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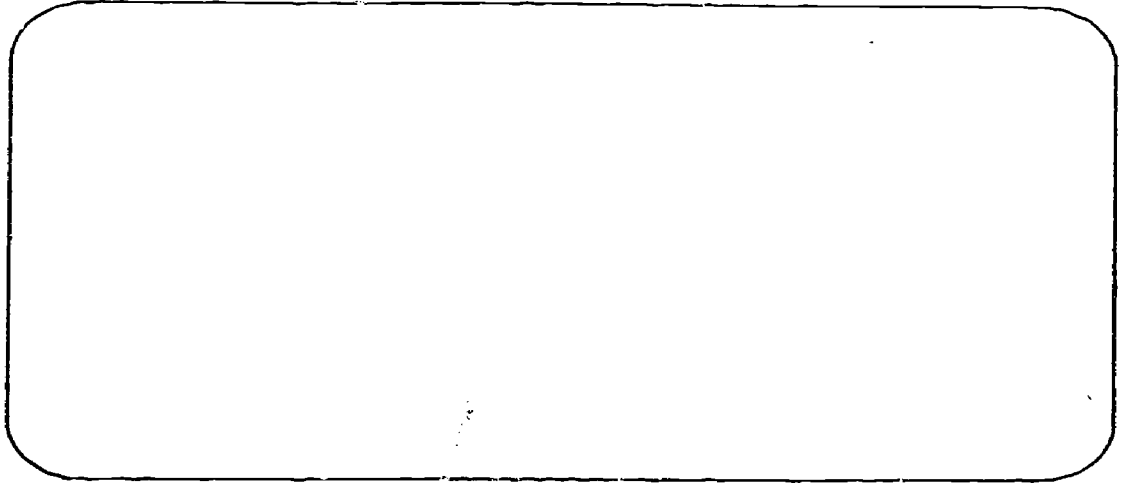
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ABSTRACT

Realizing the demanding role which vocational education must play in helping to prepare individuals to meet the changing demands and challenges of a technological society, the Kansas Advisory Council conducted an investigation to assess the status of existing State programs so that necessary improvements could be made. Objectives by which the programs were evaluated included: (1) the State's goals and priorities as set forth in the State plan, (2) the effectiveness with which people and their needs for vocational education are served, and (3) the extent to which Council recommendations have been implemented. Data were obtained from interviews, questionnaires, records and reports, research studies, and previous evaluation reports prepared by the State Advisory Council. (SN)

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**STATE ADVISORY COUNCIL  
FOR VOCATIONAL EDUCATION**



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ANNUAL EVALUATION  
OF  
VOCATIONAL EDUCATION  
IN  
KANSAS  
1971 - 1972

Approved September 27, 1972  
State Advisory Council for Vocational Education  
State Department of Education Building  
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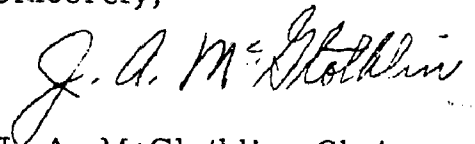
Dear Dr. Whittier:

The Kansas Advisory Council for Vocational Education transmits herewith, a report of its third annual evaluation of vocational education in Kansas. This evaluation covers FY 1972.

This report is submitted for review by you and the Kansas State Board of Education. Public Law 90-576 requires that each state advisory council shall "prepare and submit through the State Board of Education to the Commissioner of Education and the National Advisory Council, an annual evaluation report accompanied by such additional comments as the State Board deems appropriate...." The deadline for submission of this report to the U.S. Office of Education is December 1, 1972.

Throughout this evaluation, the ultimate goal has been the improvement of vocational education in Kansas. The Council sincerely hopes that the recommendations contained in this report will contribute to this goal.

Sincerely,



J. A. McGlothlin, Chairman  
Kansas Advisory Council for  
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## INTRODUCTION

The Kansas Advisory Council for Vocational Education believes that the guiding purpose of evaluation must be the improvement of vocational education in Kansas. Evaluation activities can be justified only to the extent that they contribute to this goal.

In making this evaluation, the Council defines vocational education in the broadest possible terms. As used here, the term vocational education includes the instructional program, ancillary and supporting services and any peripheral activities that may influence the effectiveness of vocational education throughout the state.

In the past few years, vocational education has received increased attention as a partial solution to certain major socio-economic problems. The high unemployment rate among youth, minority groups, disadvantaged and handicapped persons has resulted in special recognition of and an emphasis on increasing services to these groups in the Vocational Education Amendments of 1968. The development of an economy based on advanced technology has proliferated the types of occupations available to young people and drastically shifted the traditional patterns of the labor force.

As a result, vocational education is undergoing an evolution to meet the changing demands of a technological society. New occupational programs must be developed and new concepts and modes of operation must be explored. To do this requires sound data for decision making and research and innovation has become a basic part of the vocational education activities.



As vocational education becomes more complex, the need for evaluation increases. The establishment of state advisory councils as independent, third party evaluators was a partial answer to this need for review and evaluation. The advisory council is in a unique position to assist in the improvement of vocational education through an unbiased evaluation of the activities involved.

The first and second evaluations of the Kansas Advisory Council for Vocational Education concentrated on an in-depth study of problems in local districts. These evaluations identified many problems which resulted in recommendations to the State Board of Education, for improvements. It was the consensus of the Council however, that these evaluations had probably uncovered most of the problems in these districts and that further evaluations of this type would not identify many additional areas of concern.

For this reason, the third annual evaluation was designed around the guidelines suggested in Program Memorandum AVT(V) 72-44 issued by Michael Russo as Acting Director of the Division of Vocational and Technical Education in the U.S. Office of Education.

These guidelines set forth three major areas for evaluation. These are:

1. The State's goals and priorities as set forth in the State Plan.
2. The effectiveness with which people and their needs for vocational education are served, and
3. The extent to which previous council recommendations have received due consideration.

Data to implement the evaluation in these three areas were obtained from interviews, questionnaires, records and reports, research studies and previous evaluations of the Advisory Council.

The material presented in this report has been reviewed by the members of the Advisory Council and represents a consensus of their thinking. Every effort has been made to formulate constructive recommendations with due consideration for the fiscal and time limitations imposed on those who will have the responsibility for implementing these recommendations.

The Council expresses its appreciation to the staff of the Division of Vocational Education, to the State Board of Education and to others who gave their time and energy to make this evaluation possible.

## EVALUATION OF GOALS AND OBJECTIVES

To evaluate the State's goals and priorities as set forth in the State Plan for Vocational Education, comparisons were made between the goals and priorities as planned and the actual achievements of the Division of Vocational Education during FY 1972.

In regard to the validity of the State's goals and objectives in terms of student needs and employment opportunities, the number of programs in which expansions were planned or new programs projected, was compared with the net manpower needs of the state in the particular occupation involved.

From the K-MUST (Kansas Manpower Utilization System for Training) the ten occupations showing the greatest excess of manpower in the state and the ten occupations showing the greatest demand for new employees were selected. The new programs to be implemented and the expansions planned in existing programs were selected from Part III (Annual Program Plan) of the State Plan for Vocational Education.

This approach is obviously unfair to the educational planners in the Division of Vocational Education. The goals and priorities as set forth in the State Plan were developed in the spring of 1971. The K-MUST study was not available until January of 1972. The manpower data available in the first part of 1971 showed only the annual estimated job openings in the state. The manpower analysis of the K-MUST study showed annual estimated job openings and the annual input from various manpower sources. In some cases, this annual input exceeded the annual demand thus changing

a demand for manpower to an excess. In effect, planning done with relatively crude data is being compared with the somewhat more sophisticated data of the K-MUST study. This emphasizes the need for more accurate manpower data upon which to base educational planning. The continued refinement and up-grading of the K-MUST study should receive high priority in the research activities of the Division of Vocational Education.

Table I shows the ten occupational clusters which have the greatest annual excess of manpower in Kansas, and the planned expansions and new programs. Eight new programs and three expansions were planned in these occupations.

Table II shows the ten occupational clusters which have the greatest annual demand for new employees in Kansas and the planned expansions and new programs. It was planned to expand 12 existing programs and to implement 15 new programs in these occupations.

In reply to the question, "Were the State's goals and priorities valid in terms of student needs and employment opportunities?" the answer must be yes and no. They were valid in terms of the information available at the time the goals and priorities were set. They were not valid in terms of the more realistic data available at a later date in that 11 out of 38 or approximately 30% of the expansions and new programs planned for these 20 occupations, were in categories showing the highest annual excess of manpower.

TABLE I

## Ten Occupational Clusters Showing Greatest Excess of Manpower in Kansas

Occupational Cluster	Annual Net Excess (1)	Expansion of Existing Programs (2)		New Programs Planned (3)
Farmers & Farm Workers	1637	0		0
Motor Vehicle Mechanics	1023	1		4
Cosmetologists	491	2		0
Aircraft Mechanics	249	0		0
Computer Programmers	221	0		0
Electronic Technicians	157	0		2
Radio & TV Repair	141	0		0
Electricians	105	0		0
Agricultural Mechanics	104	0		0
Draftsmen	92	0		2
		3		8

(1) KMUST REPORT - Includes annual input from private and public schools and other sources of manpower.

(2) State Plan for Vocational Education, 1972, Table II, p. 277

(3) State Plan for Vocational Education, 1972, Table III, p. 283

TABLE II

## Ten Occupational Clusters Showing Greatest Demand for Manpower in Kansas

Occupational Cluster	Annual Net Demand (1)	Expansion of		New Programs Planned (3)
		Existing Programs (2)	Planned (3)	
Clerical & Kindred	2845	3		7
Food Service Workers	1774	0		0
Salesworkers	1658	0		2
Accounting & Kindred	1362	0		0
Secretary - Typist	1203	4		1
Janitor & Custodial	894	0		0
Child Care Personnel	564	2		1
Nurse Aide	499	0		0
Registered Nurse	375	2		
Practical Nurse	288	1		
			12	

(1) KMUST STUDY - This is in addition to annual input from private and public schools and other sources manpower.

