlyn Heldt, Dean of Instruction, Rochester State Junior College  
 Mr. James Ray, Aviation Representative, State Department of Aeronautics, St. Paul, Minnesota

## B. Investigative Trips:

Glendale College, Glendale, California  
 Pasadena City College, Pasadena, California  
 Long Beach City College, Long Beach, California  
 McDonnell-Douglas Aircraft Manufacturing Plant, Long Beach, California  
 Miami-Dade Junior College, Miami, Florida  
 Opa-Locka Flying School, Miami, Florida  
 Rochester Aviation Facilities, Rochester, Minnesota  
 Gopher Aviation Facilities, Rochester, Minnesota

## C. Materials Examined:

1. Catalogs and various publication from the above named institutions.
2. Occupational Outlook Handbook, United States Department of Labor, 1968-1969.

3. What the Airlines Need in New Flight Personnel, Air Transport World, January, 1967.
4. Aviation and the Community College, Institute for Community College Development, 1969.
5. An Aviation Course for College, Air Age Education Division Cessna Aircraft Company.
6. The General Aviation Aircraft Owners Survey, Federal Aviation Administration.
7. The Changing Travel Market, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan.
8. Aerospace Science Education, Federal Aviation Education, Office of General Aviation Affairs, Washington, D. C. 1965.
9. A Study Guide in Aviation Science For Grades 11 & 12, State Department of Public Instruction, Montana Aeronautics Commission, Helena, Montana 1965.
10. Fifty Years of Aeronautical Research, National Aeronautical and Space Administration, Washington, D. C. 1967.
11. Instrument Pilot (Airplane), Department of Transportation, Federal Aviation Administration, Washington, D. C. 1967.
12. Demonstration Aids for Aviation Education, Compiled by a Committee of the Curriculum Laboratory, Civil Air Patrol, Reprinted by Federal Aviation Administration, Office of General Aviation Affairs, Washington, D. C.
13. Aviation Education Course, Sanderson Films Inc., Aviation Visual Aids, P. O. Box 13121, Wichita, Kansas.

## II. FEASIBILITY OF EXPANDING THE PROGRAM IN AVIATION:

### A. Description of the Occupation:

Aviation is an all-encompassing word. It should be noted, therefore that the present feasibility study is concerned primarily with flight training, and not with the maintenance of aircraft, or other areas of aviation technology.

Flight training is by far the most popular offering in terms of aviation programs. It consists of ground instruction and may, but not necessarily, include actual flight training. Flight

programs generally prepare students for private pilot certificates and may include additional training for commercial certificates and instrument, instructor and multi-engine ratings. Instruction is either offered directly by a college, or it is provided through an arrangement with a local Federal Aviation Administration approved flight school.

Aviation administration training which includes programs in air transportation, airport management and aircraft marketing, is also included in general aviation studies. The success of many small businesses connected with aviation has been limited by shortages of capable management personnel. These programs generally draw from the business department of the college.

## B. What Are Manpower Needs?

### 1. Nationally

In addition to the needs of the military and the future shortage which may be faced by air carriers, the greatest need for trained personnel, based on the weight of numbers is in general aviation. The General Aviation Aircraft Owners Survey, published by the Office of Management Services, Federal Aviation Administration, states that general aviation represents over 90% of all civil aircraft.

As of September 1, 1964, there were 88,669 active airplanes in the general aviation fleet. Using a 10% per year growth rate, the industry will sell 20,000 units in 1974.

Some of these planes will be in the hands of corporations. Many will be in the hands of operators in revenue producing activities, many will be demonstrators. Most, however, will

be in the hands of owners, used for personal flying and for business transportation.

A rapid use of airplane pilots is expected through the 1970's. In addition to personnel to staff new positions, several thousand job openings for qualified applicants will result from the need to replace pilots that retire or leave the occupation. Although larger, faster and more efficient jet planes are likely to be used in the future, increased passenger and cargo miles may substantially exceed the increase in capacity realized from the new equipment.

Employment of pilots outside of the scheduled airlines is expected to continue to grow rapidly, particularly in business flying, aerial application, air-taxi operation, and survey flying. As one source pointed out: "People have become accustomed to mobile ways of living and business have become accustomed to depending on modern means of travel for carrying on their activities."

## 2. Locally

There is not a great demand at the present time for commercial pilots, according to Charles Peterson, chief pilot for Rochester Aviation. He did indicate, however, that throughout the region commercial pilots are needed for flight training schools, air freight and air taxi operations. As these air operations increase in the next few years, more pilots will be needed.

### C. How Are These Needs Currently Being Met?

At the present time the needs are being met throughout the country by the military, local high schools and post-high school institutions.



Locally, Rochester State Junior College has three courses in aviation. These are: 314. Introduction to Aviation, 315. Theory of Flight, and 316, Flight-Basic. Completion of these courses satisfies the classroom and flying requirements for taking the written examination and flight test for a Private Pilot's license. All ground school is carried on under the school's program and jurisdiction; the flight training is contracted with the Rochester Aviation Company located at the Rochester Municipal Airport.

The breakdown of students who participated in the program for the school year 1968-1969 is as follows.

	<u>Fall</u>	<u>Winter</u>	<u>Spring</u>
314 - Introduction to Aviation	26	8	not offered
315 - Theory of Flight	not offered	29	not offered
316 - Flight-Basic	not offered	14	7

#### COMMERCIAL PILOT CURRICULUM

<u>Freshman Year</u>		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
English 117-118-119	Freshman English	3	3	3
Physical Education 101-102-103	General Physical Education	1	1	1
Introduction to Aerospace		3	-	-
Basic Aerospace Ground		5	-	-
Physical Science 123	Elements of Earth Science	4	-	-
Basic Flight Training		-	3	-
Meteorology		-	5	-
Geography 114	Human Geography	-	5	-
Navigation		-	-	3
Commercial Ground School		-	-	4
Commercial Flight I		-	-	3
Business 313	Marketing	-	-	3
		<u>16</u>	<u>17</u>	<u>17</u>

<u>Sophomore Year</u>		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
Commercial Flight II		3	-	-
Advanced Navigation		3	-	-
Airline Operation		3	-	-
Business 211	Introduction to Data Processing	3	-	-
Speech 114	Fundamentals of Speech	3	-	-
Instrument Ground School		-	4	-
Airframe & Power Plant		-	3	-
Commercial Flight III		-	3	-
Business 411	Management Principles	-	4	-
Health 114	First Aid	-	3	-
Aerospace Systems		-	-	4
Aerospace Laws		-	-	3
Flight Instrument Training		-	-	2
Art 111	Art Appreciation	-	-	3
	Elective in Business	-	-	4
		<u>15</u>	<u>16</u>	<u>16</u>

### Course Descriptions

Introduction to Aerospace - An introduction to: the major division of aviation; economic factors; aerodynamics of flight; meteorology; instruments; navigation; space technology; occupational opportunities; future developments.