(2) State Plan for Vocational Education, 1972, Table II, p. 277

(3) State Plan for Vocational Education, 1972, Table III, p. 283

## The Scope of the Goals and Priorities

A reply to the question, "Were the state's goals and priorities sufficiently comprehensive in terms of specific population groups such as disadvantaged, handicapped, returning veterans, adult, post-secondary, secondary, etc," is difficult to formulate. It is virtually impossible to delimit some of these population groups with any degree of accuracy. The best that can be done is to establish an estimate on the basis of some rather broad assumptions.

With this understanding, the following analysis based on the best data available is submitted.

Academically Disadvantaged. This target group was delimited by using 2 sets of data taken from the 1970 Census.

The data taken from educational characteristics of the population in Kansas show that 27.2% of the 18-24 year old group (272,199) were not high school graduates. These data provided 74,038 academically disadvantaged persons.

Of the group 25 years of age or older, 24.3% had only one year of high school or less. Because many persons in the category were housewives, over 65, or otherwise not potential employees, this 24.3% was applied to the civilian labor force over 25 years of age, as a more realistic figure than the total age group. This provided 173,817 academically disadvantaged persons in this category in Kansas.

Data from the Census show that 26.5 of the males and 20.6 of the females with less than college education had received vocational training. On this basis, it was assumed that about 20% of the academically handicapped would have received some vocational education and would not be candidates

Subtracting this group from the total gave 198,000 academically disadvantaged persons in Kansas over 18 years of age.

Economically Disadvantaged. This group was delimited by taking the number of white persons with incomes below the poverty level in Kansas and subtracting those who were not potential members of the civilian labor force.

One of the problems of attempting to define disadvantaged groups is the overlapping of categories. Those who are academically disadvantaged are often the same persons that are economically and culturally disadvantaged. To offset this problem, the white population below the poverty level was used as a measure of the economically disadvantaged and the non-white population below the poverty level was used as a measure of the culturally disadvantaged.

There were 241,576 white persons in Kansas with incomes below the poverty level. From this total was subtracted 27.8% of this group who were 65 years of age or older and 87% of 71,004 children under 18 years of age. This provided a total of approximately 112,647 economically disadvantaged persons between the ages of 16 and 65.

Culturally Disadvantaged. The non-white population with incomes below the poverty level was taken as the measure of the culturally disadvantaged. Here again, it was assumed that those over 65 and those under 16 should not be included in the target population. There were 38,071 non-white persons below the poverty level in Kansas. Subtracting those over 65 and those under 16 years of age gives a total of 15,820 culturally disadvantaged persons.



Based on this analysis these data yield the following groups of disadvantaged persons in Kansas.

Academically	198,000
Economically	112,647
Culturally	<u>15,820</u>
TOTAL	326,467

This total of 326,467 disadvantaged persons represents approximately 14.5% of the total population in Kansas.

This population of disadvantaged persons represents a goal for the total educational system. It is not reasonable to assume that all of these persons are interested in vocational education or would avail themselves of it if programs were offered.

Because vocational education is concerned with earning a living, the economically disadvantaged is probably the group with which vocational education planners should be primarily interested while the academically and cultural disadvantaged should be the primary responsibility of those involved in basic education, GED development and adult education.

If the economically disadvantaged is used as a target group, the projected enrollment of 11,450 in secondary, post-secondary and adult programs and the 2565 students trained in manpower programs represents 12.44% of the economically disadvantaged persons in Kansas.

Handicapped Students. Data furnished by the U. S. Office of Education indicate that about 12.7% of the school age population is handicapped. The Special Education Section of the State Department of Education estimates that this percentage of handicaps is higher at the elementary level and decreases as the student advances through the educational system. On this basis, it was assumed that 10% was reasonable to use in grades

ten through fourteen. In 1971-72, 141,487 students were enrolled in these grades in Kansas. Ten percent of this enrollment is 14,148 of these students who were handicapped in some manner.

The State Plan for Vocational Education in 1972, projects an enrollment of 5,920 handicapped students in secondary, post-secondary and adult programs. This projected enrollment is approximately 42% of the estimated number of handicapped students.

Returning Veterans. Vocational education programs are available for veterans at Ft. Riley and the Forbes Military Facility. The military finances these programs and screens and selects the students. Additional classes could be available almost on request. Because no such requests have been made, it can be assumed that the existing programs are adequately meeting the needs of returning veterans for vocational education.

In addition, the post-secondary vocational programs in the area vocational-technical schools and community colleges are open to veterans and many have availed themselves of these after discharge.

Secondary Programs. A study conducted by the Guidance and Pupil Personnel Section of the State Department of Education indicates that approximately 20% of the high school students enter the labor market directly after graduation.

In 1971-72, the high schools in Kansas had an enrollment of 113,380 in grades 10 through 12.

Twenty percent of this enrollment is 22,676 students who will go to work at the end of the 12th grade. The State Plan for Vocational Education in 1972 projects an enrollment of 28,930 students in 639 secondary programs.

Not all vocational students will enter the labor market directly after

graduation. Many will continue their education at an area vocational-technical school, a community college or an institution of higher education. Some of the girls will marry and drop out of the work force. A comparison of these data suggest that the projected enrollment for secondary students is adequate but not necessarily excessive.

Post-Secondary Students. The 1970 Federal Census lists 97,115 students between 18 and 24 years of age, enrolled in school.

A survey of the Guidance and Pupil Personnel Section indicates that about 19% of the high school graduates will enroll in community colleges and about 4% of these graduates will enroll in an area vocational-technical school. Assuming that these percentages will hold for the 18-24 year age group, 18,452 students will be enrolled in the community colleges.

National data show that about one-third of the community college students will be enrolled in terminal programs. Because not all terminal programs are vocational and the level of funding of Kansas community colleges for vocational education is not as strong as in some areas of the country, this one-third factor was reduced to an estimated 20%.

Applying these percentages to the total number of students enrolled (97,115) gives 3690 as an anticipated enrollment in community college vocational programs and 3885 as an anticipated enrollment in area vocational-technical schools. This is a total of 7575 students that should be served in post-secondary vocational programs.

The State Plan for Vocational Education in 1972 projects an enrollment of 7500 students in 209 post-secondary programs. On the basis of the best data available, it must be concluded that the extent of post-secondary offerings is fairly close to the estimated demand.

Adult Students. The K-MUST study is an annual need for upgrading employee skills in Kansas. These data are based on a formula derived from employer surveys in Oklahoma and arbitrarily applied to Kansas with the assumption that the labor force of the two states have similar characteristics.

The list of occupations included in this study is incomplete so that the data obtained are probably conservative. The 34 occupational clusters included lists 120,182 persons who look to public education to upgrade their skills.

In 1971, the enrollment in adult vocational programs was 46,953 individuals. This enrollment represents approximately 39% of the 120,182 potential adult students in the K-MUST estimates.

Summary. Based on the data which admittedly are rough estimates, it appears that the state's goals and priorities are sufficiently comprehensive for handicapped, secondary, and post-secondary students and returning veterans.

They are not very comprehensive for the economically disadvantaged and for adults in terms of the scope of these particular populations.

It is safe to assume that the limitations of funds and staff time are more important determinants of the state's goals and priorities than the number of persons to be served. Staff members of the Division of Vocational Education almost unanimously felt a need for more programs and felt frustrated that money and time was not available to provide these.

#### Relationships with other Manpower Developments

The state's goals and priorities were related to other manpower developments in the state (e. g. private schools, industry, CAMPS, etc.), in a variety of ways.

The K-MUST manpower analysis includes the manpower in-put from other sources within the state. The number of persons trained each year in private schools, the Bureau of Apprenticeship, MDTA, programs in correctional institutions, unemployed, etc. are included in this report. As this report will be an important factor in establishing the state's goals and priorities in vocational education, these goals and priorities will reflect the influences of these manpower sources outside the public school program of vocational education.

The K-MUST Study Advisory Committee includes representation from economic development, vocational rehabilitation, the Division of Research and Information of the Kansas State Employment Security Division, and the Bureau of Apprenticeship.

The Advisory Council for Vocational Education includes representation from economic development, vocational rehabilitation and the Bureau of Apprenticeship and Training.

Because these two groups are active and continuing, this representation provides channels through which the state's goals and priorities can be evaluated in terms of the activities of these agencies.

The Commissioner of Education is a member of the CAMPS group. The Director of Manpower programs is an alternate and attends the meetings. This representation provides a linkage between CAMPS and the Division of Vocational Education.

#### Procedures for Implementing Goals and Priorities

The procedures for accomplishing goals and priorities in the State Plan for Vocational Education consisted in listing the number of programs

to be expanded and the number of new programs to be started along with the level and type of students to be served.

No priorities were established for the implementation of these programs and no allocation of these programs to specific areas (i. e. economically depressed) or to specific populations such as dropouts was made.

Because of the constantly changing circumstances within which educational planners must work, it is probable that these procedures are sufficiently specific for the purposes of the State Plan. It appears desirable for the state staff to have some room for judgment at the time the program is implemented.

#### Extent to Which Goals were Met

To assess the extent to which the Division of Vocational Education was able to implement the goals and objectives as set forth in the State Plan, comparisons were made between the planned expansions and new programs and the actual number of expansions and new programs implemented in 1971-72.

This comparison for programs to be expanded is shown in Table III and the comparison for new programs is shown in Table IV.

Table III  
Expansions Planned and Implemented

Service	Planned <sup>(1)</sup> 1972	Implemented 1972
Agriculture	4	2
Health	3	0
Home Economics	22	2
Office Occupations	7	4
Trade and Industrial	<u>30</u>	<u>10</u>
TOTALS	66	18

(1) Table II, Page 277, State Plan for Vocational Education.

Table IV  
New Programs Planned and Implemented

Service	Planned <sup>(2)</sup> 1972	Implemented 1972
Agriculture	29	1
Health	5	4
Home Economics	27	16
Office Occupations	10	9
Trade and Industrial	<u>22</u>	<u>43</u>
TOTALS	143	73

(2) Table III, Page 282, State Plan for Vocational Education.

These data show that 27% of the planned expansions and 51% of the planned new programs were implemented during FY 1972. The large number of new programs started in trade and industrial education resulted partially from the inclusion of IACP Programs in the Trade & Industrial Education Section.

Two major factors operated to limit the implementation of the state's goals. These were (1) a slight drop in secondary enrollments and (2) the limitations of funds and staff time.

Between 1970-71 and 1971-72, the secondary enrollment in grades 10 through 12 dropped slightly in Kansas. This eliminated the need for some of the planned expansions and new programs especially in agriculture and home economics which have a majority of their students at the secondary level.

In the early part of 1972, the Assistant Commissioner for Vocational Education was informed by the U. S. Office of Education, that Kansas could lose approximately \$368,000 in Federal funds as a result of 1970 Census data which show a drop in the number of 16-24 year old persons in the state.

As a result, the State Board of Education imposed a moratorium on new programs until the financial picture was clarified. Some of the new programs planned were not implemented because of this action. Because of these limitations, the implementation of goals in FY 1972, did not show any marked improvement over FY 1971.



## SERVICES TO PEOPLE AND THEIR NEEDS

### Availability of Planning Data

Progress has been made during FY 1972, in providing adequate data upon which to base educational decisions.

The K-MUST (Kansas Manpower Utilization System for Training) study establishes for the first time, a comprehensive system of manpower needs and in-put from various manpower sources so that the need or excess of available manpower in each occupational cluster can be determined.

The present draft of this study is considered to be a prototype and there is probably need for refinement and extension of these data. Present plans are that this will be a continuing study to be revised annually with revisions as experience indicates.

Related to this is the project for computerized enrollment. This will be tried on a pilot basis in the area vocational technical schools in the fall of 1972. When fully implemented, this should provide more and better information on enrollments, student characteristics and follow-up.

### Coordination Among Agencies

Coordination of training opportunities among the various agencies involved is achieved in a variety of ways.

The K-MUST Study includes the annual in-put from the agencies in Kansas, that are involved in training. This study presents the estimated number of persons to be available for each occupational cluster, from (1) Employment Security, (2) returning military, (3) private schools, (4) public secondary, post-secondary and adult programs, (5) Bureau of Apprenticeship

and Training, (6) manpower programs and (7) Bureau of Corrections.

The Department of Economic Development, the Division of Vocational Rehabilitation, the Planning and Research Section of Kansas State Employment Security Division and the Bureau of Apprenticeship and Training are all represented on the Advisory Council for this study.

The Director of the Manpower and Development programs is a member of the Division of Vocational Education. This provides a close working relationship among vocational education, the Kansas Employment Security Division, the military programs for returning veterans, and the Bureau of Corrections.

The State Advisory Council for Vocational Education includes representatives from economic development, vocational rehabilitation and the Bureau of Apprenticeship and Training. This provides an in-put of information from these agencies to the vocational education programs of the state.

#### Articulation and Coordination Among Educational Agencies

Most of the secondary, post-secondary and adult vocational education programs are under the jurisdiction of the State Board of Education. The concentration of these programs in a single agency under the direction of a Commissioner of Education has produced an improved level of coordination and articulation among them. For example, the joint meetings now held between area vocational-technical schools and community colleges.

There is little or no coordination or articulation among the occupational programs offered through University extension or in the four year colleges except where the Division of Vocational Education reimburses these programs. The colleges and universities in Kansas are controlled by the Board of Regents

and there is minimal communication between the two agencies.

This is a serious problem in that it tends to break down any state-wide planning of occupational programs at the post-secondary level. The State Board of Education and the Board of Regents has held several joint meetings to explore the ramifications of this problem.

#### Placement of Graduates

Reimbursement policies of the Division of Vocational Education tend to force educational institutions to assume responsibility for the placement of their graduates.

A level of 75% placement must be maintained by post-secondary programs and a 50% level for secondary programs. Failure to meet these standards results in a penalty in the amount of reimbursement received by the institution for the particular program.

In addition, the Division of Vocational Education is placing programs with low placement on probation. This can lead to an eventual phase out of the programs which are least productive in terms of placement.

#### Involvement in Total Manpower Development

The Commissioner of Education is a member of the CAMPS Committee and the Director of Manpower Training in the Division of Vocational Education is an alternate and attends the meetings. CAMPS in Kansas is known as the Governor's Manpower Committee.

The State Board of Education has a working agreement with the Employment Security Division through which data on manpower trends, needs and other information on the labor market is available to the Division of Vocational Education. The manpower training programs have developed

a close working relationship between the Employment Security Division and the Division of Vocational Education.

The program for employee training in new and emerging industries has contributed to a close working relationship between the Division of Vocational Education and the Department of Economic Development.

### Access to Vocational Education

The extent to which vocational education opportunities are available to all persons was estimated from a variety of data.

In the area vocational technical schools, enrollment data by county were obtained from records of the Division of Vocational Education. These data show a wide distribution of students with representation from every county in the state. These data are shown in Figure 1.

A comparison of the enrollment from the home county and other Kansas counties is shown in Table V. This enrollment varies with type of community and the geographical location of the school. Large urban centers enrolled fewer students from outside their districts. Schools located in the rural areas of the state tended to enroll more out-of-district students. An Advisory Council study estimates that 72% of the high school students in Kansas live within commuting distance (30 miles) of an area vocational technical school. The fourteen area schools in Kansas offer approximately 100 different programs.

Similar data were not available on the vocational programs in community colleges. However, community colleges in Kansas subscribe to the "open door" policy and any qualified student in the state may attend with his out-of-district tuition paid by his home county.

FIGURE 1

CHEYENNE 21	RAWLINS 22	DECATUR 20	NORTON 20	PHILLIPS 14	SMITH 21	JEWELL 42	REPUBLIC 38	WASHINGTON 46	MARSHALL 31	KEMAH 26	BROWN 34	DONIPHAN 26
SHERMAN 56	THOMAS 23	SHERIDAN 22	GRAHAM 19	ROOKS 243	OSBORNE 28	MITCHELL 104	CLOUD 52	CLAY 46	POTTAWATOMIE 33	JACKSON 41	ATCHISON 94	LEAVENWORTH 170
WALLACE 8	LOGAN 11	GOVE 12	TREGO 13	ELLIS 49	RUSSELL 38	LINCOLN 39	OTTAWA 36	DICKINSON 56	WABASH 21	SHAWNEE 53	JEFFERSON 94	WYANDOTTE 780
GREELEY 6	WICHITA 13	LANE 9	NESS 26	RUSH 15	BARTON 44	ELLSWORTH 29	SALINE 483	MORRIS 32	LYON 14	OSAGE 16	DOUGLAS 26	JOHNSON 12
HAMILTON 15	KEARNEY 6	SCOTT 21	HODGEMAN 17	PAWNEE 20	STAFFORD 20	RICE 41	MCPHERSON 273	MARION 55	CHASE 18	COFFEY 26	FRANKLIN 16	MIAMI 13
STANTON 2	GRANT 12	HASKELL 17	FORD 17	EDWARDS 23	STAFFORD 20	RENO 500	HARVEY 204	BUTLER 27	GREENWOOD 22	WILSON 10	ALLEN 134	BOURBON 42
MORTON 19	STEVENS 6	SEWARD 785	CLARK 16	KIOWA 139	BARBER 6	KINGMAN 20	SEDGWICK 3288	Woods 1	ELK 56	WILSON 10	NEOSHO 3	GRAYFORD 26
		MEADE 23	COMANCHE 33	BARBER 10	HARPER 18	COWLEY 352	SUMNER 55	CHATELAIN 20	MONTGOMERY 492	LAGETTE 11	CHEROKEE 311	

NUMBER OF STUDENTS ENROLLED IN AVT SCHOOLS BY COUNTIES

1971 - 72

7,617 SECONDARY ----- 4,738 POST-SECONDARY TOTAL 12,355

TABLE V  
 DISTRIBUTION OF STUDENTS IN  
 KANSAS AREA VOCATIONAL-TECHNICAL SCHOOLS  
 and  
 COMMUNITY COLLEGES  
 1971 - 72

SCHOOL	HOME COUNTY	OTHER KANSAS COUNTIES	OUT-OF-STATE	TOTAL
Arkansas City	340	82 (26) <sup>(1)</sup>	8	430
Northeast Kansas - Atchison	94	228 (15)	3	325
North Central Kansas - Beloit	87	586 (58)	-	673
Southeast Kansas - Coffeyville <sup>(2)</sup>	485	635 (27)	23	1143
Southwest Kansas - Dodge City <sup>(2)</sup>	611	211 (48)	-	822
Flint Hills - Emporia	227	152 (25)	-	379
Northwest Kansas - Goodland	53	300 (48)	35	388
Central - Newton, McPherson & Hutchinson <sup>(2)</sup>	977	116 (41)	1	1094
Liberal	781	269 (30)	52	1102
Kansas City <sup>(2)</sup>	773	39 (6)	-	812
Manhattan	142	151 (21)	1	294
Salina	465	264 (46)	-	729
Kaw Valley - Topeka	724	136 (24)	-	860
Wichita	3223	81 (23)	-	3304
TOTAL	8189	4043	123	12355

Source of Data --- Division of Vocational Education, State Department of Education

(1) Number in parentheses is the number of different counties represented.

(2) Includes enrollment from local community college.

Programs in the secondary schools are more restrictive in their enrollment. Except where cooperative agreements have been developed between local districts and an area vocational technical school or among two or more local districts, the enrollment in these programs must be restricted to students of the home district.

There is a growing concern for vocational education in small rural districts and several pilot projects are under study to test the feasibility of satellite and/or cooperative arrangements in these rural areas. Many of these rural districts are in the western one-third of the state where large geographical areas with a relatively small population result in many small high schools.

#### Extent of Career Education

Career education is relatively new in Kansas. The exemplary programs at Lawrence, Clay Center and Kansas City have completed their second year of operation. New programs have been started at Liberal, Wichita and Beloit and a consortium of 16 rural schools in Northwest Kansas has completed its first year of operation. It is estimated that approximately 31,200 students are involved.