Basic Aerospace Ground - Civil air regulations, meteorology; aerial navigation; radio; airframe mechanics; aircraft power plants.

Basic Flight Training - Equipment of familiarization; preflight; taxiing parking, take-offs and landings, straight and level flight; turns; climbs and glides; stalls; slow flight; integrated instruction; pattern and track flying; emergencies and critical situations; small, soft, and high altitude/temperature field operations; cross-country flying; radio procedures.

Meteorology - Atmosphere temperature and pressure stability; turbulence, clouds, air masses; circulation, fronts, thunderstorms, icing, visibility, weather observation, forecasts, and reports.

Navigation - Navigation planning aids (VFR), complete navigation log, OMI navigation, automatic direction finding; ADF, low frequency navigation, dead reckoning navigation, pilotage, polar navigation, and grid navigation.

Commercial Ground School - Federal air regulation, weight balance, flight computer, radio, airframe mechanics, aircraft power plant mechanics, air traffic control.

Advanced Navigation - Flight planning and in-flight procedures; departure, holding, and arrival procedures; radio navigation; changes in flight; emergency procedures; transition and instrument approaches.

Commercial Flight I-II-III - The training that must be included in the required hours of flight time under FAR 143.63.

Airline Operation - Consideration of the different phases of airline operations including organization, administration, personnel, public relations, sales, records, communications, government requirements and regulations, flight procedures, maintenance procedures, and general traffic-problems.

Instrument Ground School - Use and interpretation of flight instruments; flight planning; aircraft performance and human factors; preflight weather briefing; regulations and air traffic control procedures; preparation for FAA written examination.

Airframe and Power Plant - Aircraft structures; assembly and niggling; theory of flight; control systems; electrical systems; landing gear; powerplants; carburetion systems; ignition systems; lubrication and cooling; propeller principles; maintenance procedures.

Aero Systems - An introduction to the various systems of aircraft including fuel, oil, flight control, hydraulic, electrical, pressurization, oxygen, and other systems commonly utilized on small and large aircraft.

Aero Laws - An introduction to the history of aeronautical law; the governing agencies; formulation; enforcement; effect; penalties; application in specific areas of air taxi, airlines, agriculture, and repair.

Flight Instructor Training - To prepare student to become a flight instructor.

In addition to the above courses, the curriculum recommended contains courses which are currently being offered at Rochester State Junior College. Their content and description is available in the 1968-1970 catalog.

Our study also revealed a need for trained personnel in the aviation industry. These personnel should be exposed to aviation courses. It is also highly desirable according to the Federal Aviation Administration and the aviation industry that these personnel hold a private license.

The following curriculum was therefore suggested for the individual interested in working in the aviation industry and whose primary concern is business oriented.

## A. A. DEGREE IN GENERAL AVIATION STUDIES

		<u>Credits</u>		
<u>Freshman Year</u>		<u>F</u>	<u>W</u>	<u>S</u>
English 117-118-119	Freshman English	3	3	3
Physical Education 101-102-103	General Physical Education	1	1	1
Aviation 314	Introduction to Aviation	4	-	-
Business Education 111	Introduction to Business	4	-	-
Physical Science 123	Elements of Earth Science	4	-	-
Aviation 315	Theory of Flight	-	3	-
Business Education 115	Intermediate Typing	-	4	-
Mathematics 311	Business Mathematics	-	5	-
Health 111	Personal Health	-	-	2
Business 313	Marketing	-	-	3
Business 411	Human Relations	-	-	3
Aviation 316	Flight-Basic	-	-	3
		<u>16</u>	<u>16</u>	<u>15</u>

		<u>Credits</u>		
<u>Sophomore Year</u>		<u>F</u>	<u>W</u>	<u>S</u>
Business 314-315-316	Elementary Accounting (or)	3	3	3
Business 214-215-216	Principles of Accounting	(4)	(4)	(4)
Economics 311	The American Economy	3	-	-
Art 111	Art Appreciation	3	-	-
Business 412	Management Principles	4	-	-
Electives		3	3	3
Political Science 214	American Government & Politics	-	3	-
Business 422	Salesmanship	-	3	-
Business 211	Introduction to Data Processing	-	3	-
Political Science 311	Introduction to American Government	-	-	3
Physical Science 121	Elements of Physics	-	-	4
Business 432	Principles of Insurance	-	-	3
		<u>16</u>	<u>15</u>	<u>16</u>
		(17)	(15)	(17)

Suggested Electives:

Mathematics 114 - Algebra	Geography 114 - Human Geography
Mathematics 115 - Trigonometry	History 311 - The World Since 1945
Mathematics 116 - Calculus	
Business 424-425-426 - Business Law	History 112 - Minnesota History

E. Student Admission Requirements:

The applicant for the commercial pilot program must have a high school diploma or its equivalency. In addition, students who enroll in the commercial pilot program will be required to obtain at least a Second-Class Medical Certificate issued by a physician who is authorized to perform physical examinations of airmen for the Administrator of the Federal Aviation Administration.

Private Pilot License for general Aviation Studies requires a Federal Aviation Administration Class III physical examination.

F. Costs:

1. Room

Ordinary classroom in existing college adequate for local ground school instruction.

2. Equipment and Supplies

Training aides in order to meet the requirements for a commercial/instrument rating would be approximately \$1000- \$1500.

3. Staff

Currently our qualified advanced ground school instructor in order for the college to receive the Federal Aviation Administration approval.

G. Special Problems:

1. In our judgement the cost of flight school for private or commercial pilots license may exceed the financial resources of the average junior college student. For example, the local costs for a private pilot's license (which requires a minimum of 35 hours of flight time) are \$12.00 per hour for solo flight and \$17.00 per hour with an instructor. These costs are considerably increased for a commercial license which requires a minimum of 160 hours of flight time.
2. Students who enroll in the commercial pilot program will be required to obtain at least a second class medical certificate. Students who enroll in the general aviation study and expect to obtain a private pilot license are required to have a third class medical certificate.
3. We have had a special problem in trying to ascertain a statistical



need for the expansion of the present aviation offerings.

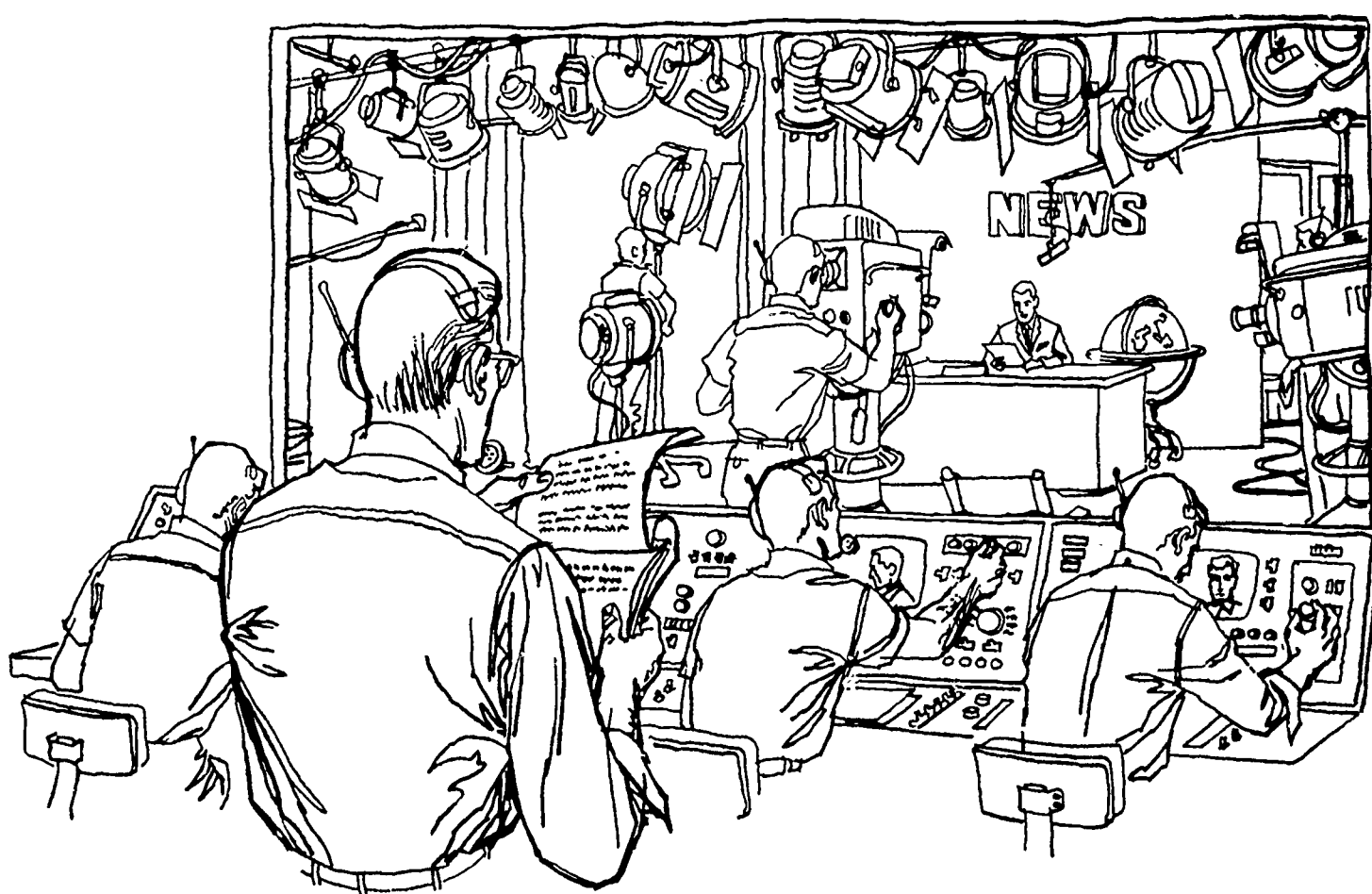
4. Funds must be made available to acquire teaching aids and simulator equipment to offer safe, proper, and complete ground school instruction.

#### H. Recommendations:

1. It is the recommendation of this committee that the current courses in aviation be continued with some additions; however, a fully-developed aviation program should not be implemented at this time. The need for such an endeavor has not been confirmed, and the costs are prohibitive.
2. In our judgement, Rochester State Junior College should offer a course which would offer more introductory and orientation information than does the present 314, Introduction to Aviation. More importantly, the amount of flying time in this course would be minimal thereby cutting the cost and allowing a person to explore aviation as a possible career or avocation.
3. Rochester State Junior College should offer an Aviation-Physical Science-Geography two week seminar. A region would be selected for study in the classroom such as the Ozarks, Black Hills, or the Iron Range of Minnesota. The instruction could be accomplished by a team of instructors from the various disciplines involved. Included in the seminar would be a flight to the region selected for study. College credit would be granted for this experience.
4. We recommend that contact be made with public schools and that information regarding aviation be made available to them. Perhaps a one-day seminar could be conducted during which a lecture and demonstration, a tour of local aircraft facilities, and a short flight, could be conducted.

5. Encourage the local high schools to investigate aerospace science as a course offering to fulfill the science requirement for graduation. This idea is currently being successfully used in the Bloomington, Minnesota, Public School System.
6. It is our impression that there now exists a good relationship with local co-operating agencies. Every effort should be made to maintain that relationship.
7. Information should be made available to veterans concerning their benefits through the G. I. Bill as they relate to aviation training.
8. As indicated we do not recommend the implementation of commercial pilot training at this juncture; however, it may be feasible to employ someone who could perform the dual capacity of teaching aviation and related skills, and serving as a coordinator between the school and co-operating institutions, and seek to foster greater community support for the expansion of our present offerings. Perhaps he could be instrumental in establishing an advisory board to assist in the eventual implementation of a commercial pilot program.

# MASS COMMUNICATION



## SUBCOMMITTEE

Kenneth J. Knapp  
James M. Russell

## I. INVESTIGATIVE TECHNIQUES:

### A. Consultants:

#### 1. Out-of-State:

Jimmie Styles, Vice-President for Research and Development,  
Tarrant County Junior College  
District, Fort Worth, Texas

Dr. Harold Niven, Assistant to the President, National As-  
sociation of Broadcasters,  
1771 N. St. N. W., Washington,  
D. C.

Sydon F. Hrachovy, Supervisor of Technical Education, San  
Jacinto Junior College, Pasadena,  
Texas

Andrew S. Korim, Assistant Coordinator of Occupational Educa-  
tion, Chicago City College, Chi-  
cago, Illinois

#### 2. In-State

Robert Shaw, Director, Minnesota Newspaper Association, Min-  
neapolis, Minnesota

Professor John C. Sim, School of Journalism and Mass Commun-  
ications, University of Min-  
nesota, Minneapolis, Minnesota

LaVerne Nies, Journalism Department, Brainerd Junior College,  
Brainerd, Minnesota

Sherman K. Headley, Assistant Manager, WCCO Television, Min-  
neapolis, Minnesota

James J. Wychor, President, Minnesota Broadcasters Association  
& Chairman of the Education Com-  
mittee of the Minnesota Broad-  
casters Association, Worthington,  
Minnesota

#### 3. Local

Charles Withers, Publisher, Rochester Post-Bulletin, Rochester,  
Minnesota

Robert A. Fick, Radio Manager KROC, Rochester, Minnesota

Dr. Wilbur L. Wakefield, Director, Extension Division, University  
of Minnesota, Rochester, Minnesota

B. Investigative Trips:

Chicago City College, Chicago, Illinois  
 San Jacinto Junior College, Pasadena, Texas  
 Tarrant County Junior College, Fort Worth, Texas  
 Pasadena City College, Pasadena, California  
 Diablo Valley College, Pleasant Hill, California  
 College of San Mateo, San Mateo, California  
 Minnesota Broadcasters Association, Worthington, Minnesota