In the fall of 1971, the enrollment in K-12 was 493,614. The estimated number of students involved in career education is approximately 6% of the total enrollment.

#### Evidence of Student Satisfaction

Evidence that students feel relatively well satisfied with their vocational programs is provided by a research report of the Master Planning

This report dealt with graduates of area vocational technical schools and does not include students enrolled in secondary or community college vocational programs. The following are excerpts abstracted from this report.

About 64 percent rated the education and training received as "very good" or "superior" as contrasted to about 5 percent who rated the education and training received as "very inferior" or "inferior."

About 64 percent rated their instructors "very good" or "superior" as contrasted to about 5 percent who rated the instructors as "very inferior" or "inferior."

About 42 percent rated the guidance and counseling received with regard to occupational choices or job opportunities as "very good" or "superior" as contrasted to 17 percent who rated the counseling and guidance received as "very inferior" or "inferior."

About 90 percent stated that if they had to start over again, they would have attended a vocational-technical school.

- (3) Student Needs, Aspirations and Accomplishments (Planning Report No. 3) Topeka, Kansas: The Master Planning Commission. pp. 27 and 28.



## Enrollment Trends

Enrollment data for vocational education classes in area vocational-technical schools and students enrolled in area vocational-technical schools from community colleges, are summarized in Table VI. These data cover the period from 1964-65 when these were started, through 1971-72.

TABLE VI

### Enrollment Trends

#### AREA VOCATIONAL-TECHNICAL SCHOOLS & COMMUNITY COLLEGES

YEAR	ENROLLMENT <sup>(1)</sup>			PERCENTAGE	
	TOTAL	SECONDARY	POST-SEC.	SECONDARY	POST-SEC.
1964-65	2861	1973	880	69.0	31.0
1965-66	3867	2320	1547	60.0	40.0
1966-67	4603	3135	1468	68.1	31.9
1967-68	6853	4441	2412	64.8	35.2
1968-69	9258	6151	3107	66.4	33.6
1969-70	10051	6341	3710	63.1	36.9
1970-71	12088	8774	3314	72.6	27.4
1971-72	12355	7617	4738	61.7	38.3

Source of Data: "Kansas Area Vocational Technical Schools," Division of Vocational Education, State Department of Education

These schools have had a healthy growth in enrollment over their 8 years of operation. The secondary enrollment has increased approximately 380% and the post-secondary enrollment has increased approximately 500%.

(1) No. of individuals enrolled.

The drop in secondary enrollments in 1971-72 has been attributed to two factors. These factors are (1) the slight decline in high school enrollments during this year and (2) a reduction in reimbursement to area vocational technical schools made it financially advantageous for some high schools to withdraw from the area vocational schools and operate their own programs.

Enrollment data by services and levels are summarized in Tables VII through IX. These data have been abstracted from the Annual Descriptive Reports for 1970-71 and 1971-72.

TABLE VII  
Secondary Enrollment Trends

SERVICE	Enrollments <sup>(1)</sup>		
	1970-71	1971-72	% of Change
Agriculture	7771	8780	+13%
Health <sup>(2)</sup>	**	**	**
Home Economics	22360	26254	+17%
Office Occupations	5841	6310	+ 8%
Trade & Industrial	4563	6821	51%
Totals	40535	48165	19%

(1) Unduplicated Count

(2) No health programs as such are offered at the secondary level. Some high school students in health occupations are served in cooperative programs under T and I.

TABLE VIII

## Post-Secondary Enrollment Trends

SERVICE	Enrollments <sup>(1)</sup>		
	1970-71	1971-72	% of Change
Agriculture	368	365	(1%)
Health	979	1058	+ 8%
Home Economics	0	14	---
Office Occupations	2152	2986	+39%
Trade & Industrial	3619	4554	+26%
Totals	7118	8977	+26%

TABLE IX

## Adult Enrollment Trends

SERVICE	Enrollment <sup>(1)</sup>		
	1970-71	1971-72	% of Change
Agriculture	1070	1052	(2%)
Health	275	270	(2%)
Home Economics	4014	4144	+ 3%
Office Occupations	10510	8079	(23%)
Trade & Industrial	31084	29342	(6%)
Totals	46953	42887	(9%)

These summaries show an increase of 19% at the secondary level, and an increase of 26% at the post-secondary level. There was a 9% decrease in adult enrollments. The decrease in adult enrollment was due primarily to lack of funds to help support these classes.

(1) Unduplicated Count

## CONSIDERATION OF PREVIOUS RECOMMENDATIONS

This section evaluates the extent to which the 1971 recommendations of the State Advisory Council for Vocational Education have been implemented in vocational education activities throughout the state. It is not intended to imply that the recommendations of the State Advisory Council were the only instruments for change. In many cases, these recommendations merely spotlighted problems which already concerned the administrators and supervisors of the programs. In these cases, the action of the Advisory Council provided additional support and encouragement.

The problems and recommendations of the Advisory Council and the response of the State Board of Education were transcribed from the Second Annual Evaluation Report of the Advisory Council. The evidence of progress was obtained through interviews, records and reports of the Division of Vocational Education and from the minutes of the State Board of Education meetings.

There does not appear to be any major areas of disagreement between the State Board of Education and the State Advisory Council for Vocational Education, in either philosophy or purpose. In accordance with its prerogative, the State Board did not respond to all recommendations. The law states that the State Board may include such comments as it deems appropriate. It can be assumed however that a response would have been made to any recommendation with which there was serious disagreement.

The Advisory Council recognizes that the implementation of many of these recommendations is a slow and difficult process. To produce change

in a state-wide school system is time consuming and requires a substantial commitment of time and funds.

There appears to be a commendable level of cooperation among the State Board of Education, the Division of Vocational Education and the State Advisory Council. All three are dedicated to providing better vocational education opportunities for young people in Kansas. Where progress has been slow it can be attributed to two factors. These factors are-

1. The extensive planning and study often required to re-direct activities and to reorient personnel, and
2. The limitations of personnel and fiscal resources under which the Division of Vocational Education must operate.

#### PROBLEM I

Problem: Many Kansas school districts face the same problem as illustrated by a letter written by John D. Hershberger, Superintendent of Schools, at Horton, Kansas. We herewith quote two paragraphs of his letter.

The legal 2 mill maximum levy for vocational education in USD #430 yields \$15,776. Our local vocational program this year will cost about \$12,500. Tuition this year to vo-tech schools will cost us \$15,990. Our total vocational expense of \$28,500 will mean a deficit of \$12,714 in our vocational education budget. This \$12,714 must come from General Fund money. With the effect of the 1970's H. B. 1825 and 2051 this presents a budget problem that has no plausible solution. The solution is to overspend the budget; seek permission to issue no-fund warrants; if permission is granted, then the following year repay the no-fund warrants, plus interest. The interest would be close to \$1,000, an additional unnecessary cost to our patrons.

As a Board of Education of a public school, we feel an obligation to educate our children from kindergarten through grade twelve; no more and no less. If we send eleventh and twelfth graders to the vo-tech school on a part-time basis, we probably should pay their tuition; but not for posthigh school students! But even assuming this obligation, our two-mill vocational levy would not meet our expenses. We would show a deficit of \$2,574 in the vocational fund.

When students graduate from high school in Kansas, they can attend a state-supported college or university where the major portion of their educational costs are borne by State funds. If they choose to attend a community college or an area vocational-technical school, the major portion of their educational costs are paid by local tax sources. If the State is justified in assuming the major posthigh school educational costs of part of the graduates, what justification is there for the State not assuming the same share of the educational costs for all posthigh school students who wish to attend tax-supported institutions?

State financing of the major operating cost of all public posthigh school education would help alleviate the problem cited by the Horton USD; it would help solve many out-district tuition problems; it would be fair and just to all high school graduates regardless of the public institution they choose to attend; it would help build a stronger educational system for the high percentage of our students who do not need a baccalaureate degree; and it would be much more equitable to the Kansas taxpayer.

#### Recommendations:

1. We recommend that the State Board of Education make state financing of posthigh school operating costs a part of their planning and do all that they can to secure the necessary legislation at the earliest possible time.
2. For immediate relief, we recommend the State Board work to maintain the present two-mill levy for the unified districts to use in conducting a vocational program in the local district. It is also recommended that the Board work for an additional two-mill levy for the district to use to pay the costs of out-district tuition for its posthigh school students until state funding for these schools becomes a reality.

#### Response of the State Board

The State Board of Education supports the philosophy that the major support of Vocational-Technical Education should be derived from the State. The State Board is acutely aware of the critical problem facing the posthigh schools operating vocational and technical education programs and will continue as a part of our leadership activity to support the necessary legislation to strengthen financial base of these schools.

#### Progress Toward Implementation

1. The State Board of Education has requested full state funding for junior colleges and the post-secondary portion of the Area Vocational Technical Schools. This should substantially lower the critical property tax in these

districts.

2. The development of the proposed comprehensive plan for post-secondary education will contribute to the solution of this problem. This should eliminate costly duplication and enable the State Board of Education to present the legislature with a total funding request for post-secondary education.

3. A court decision has invalidated the state aide formula in Kansas. The Legislature must devise a new fiscal plan for public schools prior to July 1, 1973.

## PROBLEM II

Problem: During the 1969-1970 school year, there were 153,634<sup>(1)</sup> students enrolled in Kansas high schools. In the same year, there were 16,551<sup>(2)</sup> high school students enrolled in job-oriented vocational programs. In other words, only 10.8% of the students in Kansas high schools can be identified as preparing for a wage earning occupation. Probably over 80% are preparing for additional education, or for nothing. The Council is concerned with the large number of graduates who do not go on to school or who drop out and do not have the occupational skills needed to secure or hold adequate employment.

To properly provide for this large group of students is not an easy or simple task. It will need to be approached from several angles.

### Recommendations:

3. The implementation of recommendation number one would help the expansion of career education from a financial standpoint. If the unified school districts did not have to pay tuition on posthigh school students, the money saved could be used to improve or expand their local programs.
4. Certification requirements for school administrators need to be strengthened by including some work in the field of vocational education administration. Teacher and counselor preparation requirements should be designed to provide competency in the field of career education.