C. Materials Examined:

1. Catalogs and various publications from the above named institutions.
2. Pasadena City College Bulletin, Pasadena City College, Pasadena, California, 1969-1970.
3. Growth, Significance, and Promise of Junior College Journalism Education, an address by Paul S. Swenson, Executive Director, The Newspaper, Fund, Inc., at the 51st Annual Convention, Association for Education in Journalism, the University of Kansas, Lawrence, Kansas, August 27, 1968.
4. Surveys from eighty-six print and broadcast media representing Minnesota, Iowa, and Wisconsin (original independent research), 1969.
5. Journalism Training, Brainerd State Junior College (a description of a two-year program in occupational journalism).
6. KWOA (Worthington, Minnesota) Questionnaire relating to the support of an occupational program in broadcast journalism, June 28, 1967.
7. Proposed Two-Year Broadcast Curriculum, Boston County Community Junior College, Great Bend, Kansas, 1966.
8. Two-Year Broadcast Curriculum, (Pilot Project), Wabash Valley Junior College, Mt. Carmel, Illinois, 1966.
9. Your Career in Broadcasting, Wabash Valley College, Mt. Carmel, Illinois.
10. Introduction to Mass Communications, Edwin Emery, Phillip H. Ault, and Warren K. Agee. Dodd, Mead & Co., Inc., 1966.
11. Journalism Research Survey, Dr. DeWitt C. Reddick, University of Texas, 1967.
12. Two-Year Programs in Broadcast Education, National Association of Broadcasters, Washington, D. C., 1968.



13. Two-Year Schools with Programs in Broadcast Technology, National Association of Broadcasters, April, Washington, D. C., 1969.
14. Radio Broadcasting, Central Wyoming College, 1967-1968.
15. Career Training in Radio-Television Broadcasting, Mt. Hood Community College, Gresham, Oregon.
16. Radio and Television Broadcast Technology, Kalamazoo Valley Community College, Kalamazoo, Michigan.
17. Survey of Personnel Problem Areas in Secondary T. V. Markets, conducted by the National Association of Broadcasters, Washington, D. C., July, 1967
18. Employment Outlook for Radio and Television Broadcasting, Occupational Outlook Report Series, Bulletin #1550-115, from the 1968-69 Occupational Outlook Handbook, U.S. Department of Labor, Bureau of Labor Statistics.
19. Careers in Radio, National Association of Broadcasters, Washington, D. C., 1967.
20. Careers in Television, National Association of Broadcasters, Washington, D. C., 1967.

## II. FEASIBILITY OF IMPLEMENTING A PROGRAM IN OCCUPATIONAL JOURNALISM (PUBLICATION AND ELECTRONIC MEDIA):

### A. Description of the Occupation:

A two-year program in occupational journalism prepares students for careers in editorial (reporting, writing, editing, picture-taking, etc.) and advertising departments of small daily and weekly newspapers, industrial publications, and magazines; public relations programs in industry and government; small community radio and television work (announcing, news-gathering and writing, advertising, and business); and other media occupations requiring at least two years of college preparation in journalism and the liberal arts.

### B. What are the Manpower Needs?

The need for the two-year student in occupational journalism is quite apparent both in print and broadcast media. In preparation for this study, questionnaires were sent to 205 small daily newspapers, weekly

newspapers, and small radio stations in the tri-state area of Minnesota, Iowa, and Wisconsin. The 86 responses from these media overwhelmingly endorsed the idea and need of such a program. Seventy-six of the 86 said they would be likely to hire these two-year graduates. (For a more detailed breakdown of the questions asked and the responses, see Appendix IA through ID.

PRINT MEDIA. The basic problem confronting the small media can be summed up in these representative comments by newspapers in the tri-state area. From Algoma, Wisconsin: "It has been our experience in Wisconsin that the University journalism graduates do not look for employment to any appreciable degree in the small community newspapers. Good people are needed there and it is a rewarding, satisfying and now getting to be a reasonably well paid vocation." From Rush City, Minnesota: "Small weekly newspapers are in desperate need of qualifying reporters and editors." From Osage, Iowa: "It is my opinion that University journalism graduates are trained for city and glamour jobs. They are not given much encouragement to look at the small town journalism field " (See Appendix IE.)

In our survey, 52 or 62 newspapers said they favored a two-year program in occupational journalism. Fifty-four said they would hire these graduates. Further evidence from LaVerne Nies, journalism department head at Brainerd Junior College (which has a two-year program in occupational journalism), supports the need case. He said in 1968-1969 he had more requests for graduates of his program than he could supply.

While the University of Minnesota in the past has not endorsed a two-year program in journalism, Professor John C. Sim of the School

of Journalism and Mass Communications, said the attitude of the University Journalism School is changing. He said, "If the small newspapers are going to get anybody at all, there will have to be a two-year program : Charles Withers, publisher of the Rochester Post-Bulletin, in support of a two-year program stated: "Some of the best people we have are not college graduates."

While the above sources establish the manpower needs on a local and regional level, the following data reveals the need beyond this area, In a similar survey conducted in 1967 by the University of Texas, 75 of 91 Texas newspapers said they would be likely to hire two-year students. The California Newspapers Publishers Association and the Journalism Association of Junior Colleges completed a study of job opportunities on California dailies and weeklies in March of 1968. They found "ample evidence that publishers in California will hire person with less than four-year degrees".

BROADCAST MEDIA. Unlike the printed word, the broadcast media has had a comparatively brief and expansive history. Hence, there has been a shortage of trained personnel and the media has been forced to employ many high school graduates. Now the small media are demanding personnel with a broader liberal arts background in an attempt to upgrade the quality of their product. James Wychor, president of the Minnesota Broadcasters Association (MBA) asserted, "The time when you got by with a high school graduate writing the news is gone."

The MBA endorses a two-year program in occupational broadcast journalism. (See Appendix IV.) So does the National Association of Broadcasters. About one half of the radio and T. V. stations in

Minnesota, according to an MBA survey, would be willing to co-operate with a junior college in some form of broadcast apprenticeship program for students enrolled in a broadcast course.

In our survey, 23 or 24 radio stations in Minnesota and Iowa said they favored a two-year program in occupational broadcast journalism. The one radio station which cast the negative vote said that it would, nevertheless, hire a graduate of such a program. Twenty-two of 24 said they would employ such people. (See Appendix IC).

In another survey conducted in 1967 by KWOA Radio in Worthington, Minnesota, the need for two-year trained personnel in the broadcast media is reinforced. Twenty-four respondents indicated they had a total of 70 to 80 openings each year in all classifications other than clerical. (For a more detailed description of the findings of the survey, see Appendix II.)

Locally and at the state level, KROC Radio and Television and WCCO Radio and Television said that they view as desirable a two-year program in the broadcast media. Robert Fick, manager at KROC, said his station currently employs more two-year people than four-year graduates. Sherman K. Headley, WCCO assistant manager stated that he believed that "people with two years of training could find employment in the smaller broadcast and print operations around the state." (See Appendix V.)

#### C. How Are These Needs Currently Being Met?

As cited above, the scarcity of trained personnel in both the small print and electronic media has forced the hiring of persons, for the most part, with only a minimal amount of formal education. Our survey of 96 respondents showed 39 hiring high school graduates and

41 hiring personnel with some college background. Only 10 said most of their employees were college graduates. One respondent, revealing his apparent frustration on locating qualified personnel, said he would hire "anyone we can find." According to James Wychor, president of the Minnesota Broadcasters Association, "each year there are about 200 job openings for beginners with some form of broadcast education background in Minnesota alone." Most of these jobs, he said, are being filled by persons with no training and with little formal education.

D. Description of Proposed Curriculum:

CURRICULUM OUTLINE  
PRINT MEDIA

		<u>Credits</u>			
		<u>F</u>	<u>W</u>	<u>S</u>	<u>SSI</u>
<u>Freshman Year</u>					
English 117-118-119	Freshman English	3	3	3	-
Health 111	Personal Health	-	2	-	-
Physical Education 101-102-103	General Physical Education	1	1	1	-
Biology 111	Elements of Biology	4	-	-	-
U. S. History 124-125-126	History of the United States	3	3	3	-
Humanities 111-112-113	Humanities in the Modern World	3	3	3	-
Journalism 121	Introduction to Mass Communications	3	-	-	-
Journalism 122	Beginning Reporting	-	3	-	-
Journalism 123	News and Publications Editing	-	-	3	-
Journalism 111	Photojournalism	-	-	3	-
J-Work on Publications		NC	NC	NC	-
J-Journalism Field Work		-	-	-	6
		<u>17</u>	<u>15</u>	<u>16</u>	<u>6</u>
		<u>Credits</u>			
		<u>F</u>	<u>W</u>	<u>S</u>	
<u>Sophomore Year</u>					
Economics 214	Principles of Economics	5	-	-	
Psychology 214	General Psychology	-	3	-	
Political Science 214-215-216	American Government & Politics	3	3	3	
*Business Education 114	Beginning Typewriting	3	-	-	
J-Advanced Reporting		3	-	-	
Sociology 114	Man in Society	3	-	-	
Sociology 115	American Society	-	3	-	
Sociology 116	Social Problems	-	-	3	



## Sophomore Year (continued)

Credits

<u>F</u>	<u>W</u>	<u>S</u>
----------	----------	----------

J-Publication Lab  
 J-Principles of Advertising  
 J-Journalism Field Work  
 (if not taken during previous  
 summer)  
 J-Feature & Editorial Writing  
 Elective

1	1	1
-	3	-
-	-	6
-	-	3
-	3	3
<u>15</u>	<u>16</u>	<u>13</u>
(18)		(16)

\* Optional

CURRICULUM OUTLINE  
 BROADCAST MEDIA

CreditsFreshman Year

<u>F</u>	<u>W</u>	<u>S</u>	<u>SSI</u>
----------	----------	----------	------------

English 117-118-119	Freshman English	3	3	3	-
Health 111	Personal Health	-	2	-	-
Physical Education 101-102-103	General Physical Education	1	1	1	-
Biology 111	Elements of Biology	4	-	-	-
U. S. History 124-125-126	History of the United States	3	3	3	-
Humanities 111-112-113	Humanities in the Modern World	3	3	3	-
Journalism 121	Introduction to Mass Communications	3	-	-	-
Journalism 122	Beginning Reporting	-	3	-	-
Journalism 123	News and Publications Editing	-	-	3	-
Work on Publications		NC	NC	NC	-
J-Journalism Field Work (also offered Spring Quarter, Sophomore Year)		-	-	-	6
J-Principles of Broadcasting (included FCC license instruction)		-	-	3	-
		17	15	16	6

CreditsSophomore Year

<u>F</u>	<u>W</u>	<u>S</u>
----------	----------	----------

Economics 214	Principles of Economics	5	-	-
Psychology 214	General Psychology	-	3	-
Political Science 214-215-216	American Government & Politics	3	3	3
Sociology 114	Man in Society	3	-	-
Sociology 115	American Society	-	3	-
Sociology 116	Social Problems	-	-	3
J-Broadcast Reporting		3	-	-
J-Publications Lab		1	1	1
J-Principles of Advertising		-	3	-

Sophomore Year (continued)		<u>Credits</u>		
		<u>F</u>	<u>W</u>	<u>S</u>
J-Journalism Field Work (if not taken during previous summer)		-	-	6
Speech 114	Fundamentals of Speech	-	3	-
Speech 115	Public Speaking	-	-	3
	Elective	-	-	3
		<u>15</u>	<u>16</u>	<u>13-16</u>

E. Student Admission Requirements:

The applicant for the occupational journalism program must have a high school diploma or its equivalency. It would be helpful for the prospective student to have taken high school courses in journalism, speech, typing, and other communication and liberal arts areas. An applicant for the broadcast media curriculum should have a good voice and other characteristics that make him a dramatic or attractive personality.

F. Costs:

The program above requires two instructors in journalism or one more than presently employed at our institution. There is no other additional cost involved as the program utilizes existing facilities and equipment. (This presumes that journalism facilities planned in Phase II of RSJC building construction are completed.)

A more elaborate program could be devised. For example, (1) a training control room could be added with an estimated cost of from \$2500 to \$3500, according to the National Association of Broadcasters. (See Appendix III for a breakdown of data.) (2) A television studio, using a closed circuit television system could be included. Cost of the closed circuit television system is approximately \$1500. (3) A third journalism instructor could broaden the number and scope of course offerings.

G. Special Problems:

While we foresee no serious obstacles for the implementation of the occupational journalism program, we think there are some aspects that need recognition. They are:

1. Recruitment of cooperating media for participation in the Journalism Field Work portion of the curriculum.
2. Because of expected limited enrollment in the foreseeable future, the occupational journalism program should be restricted to a minimal number of state junior colleges.
3. We expect, at least in the beginning years of the program, that enrollments will be relatively small. Class size, then, will be small.

H. Recommendations:

1. A program in occupational journalism (including both print and broadcast media) should be implemented at Rochester State Junior College when classroom space becomes available and when a second journalism instructor has been hired. These preliminary steps could be completed and the program implemented by the Fall of 1970.
2. An advisory committee, consisting of prominent members in the field at both the state and local level, be instituted to insure the successful implementation and operation of the program. Members of this committee should include representatives of the following: local radio and television stations, Rochester Post-Bulletin, Minnesota Broadcasters Association, Minnesota Newspaper Association, and the University of Minnesota School of Journalism and Mass Communications.
3. Based upon the recognition that anticipated enrollment in the near future will be limited, it is our recommendation that not more than

two junior colleges initiate programs in occupational journalism in Minnesota.