(1) Source - Facts about Public Education in Kansas, State Department of Education

(2) Source - Annual Report to the U. S. Office of Education, Division of Vocational Education, Department of Education

5. Policies that will integrate occupational information in the curriculum from the kindergarten through the elementary school would help solve some of these problems. The junior high school curriculum should provide for some exploration in a number of career fields. The high school and posthigh curriculum should provide skill training as needed by the student.
6. The State Board should continue the development and implementation of a major statewide in-service training program to encourage the expansion and improve the quality of guidance services at the elementary, secondary, posthigh and higher education levels.

#### Response of the State Board

The State Board supports the recommendation that all school administrators should have minimum course work in Vocational Education. It is recommended that minimum standards be developed and submitted to the State Board for review and be implemented as certification requirements for school administrators.

#### Progress Toward Implementation

1. Beyond agreement, there does not appear to be any progress toward requiring a minimum level of competency in vocational education, among administrators.

The Professional Teaching Standards Advisory Board is currently studying revisions for teacher certification. This recommendation is repeated in this report with a request that it be forwarded by the State Board to the appropriate sub-committee concerned with certificate requirements for administrators.

2. The work done in the development of career education programs throughout the state contributes to the implementation of recommendation No. 5. The exemplary programs at Lawrence, Clay Center and Kansas City are designed to produce model career education programs which can be used in similar school situations throughout the state. Career education has also been implemented in other localities.





Kansas State University has participated in these programs with research, teacher education and curriculum development. This participation has been made possible through grants from the Division of Vocational Education. The curriculum materials developed through "Careerpacks" in this project will be available to all interested schools throughout the state.

The State-Wide Goals for Education in Kansas adopted in the summer of 1972 includes career awareness as one of the goals for education with the following statement.

CAREER PREPARATION (Awareness)

SUB-GOAL - A structured program in career awareness should be developed to provide on the elementary level cognizance of the wide range of careers in our society and the roles and requirements of the employees in those careers, on the junior high level an opportunity for "hands-on" exploratory experiences necessary in career decision making, and on the secondary level a salable skill for (1) entry into the world of work or (2) preparation for post-secondary education with eventual employment.

- a. Objective--By 1974 ( ) curriculum packages on career education for elementary schools should be developed.
- b. Objective--By 1974 ( ) curriculum packages emphasizing exploratory experiences with career education for junior high schools should be developed.
- c. Objective--By 1974 ( ) curriculum packages on career education for secondary schools should be developed.

3. The following activities have contributed to the implementation of recommendation No. 6.

a. Career Development Workshop -- This workshop will concentrate on the in-service training of counselors, with specific emphases on the vocational aspects of counseling, within the total guidance and counseling programs. This workshop would be designed to center around the areas of counseling theory and practice relating to the task of counseling with students on vocational and occupational needs.

b. Vocational Guidance Workshop -- This will be a week long workshop specifically designed for AVTS counselors, and other interested vocational

educators. This workshop is part of a week long vocational education workshop held at Kansas State College, Pittsburg. A committee of AVTS counselors will assist in the formulation of the week long activities.

c. AVTS-Counselor Retreat -- This fall retreat will consist of a two day workshop for AVTS counselors at Rock Springs Ranch. This informal workshop will have the objective of furthering communication between the AVTS counselors and the Guidance Services Section, role identification and the sharing of needs and concerns of the personnel involved.

d. Kansas Vocational Association Convention -- The KVA has requested sectional meetings for guidance and counseling personnel during their state convention in Wichita, March 25 - 27, 1971. Three different time periods have been provided within the program structure for meetings pertaining to guidance and counseling.

e. VIEW Project Orientation -- The Division of Vocational Education has established a VIEW project on the campus of Kansas State University, Manhattan. The purpose of the project is to provide meaningful occupational information for Kansas counselors and educators. The involvement of the Guidance Services Section will be to provide liason work between the center and counselors in the field. Six orientation workshops on the use of the VIEW system will be held across the state. The specific purpose of these workshops will be to show how the VIEW project may be implemented at the local level.

f. Occupational Unit Development, K - 12 -- This project will consist of committee work, in cooperation with Kansas State University, Curriculum Section and the Division of Vocational Education, to develop a set of guidelines to expose students to the world of work and career exploration, K - 12.

### PROBLEM III

Problem: The people in the thinly populated areas of the State have a need for career education; but, in many places, it is not available.

It is difficult and costly to have an extensive vocational program in a high school with an enrollment under 200. Of our 388 high schools, 54.6% (212) of them are under that figure. It can be seen that many of our students do not have an opportunity for employable skill training in their local high school.

A study by the central office of the Advisory Council shows that approximately 72% of our Kansas high school students live within commuting distance (30 miles) of an area vocational-technical school; however many of these schools do not have

the facilities or instructors to accept students from outside the local district. The Kansas Association of Area Vocational-Technical Schools reported to the State Board that, on June 1, 1971, these schools had approximately 1,200 persons on their waiting lists for admission to vocational training programs.

#### Recommendations:

7. To help remedy this situation, we recommend that the Board encourage legislation that would make it easier to establish interschool cooperative vocational programs.
8. The Council would further recommend that the State Board encourage local districts to explore the possibility of expansion of their vocational programs by the use of closed-circuit television, video tapes, mobile classroom units, a tele-lecture system worked out through the telephone company, and work-study programs in cooperation with local employers. Some of these practices would require the cooperation of several districts and could probably not come to pass until after the legislation recommended above is accomplished.
9. Satellite programs with approved vocational-technical schools should be encouraged by the State Board when they appear to be feasible.
10. We recommend additional unification of districts to strengthen the schools in order that they will be able to offer a more comprehensive program.

#### Response of the State Board

Kansas' rural history is reflected in the fact that many small rural districts limit their vocational offerings to the areas of homemaking and agriculture. The State Board will promote legislative change in the School Foundation formula and will support authorization of school districts to contract over expanded periods of time; so that these small districts, through cooperative efforts, may expand their vocational education to offer students choices to study for other occupational fields.

#### Progress Toward Implementation

1. The exemplary program in career education at Clay Center, Kansas was designed to provide a model for use in similar rural districts throughout the State.

Experience with this program suggests at least two elements which can be of value in any rural school. These are the "World of Work" Course offered at the 8th grade level and the Diversified Cooperative program at the high school level. Both are rated as quite successful by the administrators, teachers and employers involved. Both of these activities can be implemented with a minimum of expense to the district.

Additional work needs to be done in further evaluation of these activities, and in the development and dissemination of curriculum materials to other interested school districts. The procedures for the Diversified Cooperative program and the requirements for coordinators of this program need to be studied and refined by the Division of Vocational Education.

2. A second project designed to explore ways of meeting the needs of rural youth for vocational education is the Unified Schools Association for Vocational Education. This is a cooperative venture of 16 small school districts in Northwest Kansas. The 16 school districts represent a total of approximately 10,000 students in K-12 grades and the largest community of the 16 has a population of approximately 3800 persons. The 16 districts represent a geographical area which is approximately 125 miles long and 75 miles wide.

The purpose of this project is to identify employment opportunities in the area and to design a vocational education system which will provide quality vocational education to the students of the districts. This project is in the developmental stage and has not yet yielded results that can be generalized to other rural schools. At this time, it must be considered as a first step toward improving the vocational education opportunities for rural youth.

## PROBLEM IV

Problem: The more populous areas of the State cannot provide for the multitude of people that should have occupational education. The present staff and facilities of these areas are so limited that hundreds of students are denied admission each year.

On June 1, 1971, the Kansas area vocational-technical schools had enrolled on their waiting list approximately 1,200 students who could not be served. In addition, these schools had many inquiries from persons who gave up when they learned the length of the waiting list. Last year, Topeka was forced to put their contracting schools on a student-quota basis and had 184 from their own district on the waiting list. They also had 850 students in over 34 classes at night in addition to regular day school programs.

In addition to the ones who apply and can get into these schools, there are probably many more who by the nature of their aptitudes and abilities should be guided toward the programs offered in the vocational field.

Recommendation number one will help solve this problem if enacted into law.

### Recommendation:

11. The operation of programs in vocational education throughout the year and the continuous use of facilities to utilize them from early morning until late at night should be investigated and practiced where feasible. The necessary funding for this expansion of services should be provided.

### Response of the State Board

The State Board of Education supports and encourages the expanded school day and school year for the continuous use of facilities so that more populous areas of the State can provide for a multitude of people who desire vocational training and that the State support the need for financing education of such schools so that this can become a reality.

### Progress Toward Implementation

1. The number of adults enrolled in vocational education in Kansas has increased steadily over the past several years and most of these are enrolled in evening programs. The increase in enrollment between 1969-70 and 1970-71 was approximately 23%. Enrollment data for 1971-72 are

not yet available, but it is anticipated that this rate of expansion will probably continue.

2. The Division of Vocational Education has encouraged the Area Vocational-Technical schools to expand their student capacity by year round operation and by more flexible enrollment and scheduling policies. Ten schools offered 8 week summer vocational programs in 1972.

3. Another way of increasing student capacity is through community based programs of work experience and cooperative education. In 1972, the Division of Vocational Education increased its allocation of funds for cooperative programs by 25%. In addition, a summer workshop especially for coordinators of these programs was held.

#### PROBLEM V

Problem: Kansas has need for more and better workers in the field of health occupations. The State has no well-organized system of health education to supply this need.

Informed observers predict that some form of compulsory health insurance may be passed by the Congress in the near future. Since no current plans are designed to prepare personnel for the increased need that will surely develop, the Council makes the following recommendations.

#### Recommendations:

12. We recommend that the State Board of Education urge the Federal government, when making grants from other agencies to the health occupations programs in Kansas, coordinate such grants through the health occupations education section of the Division of Vocational Education.
13. Expenditure of research funds to determine the current and future needs for workers in the health field would appear desirable.
14. We recommend that the Division of Vocational Education develop and implement core-curricula guidelines for the array of occupations to serve the health care needs of Kansas.