4. We recommend that the second instructor hired in the occupational journalism program have specialization or work experience in the broadcast media.
5. We recommend that all journalism courses be transferable and numbered accordingly. Students wishing to pursue a B. A. degree later could do so without appreciable loss of credit.

## APPENDIX IA (Questionnaire)

ALL MEDIA  
(Newspapers & Radio)

205 sent      86 responses      42% return

48 Weekly Newspapers (once or twice a week)

24 Radio Stations

14 Daily Newspapers

1. Do you feel there is a need for more people trained in journalism statewide?

84-YES      No Answer - 1  
1-NO

2. Of what background are most of the employees you hire, not counting mechanical or technicians? (Choose one response)

10-College Graduates  
39-High School Graduates  
41-Some College  
10-Others

3. Do you favor a two-year program in mass communications to be taught in the state junior colleges?

75-YES      No Answer - 6  
4-NO

4. Do you think those completing such a program are likely to be successful in journalism?

75-YES      No Answer - 8  
3-NO

5. Do you feel you would be likely to hire these two-year students?

76-YES      No Answer - 6  
4-NO

6. For what positions would you hire these two-year people?

50-News Gathering and Writing  
49-News and Advertising  
34-Advertising  
9-Other

7. What salary would you be likely to pay these two-year people:

4-\$50 to \$75 Weekly  
23-\$75 to \$100 Weekly  
42-\$100 to \$125 Weekly  
6-\$125 to \$150 Weekly  
2-\$150 plus Weekly

8. What percentage of the student's two-year program should be devoted to journalism classes?

6-10%      21-25%  
21-33%      27-50%  
1-Other



9. Of the following, select the courses you think the two-year students should take.

42-Introduction to Mass Communications  
32-News Reporting, Radio and TV  
54-Photography  
40-Feature Writing  
67-Advertising  
66-News Reporting, General  
41-News Editing  
14-History of Journalism  
19-Editorial Writing  
30-Public Relations  
4-Others

10. Do you think a foreign language should be required of these two-year students:

7-YES            7 - No Answer  
72-NO

11. Do you think these two-year students ought to complete an Associated of Arts Program at the Junior College?

43-YES            21 - No Answer  
22-NO

12. What other courses should be required of two-year students in mass communications?

20-English  
6-Speech  
7-Typing  
(See all newspaper sheet.)

## APPENDIX IB (Questionnaire)

ALL NEWSPAPERS  
(Minn. - Iowa - Wisconsin)

178 sent                      62 responses                      35% return

48-Weekly Newspaper (once or twice a week)  
14-Daily Newspaper

1. Do you feel there is a need for more people trained in journalism statewide?  
                                          60 - YES              No Answer - 1  
                                          1 - NO
2. Of what background are most of the employees you hire, not counting mechanical or technicians? (Choose one response)  
                                          9 - College Graduates  
                                          29 - High School Graduates  
                                          3 - Some College  
                                          2 - Other
3. Do you favor a two-year program in mass communications to be taught in the state junior colleges?  
                                          52 - YES              6 - No Answer  
                                          3 - NO
4. Do you think those completing such a program are likely to be successful in journalism?  
                                          55 - YES              4 - No Answer  
                                          4 - NO
5. Do you feel you would be likely to hire these two-year students?  
                                          54 - YES              4 - No Answer  
                                          4 - NO
6. For what positions would you hire these two-year people?  
                                          36 - News Gathering and Writing  
                                          37 - News and Advertising  
                                          29 - Advertising  
                                          3 - Other (Photography, Management)
7. What salary would you be likely to pay these two-year people?  
                                          4 - \$50 to \$75 Weekly  
                                          18 - \$75 to \$100 Weekly  
                                          35 - \$100 to \$125 Weekly  
                                          5 - \$125 to \$150 Weekly  
                                          2 - \$150 plus Weekly
8. What percentage of the students' two-year program should be devoted to journalism classes?  
                                          4 - 10%                      14 - 33%  
                                          15 - 25%                      20 - 50%

9. Of the following, select the courses you think the two-year students should take.

25 - Introduction to Mass Communications  
 11 - News Reporting, Radio and TV  
 51 - Photography  
 36 - Feature Writing  
 50 - Advertising  
 53 - News Reporting, General  
 28 - News Editing  
 11 - History of Journalism  
 12 - Editorial Writing  
 16 - Public Relations  
 4 - Others (Journalism Law)

10. Do you think a foreign language should be required of these two-year students?

7 - YES                      3 - No Answer  
 52 - NO

11. Do you think these two-year students ought to complete an Associate of Arts Program at the junior college?

31 - YES                      15 - No Answer  
 16 - NO

12. What other courses should be required of two-year students in mass communications?

14 - English	5 - Typing
6 - History	2 - Sociology
5 - Political Science	2 - Psychology
4 - Business	3 - Speech
4 - Government	2 - Summer Intern Program
2 - Salesmanship	2 - Economics

## APPENDIX IC (Questionnaire)

ALL RADIO  
(Minn. - Iowa)

32 sent

24 responses

75 %

1. Do you feel there is a need for more people trained in journalism statewide?

24 - YES                      0 - NO

2. Of what background are most of the employees you hire, not counting mechanical or technicians? (Choose one response.)

1 - College Graduates  
10 - High School Graduates  
10 - Some College  
8 - Other (Broadcast Schools)

3. Do you favor a two-year program in mass communications to be taught in the state junior colleges?

23 - YES                      1 - NO

4. Do you think those completing such a program are likely to be successful in journalism?

20 - YES                      3 - No Answer  
1 - NO

5. Do you feel you would be likely to hire these two-year students?

22 - YES                      2 - No Answer  
0 - NO

6. For what positions would you hire these two-year people?

14 - News Gathering and Writing  
12 - News and Advertising  
5 - Advertising                      6 - Other (Announcing)

7. What salary would you be likely to pay these two-year people?

5 - \$75 to \$100 Weekly                      1 - \$125 to \$150 Weekly  
17 - \$100 to \$125 Weekly

8. What percentage of the students' two-year program should be devoted to journalism classes?

2 - 10%                      6 - 25%  
7 - 33%                      7 - 50%  
1 - Other (50+)

9. Of the following, select the courses you think the two-year students should take.

17 - Introduction to Mass Communications  
21 - News Reporting, Radio and TV  
13 - News Reporting, General  
13 - News Editing  
3 - Photography                      3 - History of Journalism  
4 - Feature Writing                      7 - Editorial Writing  
17 - Advertising                      14 - Public Relations

10. Do you think a foreign language should be required of these two-year students?

0 - YES                      4 - No Answer  
20 - NO

11. Do you think these two-year students ought to complete and Associate of Arts Program at the junior college?

12 - YES                      6 - No Answer  
6 - NO

12. What other courses should be required of two-year students in mass communications?

6 - English  
3 - Speech  
2 - Typing



## APPENDIX ID (Questionnaire)

## MINNESOTA NEWSPAPERS

77 sent

26 responses

34 % return

20 Weekly Newspapers (Once or twice a week)

6 Daily Newspapers

1. Do you feel there is a need for more people trained in journalism statewide?

25 - YES

1 - No Answer

0 - NO

2. Of what background are most of the employees you hire, not counting mechanical or technicians? (Choose one response.)

2 - College Graduates

14 - Some College

13 - High School Graduates

Other - Trade School

- Local People

3. Do you favor a two-year program in mass communications to be taught in the state junior colleges?

22 - YES

3 - No Answer

1 - NO

4. Do you think those completing such a program are likely to be successful in journalism?

23 - YES

2 - No Answer

1 - NO

5. Do you feel you would be likely to hire these two-year students?

24 - YES

1 - No Answer

1 - NO

6. For what positions would you hire these two-year people?

16 - News Gathering and Writing

15 - News and Advertising

11 - Advertising

Other - Photography

7. What salary would you be likely to pay these two-year people?

1 - \$50 to \$75 Weekly

7 - \$75 to \$100 Weekly

17 - \$100 to \$125 Weekly

3 - \$125 to \$150 Weekly

2 - \$150 plus Weekly

8. What percentage of the students' two-year program should be devoted to journalism classes?

1 - 10%

7 - 25%

6 - 33%

11 - 50%

9. Of the following, select the courses you think the two-year students should take:

- 12 - Introduction to Mass Communications
- 25 - News Reporting, General
- 5 - News Reporting, Radio and TV
- 21 - Photography
- 18 - Feature Writing
- 20 - Advertising
- 8 - Public Relations
- 13 - News Editing
- 6 - History of Journalism
- 8 - Editorial Writing
- Other - Journalism Law

10. Do you think a foreign language should be required of these two-year students?

- 5 - YES
- 1 - No Answer
- 20 - NO

11. Do you think these two-year students ought to complete an Associate of Arts Program at the junior college?

- 11 - YES
- 5 - No Answer
- 10 - NO

12. What other courses should be required of two-year students in mass communications?

- 6 - English
- 4 - Typing
- 2 - Political Science
- Others - Sociology, Business Economics, Psychology, Speech, History

## APPENDIX IE

The following are all of the comments received from newspaper publishers and radio station managers in answer to the item: Please add any comments which you feel should be considered by us in making a decision to add the two-year mass communications program.

1. Oelwein, Iowa: A good solid two-year program in mass communications could do a lot to fill the requirements of this industry on the smaller level. There is a great need for more young persons in this industry.
2. Worthington, Minnesota: The Minnesota Broadcasters Association as well as individual broadcasters in the state are very desirous of getting a two-year radio broadcasting course going in some junior college in the state. About one-half of the radio and T.V. stations in the state would be willing to cooperate with the junior college in some form of broadcast apprenticeship program for students enrolled in a broadcast course.
3. Grand Rapids, Minnesota: A two-year graduate with a sincere interest in writing and with a basic knowledge of grammar and spelling and sentence construction could do very well.
4. Hibbing, Minnesota: There is a definite need for persons trained in mass communications for both radio and newspapers (small market areas) today. Radio, which I represent, does need personnel in the news gathering and reporting field. I am sure those trained for such an occupation will find good opportunities in the radio and T. V. (small market areas).
5. Clintonville, Wisconsin: I do feel generally, that our small papers do not require as highly-specialized people as those coming out of the University Journalism schools and that we would be helped more directly by two-year people.
6. Northwood, Iowa: I am sure that the demand for the graduates will exceed the supply.
7. Blue Earth, Minnesota: We always need capable people.
8. Little Falls, Minnesota: I have had some experience with the Brainerd Junior College program which is good. Sent a young man there two years and he moved up rapidly from a raw newsman to one who today has been hired by the Duluth daily. Someone trained at the junior college level with a basic idea of what journalism is all about can make progress and advance in his chosen field.
9. Algoma, Wisconsin: It has been our experience in Wisconsin that the University journalism grads do not look for employment to any appreciable extent in the small community newspapers. Good people are needed there and it is a rewarding, satisfying, and now getting to be reasonably well paid vocation.

10. Amery, Wisconsin: I feel the two-year program won't give individual diversity necessary today in journalism. Favor journalism only at graduate level.
11. Lake City, Minnesota: There is a real need for able men and women to take a full or part-time job on weekly newspapers.
12. International Falls, Minnesota: I feel that students going into broadcast or journalism would receive better training through the junior college system than through many of the so called "Broadcast Training Schools."
13. Bloomfield, Iowa: I feel any two year course in mass communications should give the student the option of continuing his journalism schooling at a four-year school or going to work immediately. It might be of value to allow students to specialize within the journalism program, i.e. newspapers, radio-T. V. news, advertising, public relations.
14. Bemidji, Minnesota: At this time there is a need for trained people in both radio and T. V. The small market stations cannot compete with the larger markets when it comes to wages. We in the small markets are faced with the ever present problem of losing good newsmen and announcers. Many announcers leave the communications field and go into other areas of work. A solid two-year mass communications program may be the answer.
15. Owatonna, Minnesota: We must rely on radio trade schools for our announcers. I would suggest an actual radio announcing course for students so we could hire trained announcers from the junior colleges.
16. Austin, Minnesota: We can no longer obtain journalism grads (4-year) but we have made excellent reporters out of grads in other fields. Many good reporters never saw a college campus except to cover a news story.
17. Osage, Iowa: It is my opinion that University journalism graduates are trained for city and glamour jobs and to obtain degrees past the bachelor's. They are not given much encouragement to look at the small town journalism field. Mason City's community college is also studying this type of training, but I don't know what results they have had. Our big problem is too few students interested.
18. Rush City, Minnesota: Small weekly newspapers are in desperate need of qualified reporters and editors. The wage scale is increasing steadily. There is also no doubt that beginning reporters can benefit from the creative experience of a small weekly background. I particularly emphasize journalism reporting over straight English courses. There is a vast difference in the two forms of communications. Photography is a must to today's newspaperman.

## APPENDIX II

QUESTIONNAIRE

June 28, 1967

FOR MINNESOTA COMMERCIAL BROADCASTERS -- ATTENTION GENERAL MANAGER:

As you know, qualified personnel are becoming harder to find every day. To aid in attracting young men and women into the broadcast field, your Minnesota Broadcasters Association is cooperating with several Junior Colleges in the State to attempt to institute two-year broadcast courses. These young people, after completing the two-year course, would have either their First or Third Class Endorsed FCC License, plus being very proficient in all phases of radio broadcasting.

To aid in promoting these courses, we want your assistance by answering the following questions and returning as soon as possible.