## Response of the State Board

The State Board of Education recognizes the need for strengthening all phases of vocational education and in particular the Health Occupations field. They also recognize the critical shortage of trained workers in the health field. The State Board of Education urges additional State financing for the development of teacher training programs in the Health Occupations field.

## Progress Toward Implementation

1. The policy of direct grants to institutions by various Federal Agencies is undesirable in that it is usually not included in the planning of the State Board of Education which is charged with the responsibility for state-wide comprehensive planning of occupational programs.

The comprehensive plan for post-secondary education required under Title X of the Educational Amendments of 1972, should alleviate some of this problem and contribute to the implementation of recommendation No. 12.

Numerous joint meetings of the State Department of Education and the Board of Regents have been held to explore way of coordinating the development of these programs in the four year colleges.

2. Recommendation No. 13 has been implemented. The K-MUST report developed by Kansas State University with research funds provided by the Division of Vocational Education includes a section on the manpower needs for health workers.

3. Work is progressing on the development of curriculum guidelines for those health occupations where this is appropriate. Many health occupations are licensed and the curriculum to be followed is prescribed by the licensing board and/or a professional accrediting agency.

4. Progress in strengthening the health occupations programs in Kansas has been made by the employment of a qualified teacher educator on the staff of the Kansas State College at Pittsburg, Kansas.



## PROBLEM VI

Problem: The methods of motivating and instructing disadvantaged youth in the past have not met the needs of this segment of our student population. As a result, many leave school unprepared to hold or advance in a job. A high percentage of them are unemployed or underemployed. In many cases they become delinquent.

### Recommendation:

15. We recommend that high school graduation requirements be made more flexible to accommodate the differences in interest and ambitions of these students. It is further recommended that provisions be made to enable the disadvantaged youth to take advantage of work-study programs to earn money to enable him to stay in school.

### Response of the State Board

The State Board of Education supports the philosophy that new methods of motivation and instructing disadvantaged youth must be implemented whether within the system of K through 12 or as an entirely new and different approach in working with these types of individuals. The Board further supports the Advisory Council's recommendation that the high school graduation requirements be made more flexible so as to accommodate new and innovative programs designed to meet their particular needs. The State Board of Education further agrees that the educational needs number six as listed in the SEEK project be expanded. It states, "There is a need to formulate programs for the potential dropout, unmotivated student, or student who is alienated from school. Each school should utilize diagnostic techniques as early as possible to identify this type of student. One might suggest that there should be experimentation with such programs as work-study, on-the-job training, or self-actuating programs to determine how to identify and help such students."

It is of utmost importance to those students who do not fit the typical education structure. Further, the State Board is presently developing a dropout proposal to be submitted to the U.S. Office of Education for funding. This proposal, if approved, would create within the unified school districts of our State, an entirely new concept for Kansas in working with the disadvantaged in developing a curriculum designed to their specific needs rather than a curriculum designed for the student who is going on to advanced degrees. This program should enhance the desires of the businesses and industries, labor organizations, and other interested groups in making jobs available from the private sectors so that students or trainees may begin to develop good working habits, entry level skills, and be motivated to earn while they learn as well as to be tax payers rather than tax takers. For this reason, jobs should be planned and developed so

that they not only can earn but also can obtain work experience and should be evaluated and credit given toward high school graduation with a work experience obtained.

It is a common knowledge that schools are conservative institutions and do not adjust readily to social change. Kansas schools are no exception. If State requirements are not flexible enough to make innovation and change easy for the school administrators, as well as the faculty, we will continue to be educating for the past instead of the future. The State Board will continue to encourage flexibility at all levels of education in the State.

### Progress Toward Implementation

1. The Goals for Education in Kansas include the following sub-goals relative to disadvantaged students.

#### DROPOUTS

SUB-GOAL - Each school district, community junior college, area vocational-technical school, and the Kansas Technical Institute should (1) determine the major underlying causes of dropouts in such district or school, (2) adopt a plan designed to make an early identification of potential dropouts, and (3) institute a program of preventive measures for the same. Cooperation should be instituted with private schools for the same type of program. (A dropout is a student who leaves school for any reason, except death, before he graduates or completes a program and does not transfer to another school.)

a. Objective--By 1977 ( ) all school districts, community junior colleges, area vocational-technical schools, the Kansas Technical Institute, and private schools should put preventive programs into operation bringing dropouts back into the educational system.

#### ECONOMICALLY DISADVANTAGED

SUB-GOAL - The relationship between the home and the school should be strengthened. The parents must be involved in a way such that they can provide input, support, and reinforcement for the learning tasks of the school.

a. Objective--By 1975 ( ) all program applications for specialized functioning of services for disadvantaged should include a section for plans, which should be cooperatively developed by parents, school personnel, and other members of the community who have a direct contribution to make.

## ECONOMICALLY DISADVANTAGED

SUB-GOAL - Evidence should be obtained on each child at the beginning of first grade and/or preschool to determine the level he has reached with regard to language, visual, auditory, and tactile approaches to learning.

- a. Objective--By 1975 ( ) all program applications for specialized funding of services for disadvantaged should include a plan for a pre-educational service evaluation to determine individual learner level of program readiness.

## ECONOMICALLY DISADVANTAGED

SUB-GOAL - A range of program organizations including basic academic skills and social skills of daily living which emphasize continuous learning through problem solving should be in operation.

- a. Objective--By 1975 ( ) performance objectives should place emphasis on relevancy of basic academic and social skills.
- b. Objective--By 1975 ( ) problems from the everyday living of the economically disadvantaged should be identified which are amenable to use at varying levels of education as a learning vehicle.

While these goals are too recent to have influenced the programs for students, they do place the State Board of Education firmly in support of special treatment for the disadvantaged and handicapped student.

2. During 1972, the Exemplary and Special Needs Section of the Division of Vocational Education sponsored and partially supported the following programs. These programs are described in detail under the section on disadvantaged and handicapped students.

- a. Basic Learning Skills Centers. Four currently in operation serving 445 educationally disadvantaged and handicapped students. Four additional centers are planned.

- b. Vocational Exploration and Work Attitude Adjustment Programs. These were nine special 8 week summer programs for students identified as potential dropouts or economically disadvantaged. 480 students were enrolled.

- c. Training and Related Academics Designed for Economic Security (TRADES). This is a special program for disadvantaged secondary students operated by USD 497, Lawrence, Kansas. 83 students were enrolled in FY 1972.
- d. Developing Comprehensive Competitive Employment Services for the Physically Handicapped. This is a planning project carried out jointly by Wichita University and United Cerebral Palsey of Kansas.
- e. Vocational Education at the Kansas School for the Deaf. This is a planning project designed to provide better vocational education services for hearing impaired students at this school.
- f. Special Vocational Program for Indian Families. A project designed to train out-reach workers to assist Indian families. This project is a component of the New Horizons Project and is operated by the Seaman School District.
- g. Vocational Education for Hearing Impaired. This program is operated by the Johnson County Community College and is designed to develop vocational education at the post-secondary level for students with hearing impairments.
- h. Developing Vocational Education for the Handicapped. This is a coordinated effort by the Salina Area Vocational Technical School, the State Division of Vocational Rehabilitation, and the Special Education Section of the State Department of Education to develop vocational education programs for the educable mentally handicapped student.

## PROBLEM VII

Problem: Career education needs cover such a wide range of educational levels that administrative cooperation in planning of vocational education on all levels is becoming very urgent if an orderly system of career education is to be developed without costly and needless duplication.

### Recommendation:

16. The Council recommends that the State Board of Education continue their efforts to work with the Board of Regents in planning in the field of career education to develop a constructive program that will avoid costly duplication.

### Response of the State Board

The State Board of Education goes on record as supporting the continuation of the policy of career education programs requiring two

years or less of posthigh school training remaining the exclusive responsibility of the State Board of Education. In the interest of economy and efficiency, those programs that a four-year college under the Board of Regents is offering should come under the State Plan, the same as other occupational programs.

The State Board further supports the philosophy that if Kansas colleges and universities are to expand their occupational offerings, there must be coordination between the State Board of Education and the State Board of Regents. Without coordination of occupational education at the posthigh school level between the State Board of Education and the State Board of Regents, undesirable competition can and will result, thereby working to the detriment of the persons these systems are designed to serve.

### Progress Toward Implementation

1. The State Board of Education has held several joint meetings with the Board of Regents and plans to hold more. The purpose of these meetings is to discuss the coordination of overlapping programs.

2. The State Board of Education has initiated the development of a comprehensive plan for post-secondary education in Kansas. The Educational Amendments of 1972 (S. 659) will require that all post-secondary education of less than baccalaureate level be made a part of this plan.

### Follow up of Recommendations

The Kansas Advisory Council for Vocational Education will plan to include a section in each of its annual reports to assess the response of the board and the progress made toward implementation.

To date, the Council is pleased with the cooperation and consideration received from both the State Board of Education and the Division of Vocational Education.

## SPECIAL ACTIVITIES IN VOCATIONAL EDUCATION

There are certain activities of the Division of Vocational Education that are not adequately reflected in the guidelines for evaluation as furnished by the U.S. Office of Education. Some of these activities are directed toward the solution of critical problems and are presented in this section to complete the evaluation of vocational education in Kansas.

### Research and Development

The Council has been concerned in its first and second evaluations with the lack of adequate management information on which to base educational decisions. Several projects have been completed or are in process during FY 1972 which contribute to the solution of this problem.

The K-MUST Study. The Kansas Manpower Utilization System for Training is a manpower analysis for the state of Kansas, done by Kansas State University, Manhattan, Kansas and supported by the Division of Vocational Education with research funds. This analysis is specifically designed to provide manpower information for educational planning.

The report combines the annual manpower needs in occupations with the in-put to the occupation from various manpower sources. These sources are (1) unemployed registrants at the Kansas Economic Security Division, (2) returning military, (3) private schools, (4) secondary, post-secondary and adult public education, (5) delayed entrants from public education, (6) Bureau of Apprenticeships and Training, (7) Manpower Programs and (8) Bureau of Corrections Programs. Comparisons of the annual job openings and the

annual in-put gives a net annual demand or excess for the occupation. The prototype covers the years from 1971 through 1975.