1. How many young people visited your station to inquire about the steps necessary to get into the broadcasting field during the past year?
  - a. Is this more or less than a year ago?  
(In answering the above questions, consult with your program director and other staff members who may have inquiries.)
2. List the average number of job openings you have at your station each year, and give classification; also list the opening that you could or would fill with a recent broadcast school graduate who has had some commercial radio experience.
  - a. Job openings annually?                      Class?                      Would you consider  
recent graduate with some experience?
  - b. Average starting pay?
3. Would you be willing to cooperate with the State Junior Colleges in a broadcast apprenticeship program? This would essentially be "on the job" training for the students in the Junior College broadcasting class. They would work so many hours per week in a radio station within 50 to 75 miles of the college and receive credit for the work.
  - a. Comments:
4. Would your company be willing to set up an annual scholarship in the amount of \$100.00 or more for a young person enrolling in a Junior College broadcast course?    Yes                      No
5. Do you know of any BROADCAST or RADIO clubs in any of the high schools of colleges in your service area?    Comments:
6. How closely does your staff cooperate with the clubs?    Comment:

Jim Wychor, Chairman  
Education Committee



RESULTS OF EDUCATIONAL QUESTIONNAIRE,  
Mailed to 83 Radio & TV stations in Minnesota.

Of the 83 mailed... the returns were as follows:

Radio.....21  
Radio & TV.....3

The 24 replies indicated that approximately 350 young people requested information on careers in Radio & TV each year.

The 24 respondents indicated they had a total of 70 to 80 job openings each year in all classifications.

More than one half of those replying indicated they would be willing to take part in a part-time apprenticeship program of work for students enrolled in a broadcast course.

Several respondents already have scholarships.

Ten indicated they would be willing to set up a scholarship of \$100.00 per year or more.

Five wanted more information.

Two indicated that they would pay the full tuition each year for one student from their area attending a school.

Eleven of the respondents indicated that there were broadcast clubs in area high schools and colleges. Ten had no knowledge of such clubs in their area.

## APPENDIX III

Equipment for a Training Control\*Room and Studio Classroom

Console	\$1,500 - \$2,500
Two Turntables	\$100.00 per unit
One Reel-to-Reel Tape Recorder	\$130.00
Cartridge Tape Recorder	\$400.00
One Control Room Speaker	\$ 25.00
One Studio Speaker	\$ 25.00
Two Microphones	\$100.00 per unit

\* The price indicated is for original equipment. There are good used consoles and other equipment available for purchase at a reduced cost.

The equipment listed above will suitably equip a control room for teaching purposes and provide for studio classroom that may be used for listening and/or production.

## APPENDIX IV

## MINNESOTA BROADCASTERS ASSOCIATION

June 5, 1969

Dear Mr. Knapp:

Enclosed, you will find the completed questionnaire I received in this morning's mail.

As you can see by my replies, I, as a broadcaster as well as President of the Minnesota Broadcasters Association, am vitally interested in at least a phase of your proposed course.

Our association, in cooperation with the National Association of Broadcasters, would very much like to see a two-year course in Radio-TV broadcasting established at some Junior College in Minnesota.

Currently, there is such a course at the Vocational School at Thief River Falls, Minnesota. Another will start this fall at the Duluth Area Vocational-Technical Institute. However, both of these are basically two (2) year terminal courses in Radio-TV announcing and/or Radio-TV technical and engineering.

What our association would like to see established is a 2-year course at a Junior College that could be a two-year terminal education; or the student could transfer many of the credits obtained to the University of Minnesota School of Broadcast Journalism or some other four-year institution.

This is the type of course that is now lacking in our state. If I can be of any help to you in any way, feel free to call on me or our associations executive secretary, Jim Adams, at 810 Capitol Square, St. Paul, Minnesota 55101.

Very truly yours,  
James J. Wychor, President  
Minnesota Broadcasters Association

## APPENDIX V

July 9, 1969

Mr. Knapp:

Jim Adams of the Minnesota Broadcasters Association has passed on to me your letter requesting comment on your proposed two-year program in occupational journalism.

Several colleges around the state of Minnesota have become aware of the need for people in all fields of communications. For example, the junior college (or is it the vocational school?) in Duluth is laying plans for an electronic training program, and Gustavus Adolphus is beginning a television program training course.

Given the proper staff, facilities, money, and curriculum, I would think that the Rochester State Junior College could develop a worthwhile program even if limited to two years. Further, I believe that people with two years of training could find employment in the smaller broadcast and print operations around the state. I am sorry that your letter did not contain more specific information or requests, but I trust my comments may be of some help.

Cordially yours,  
Sherman K. Headley  
Assistant Manager  
WCCO  
Minneapolis, Minnesota

## OVERALL COMMITTEE RECOMMENDATIONS AND OBSERVATIONS

1. The committee concluded that there was a need for a coordinator who would act as a liaison person between the college and the community in the implementation of the proposed programs. Whether this person should be a full-time employee or something less than that was not clearly established. As a stop-gap solution, however, it was recommended that the expertise of the various members of the committee be utilized in maintaining the momentum that has been established as a consequence of the workshop. They would be responsible for hosting a series of seminars with state and local groups with the intent of informing them of the findings, and keeping alive and broadening the contacts already made. The efforts of these people would be temporarily coordinated by the Dean of Instruction, or his designate.
2. The workshop also recommends that local advisory bodies representing the various areas under investigation be established as soon as possible to review the findings. The curriculums which have been devised could be used as the basis for discussion. These advisory groups would be of significant value in the implementation and maintenance of any of the programs under study. For example, they could keep the college alert to new developments in the field; advise on curriculum development; give leads to potential faculty; help recruit students to the programs; help to evaluate our programs; and perhaps most importantly, help maintain and broaden the lines of communication between the community and the college so that the college may anticipate subsequent community needs and prepare for them.
3. Contact has been made with Mr. Fred Hodges of the Rochester Vocational School in an attempt to ascertain if there is a possibility of duplication of services to the community. It was determined that in the area of aviation, the Rochester Vocational School plans to adopt a program which



would compliment the one proposed by the college. While the college program is primarily concerned with flight training, the Vocational School's program would be devoted to ground work leading to Airplane and Powerplant licensing. In one other area (Police Science), there may be a duplication of services. The Vocational School has revealed an interest in instituting a program in Law Enforcement. This consideration had better be taken into account before the college implements such a program.

4. It is the committee's recommendation that the college should prepare and submit all applications for new programs to the Minnesota Junior College Board which are described herein. (It should be observed that in most instances the method of enacting new programs is via in-service training rather than out-right implementation of the programs in their entirety.)
5. It would seem imperative in this final recommendation to re-emphasize the necessity of keeping alive the momentum which has been generated. Contacts have been made with a number of people at the local, state and national level, and there has been a great deal of exposure to ideas--going in both directions. For example, a dialogue has been established with the local Police Department and as the Chief of the Rochester Police observed, the very fact that we are sitting down together and talking about mutual concerns is a positive step in the relationship between the police force and the academic community.

It should be observed, however, that our purpose is to establish more than just a dialogue. In order for our institution to be truly committed to the concept of community college, we must remain alert and sensitive to the needs of the community, and then translate those needs into meaningful social action.