In addition to the sub-professional manpower needs analysis, the report also includes data on (1) the demand for skills upgrading in Kansas, (2) the ten top vocational programs by student interest, (3) potential training populations by counties, and (4) the projected increase and replacements needs for vocational education personnel.

The present report is considered to be a prototype. A second and more refined report will be available in the fall of 1972. The completion of this study represents a considerable step forward in the development of management information.

Computerized Student Accounting System. This project was developed by Kansas State University under a research contract with the Division of Vocational Education. The purpose is to provide more accurate enrollment and follow-up data on students in vocational classes with much less time and energy required from the state staff.

The system includes an initial enrollment sheet which collects personal and enrollment data on students. This enrollment sheet is in effect, a computer scanning instrument. From this, IBM data cards on each student are developed.

Included in this system is an annual, three year and five year follow-up of these students. This system will be implemented in the area vocational technical schools in the fall of 1972 as a pilot run.

Research and Planning Services. This project is a step toward providing a research capability for the Division of Vocational Education. Kansas is one of the few states that does not have the services of a research coordinating





unit as defined in the Vocational Education Amendments of 1968.

Effective September 1, 1972, Dr. H. Kittleson will be employed half time in the Division of Planning, Research and Evaluation of the State Department of Education. It will be Dr. Kittleson's responsibility to perform certain specified research activities for the Division of Vocational Education.

Specifically in FY 1973, Dr. Kittleson will be assigned to:

1. Develop computer applications to produce basic vocational education reimbursement data for unified school districts and community colleges under the 1973 Kansas State Plan for Vocational Education.

2. Develop a plan and rationale for the establishment and approval of a state staff position in a Vocational Education Research Coordinating Unit to be established as part of the Planning, Research and Evaluation Unit of the State Department of Education.

3. Develop research data and plan research projects directly related to vocational education as time permits.

Student Follow-up System. The continuation of the research project being carried out by Emporia State College to develop a method of contacting vocational graduates directly for information retrieval on student follow-up. A system using driver's license numbers as a basis for determining addresses of vocational school graduates is being devised. The validity of follow-up information received from students themselves is an important factor.

Computerized Reimbursement Data. The possibility of computerizing the reimbursement data has been under study for the past year. Presentations of proposed plans have been made before both the State Board of Education and the State Advisory Council for Vocational Education. The plans will utilize the criteria for reimbursement as set forth in the state plan.

The development of computer applications for this purpose is one of the tasks assigned to Dr. Kittleson in the Planning, Research and Evaluation

Section. The implementation of these plans should result in better information for local administrators at a much earlier date and in addition, it should eliminate much of the excessive paper work now required to compute reimbursement.

### Information Dissemination

The Division of Vocational Education has developed a Handbook for Planning, Developing and Implementing Vocational Education in Kansas. This handbook is designed to simplify the interpretation of the policies and procedures as set forth in the State Plan for Vocational Education and to assist those who plan and operate vocational education programs by providing in much more detail, the guidelines for developing vocational education in Kansas.

This handbook was developed by the Division of Vocational Education with assistance from vocational teachers and school administrators. The development of this handbook implements a recommendation made by the State Advisory Council in its first annual evaluation. This recommendation states:

The Board should initiate action to make the State Plan more a State of Kansas Plan, a more concise plan, a shorter and more specific plan, a more comprehensive plan. A popular version should be made and widely distributed.

### Exemplary Programs

During FY 1972, the exemplary programs in career education at Lawrence, Clay Center and Kansas City were continued for their second year of operation. These programs are designed to produce a model career education program for a rural (Clay Center), an urban-rural (Lawrence)

and an urban (Kansas City) school district. It is hoped that the experience in these districts will provide techniques and instructional materials which can be generalized to similar school situations throughout the state. It is estimated that approximately 17000 students and 822 teachers were involved in these career education activities.

An exemplary career education program is in the process of development by the Unified Schools Association for Vocational Education. This association is a consortium of 16 rural school districts centered at Hill City Kansas. A coordinator of career education has been employed and 284 teachers are involved in developing educational materials for career education. The Colby Community College and the Northwest Area Vocational School at Goodland are involved in planning and developing the secondary part of this exemplary program.

Because of the small size of the schools and the large geographical areas involved, traditional approaches to vocational education have been of limited value. Many new ideas will have to be tried and evaluated in the development of this program. It is estimated that approximately 10,000 students from these 16 districts will be involved.

New career education programs were started during FY 1972 at Liberal, Wichita and Beloit. These projects will eventually involve approximately 4200 students and 217 teachers.

Kansas State University, Manhattan, Kansas provided in-service training for teachers of career education and assistance in the development of instructional materials. This was done under contract with the Division of Vocational Education. Approximately 675 teachers participated in work-

shops, seminars and special educational programs under this arrangement.

### Programs for the Disadvantaged

A variety of programs for disadvantaged students was sponsored during FY 1972. Some of these programs were:

Basic Learning Skills Centers. These were specialized laboratories designed to correct communication and mathematic deficiencies of educationally disadvantaged vocational students. During FY 1972, three area vocational technical schools at Liberal, Goodland and Manhattan and the Garden City Community College operated these laboratories as a component of their vocational program.

Evidence of the need for these specialized laboratories was an assessment of student deficiencies in mathematics and communications. It was estimated through testing, that approximately 40% of the vocational students in the area vocational technical schools and the community colleges were three grade levels or more below the proficiency required to achieve success in the regular vocational programs.

Approximately 445 vocational students enrolled in these special programs for 30 or more instructional hours. Students were identified for the program by test scores and attended classes on a voluntary basis.

The success of these programs has resulted in the establishment of similar laboratories at the area vocational technical schools at Atchison, Columbus and Emporia and at the Alma, Kansas high school.

Vocational Exploration and Work Attitude Adjustment Programs. These were nine summer programs of eight weeks duration, designed for potential drop-outs and the economically disadvantaged. These programs consisted

of a 2 hour per day exploratory vocational class and 3 hours per day in a vocational work-study program.

The exploratory vocational class consisted of laboratory experience, field trips, use of resource persons and other ways of letting students find out what careers are available and what skills are needed to become employed in these career areas. Each student was allowed to choose four of six vocational areas to explore.

Three hours per day were spent by the students in a work situation under the vocational work-study program. Students worked for public agencies in jobs unrelated to the vocational areas being explored and 80% of their wages were paid by Federal vocational work-study funds. The work portion of the program provided students with an income from the wages and a way to develop positive work attitudes. A coordinator-counselor was employed to direct the work adjustment part of the program and was responsible for supervising students on-the-job and acting as a liaison between the employer and the vocational program.

These nine programs served approximately 480 disadvantaged students.

Training and Related Academics Designed for Economic Security. This is a special vocational program generally referred to as TRADES. It is operated by USD 497, Lawrence, Kansas.

This program is housed in an off-campus building away from the regular high school. During the past year, eighty-three students identified as actual or potential drop-outs were enrolled in the program. Skill training and on-the-job experience training was provided in food service, health occupations, pre-carpentry, student aides and industrial training areas. A diploma was awarded those students completing the class and obtaining

successful employment. Seventy percent of the students completed the class and 100% of those completing were employed after graduating. 60% of the students not completing the class were employed. Instructors provided students with skills in communications, human relations, mathematics, and other indirectly related materials. A student organization was formed to provide leadership skills.

Special Vocational Program for Indian Families. This project was a part of the New Horizons program and was operated by the Seaman School District. The purpose of the project was to train persons to work with indian families in their home or with groups of indian families in a home teaching situation. The content of the program included homemaking, family budgeting and consumer education. The project also included a skill training program designed to assist these families in the production of indian made products for sale.

Coordinated Occupational Communications. This is a special project developed and implemented to help vocational teachers and general education teachers solve the problems of teaching communication and mathematics skills to vocational students.

In FY 1972, this project was conducted at Kansas State College at Pittsburg, Kansas. Eight vocational teachers and three general education teachers participated in exploring ways to correct these student deficiencies more effectively. The concepts developed were evaluated by the teachers in their classrooms.

The Coordinated Occupational Communications project requires a follow-up to be carried out by the director of the project. The purpose of this follow-up will be to determine which of the techniques devised were effective.

## Programs for the Handicapped

Vocational Education for the Hearing Impaired. Johnson County Community College will implement the second phase of a three phase program to develop vocational education at the postsecondary level for those with hearing impairments. Vocational programs will be started this fall for hearing impaired students selected to participate in this pilot vocational program. Extensive research and planning has gone into this project and its operation is being monitored by many interested persons and groups both at the local and national level.

Developing Vocational Education for the Handicapped. This project is a coordinated effort of the Salina Area Vocational Technical School, the State Division of Vocational Rehabilitation and the Special Education Division of the State Department of Education. It is a planning project designed to produce a feasibility study for a pilot project in the Salina area.

The purpose of this project is to produce vocational education programs for the educable mentally retarded students and for regular students of limited ability. The program is under the direction of the Salina Area Vocational Technical School and uses an appointed Advisory Committee.

Vocational Education at the Kansas School for the Deaf. This is a planning grant designed to produce better vocational education services for hearing impaired students at the Kansas School for the Deaf.

A careful survey and study has been made at the school. From the results of this, it is planned to begin a program of upgrading equipment and personnel.

Developing Comprehensive Competitive Employment Services for the Physically Handicapped. This is a planning project to be carried out by

Wichita State University and the United Cerebral Palsy of Kansas.

Many of the cerebral palsied adults who are seriously handicapped physically, are of normal or superior intelligence. These persons have been trained through the traditional therapy programs designed to produce maximum capabilities from a physical standpoint. Additional training is required to bring these people into the mainstream of a working society.

The project will emphasize the matching of people to jobs to provide work opportunities for these handicapped. The major objective is to plan comprehensive, competitive employment services for the severely physical handicapped.

Supplementary Services for Disadvantaged and Handicapped. In FY 1972, forty-two schools provided supplementary services in their regular vocational programs, for handicapped and disadvantaged students at the secondary, post-secondary and adult level. These forty-two schools included 14 area vocational technical schools, 7 community colleges and 21 unified school districts.

These supplementary activities and services included the use of teacher aides, the development and use of individualized instruction, special counseling services, the development of exploratory vocational classes and the addition of special material on job opportunities and training programs.

These supplementary services to disadvantaged and handicapped students will probably remain a major part of the vocational education program for the handicapped in Kansas.

Because of the rural nature of the state and consequently, the preponderance of small schools with limited enrollment, it is not possible to



set up special programs for the disadvantaged and handicapped in many areas of the state. Only in the urban centers is there enough resident disadvantaged and handicapped students to justify special classes. Innovative programs and new techniques need to be developed to serve the handicapped students in rural areas.

### Vocational Guidance and Counseling

The Division of Vocational Education supports a vocational guidance position from vocational education funds. This Consultant in Vocational Guidance is an integral part of the Guidance and Pupil Personnel section of the State Department of Education and is responsible to the Director of this section. The consultant in Vocational Guidance is assigned to work with vocational guidance and counseling problems throughout the state.

Some of the major activities of this consultant during FY 1972 were:

Occupations Workshop. The second Occupations Workshop was held at Wichita State Univeristy in June of 1972. The purpose of the workshop was to assist the school counselors in Kansas to create more effective programs for non-college bound student. The six day workshop included one day of establishing an interview model, two days of interviewing entry level workers, and three days of synthesizing the data collected in order to initiate more effective programs for those students going directly from the school setting to the world of work. The workshop participants included school counselors from all levels, employment service counselors and personnel from the State Department of Education.

Vocational Information Charts. These charts were first developed during FY 1970 and were updated during FY 1972.

The purpose of the charts is to provide educational and lay persons with the information needed to promote vocational education and vocational

guidance within the framework of the total school counseling program. The charts include:

1. The Employment of Kansans by occupational area.
2. High school enrollments by programs.
3. Characteristics of the High School Graduates in Kansas, and
4. The Kansas Education Program.

### Career Development Project

The first year of the career development project at the Central Kansas Area Vocational Technical School served the three unified school districts of Hutchinson, Newton and McPherson. The purpose of this project was to provide students in grades K-12 with (1) an awareness of self, (2) an awareness of the world of work and (3) improved counseling services.

This project was funded by Title III, E. S. E. A. and consulting services were provided by the vocational guidance consultant.

Guide for Developmental Career Education. This research project was initiated in January of 1972. The purpose of the project is to develop a "Kansas Guide for Developmental Career Education." The research project is the outgrowth of a U. S. Office of Education contract with the University of Missouri - Columbia. A committee of twenty five persons throughout the state of Kansas is in the process of developing this guide which may be used by local unified school districts that wish to become involved in various aspects of career development and career education. The first phase of the project is scheduled to be completed by January of 1973. The second phase will include testing the guide in pilot schools in Kansas.

K-VIEW Project. Consultive services were provided to the Kansas

Vocational Information for Education and Work Project. These consultative services included working with school counselors and faculties, showing various methods that may be used to assist students in using the K-VIEW system. The system has grown from an initial 30 schools in Fiscal 1971 to the present 150 schools using the program in Fiscal 1972.

Counselor Education Programs. Conference in-service and pre-conference programs were conducted with the six counselor education programs in Kansas. These activities include classroom presentations to assist school counselors to be effective with "all" students, and not just the college bound.

Consultive Services. In addition, the Consultant in Vocational Guidance provided services to 19 different organizations in FY 1972. These organizations included unified school districts, area vocational technical schools, community colleges and professional organizations concerned with guidance and counseling.

### Training for New and Expanding Industry

During FY 1972, the Division of Vocational Education organized and supported a variety of programs to train employees for new and expanding industries in the state.

These projects are a coordinated effort between the Division of Vocational Education and the Department of Economic Development in Kansas.

Some of the programs in FY 1972 were:

<u>Plant</u>	<u>Location</u>	<u>No. of Employees Trained</u>
Precision Products	Greensburg	30
Power Flame	Parsons	120
Vinylex, Inc.	Pittsburg	17
Pitts Plastic	Pittsburg	24

In addition to these, a program has been planned by the Barton County Community College to train approximately 600 persons for the New Fuller Brush facility at Great Bend.

### Manpower Development and Training

The purpose of the Manpower Development and Training programs is to alleviate through training, unemployment that is caused by a lack of skills for available jobs. To be eligible, an individual must be unemployed and at least 16 years of age.

Institutional Manpower Development and Training programs are jointly administered by the Vocational Education Division of the State Department of Education and the State Employment Service. The State Employment Service determines the occupational training areas and selects and refers the trainees. The Vocational Education Division organizes and supervises the training. Full time manpower classes, except under special circumstances, must meet on a 40 hour per week basis.

Skill Centers. Kansas has two MDTA Skill Centers at Kansas City and Wichita and a Manpower Training Center at Topeka. These are operated in conjunction with the area vocational technical school in each locality.

These Skill Centers are designed to meet the employment needs of each student as completely as possible. In addition to skill training, basic education, employment orientation and counseling are available as needed. These centers operate on a full year basis and enroll students on every Monday of each week.

Project Transition. Two training centers have been established at Fort Riley and at the Forbes Military Facilities base in Topeka. These

centers provide a variety of skill training for military personnel about to be discharged. The purpose of these centers is to ease the transition from military life to civilian life. The Project Transition Programs at Forbes is the only United States Air Force MDT Skill Center in the country.

Correctional Training. Vocational training centers have been established at the State Penitentiary and the Women's Correctional Center at Lansing and at the Reformatory at Hutchinson. These programs offer a variety of skill training to inmates of these institutions to assist them in employment after release.

Enrollment. During FY 1972, 2565 persons were trained in manpower and development classes. The distribution of this enrollment was:

	<u>No. of Students</u>	<u>No. of Classes</u>
Skill Centers	819	25
Returning Veterans	1481	17
Correctional Institutions	<u>265</u>	<u>9</u>
Totals	2565	51

Vocational Education Personnel Development

Since January 15, 1972, the Division of Vocational Education has had available, the services of a person responsible for vocational education personnel development. This position is funded under a grant from the U.S. Office of Education and the incumbent in this position is a staff member of Kansas State College at Pittsburg working under contract with the State Department of Education.

Some of the activities in personnel development carried out in the

last six months of FY 1972 are:

Development of a State Plan. A comprehensive plan for educational personnel development has been developed. This plan includes (1) the goals and objectives of vocational education, (2) the personnel needs to obtain these goals and objectives, and (3) the supplemental services needed to supply these needs.

Organization of an Advisory Committee. An Advisory Committee representative of community colleges, local school districts, area vocational-technical schools, business, and industry has been organized and has held several meetings.

Coordination of Vocational Teacher Preparation. A series of conferences with cooperating teacher education institutions and the staff of the Division of Vocational Education has been held and more conferences are planned. The purpose of these conferences is to produce a coordinated effort to develop a state-wide system of vocational teacher preparation.

State Organization of Vocational Teacher Educators. Two meetings have already been held and plans have been made for a fall and spring meeting each year of vocational teacher educators and the Vocational Division staff. The purpose of this organization is to develop better communications between the two groups.

Workshop for Coordinators. This workshop was held in the summer of 1972 for coordinators of cooperative programs in agricultural and home economics related occupations. Thirty coordinators were in attendance and twenty completed the requirements for certification.

The instructional program was an eight week internship in business and industry together with related course work.



Development of Industrial Education Teachers. A project has been developed to produce 100 industrial education teachers to implement the new industrial arts career education curriculum by 1973. Centers providing in-service education for this project are:

Kansas State College, Pittsburg  
30 teachers

Kansas State Teachers College, Emporia  
24 teachers

Kansas State College, Fort Hays  
25 teachers

Wichita State University, Wichita  
50 teachers

Development of Career Education Teachers. A plan to develop uniform philosophies, objectives and methods among the colleges and universities, for career education teachers is under way. This coordinated approach to career education will be implemented on both a pre-service and in-service basis.

Home Economics and Agri-Business Teachers. Curricular changes in the teacher education program of these two groups has been initiated. It is planned to place more emphasis on occupations programs and career education in the pre-service education of these teachers.

Workshops for Vocational Counselors. The purpose of this workshop is to assist vocational guidance counselors to implement the KVIEW materials in their local school districts, and to assist counselors to plan and implement programs of occupational orientation and career awareness. This service is provided by contract with Kansas State University, Manhattan, Kansas.



Services for the Disadvantaged and Handicapped. Special in-service programs have been held at Kansas State College at Pittsburg, for advisors of youth organizations. The purpose of these programs is to help the advisors motivate handicapped and disadvantaged young people to participate effectively in these organizations. Thirty-five advisors have participated in this workshop.

Kansas State University at Manhattan, has sponsored a workshop for instructors in methods and materials for teaching disadvantaged and handicapped students in vocational agriculture.

## COMMENDATIONS

In any evaluation, there is always a danger that concern with the problems may obscure some of the good things that happen. During FY 1972, there were many activities that indicated a high level of achievement or contributed to significant progress in vocational education in Kansas. The Council takes this opportunity to congratulate and encourage the persons involved.

Specifically, the Council commends:

Miss Nancy Hodgkinson of Garden City, Kansas on her selection as national president of the 454,000 member Future Homemakers of America.

The Exemplary Career Education program in USD 497, Lawrence, Kansas on its selection as one of the 15 outstanding career education programs in the United States to be included in the North Carolina study.

The State Board of Education and the Division of Vocational Education on the following:

1. The development through Kansas State University, of the K-MUST manpower analysis which provides much improved data for educational planning.
2. The progress made toward a computerized student accounting system.
3. The progress made toward a computerized reimbursement system which will not only provide better information, but should make it available for use at a much earlier date.
4. The employment of a teacher educator for health occupations on the staff of Kansas State College, Pittsburg.
5. For the budget request to provide a leadership position in career education.

6. The support and encouragement which made possible the employment of a staff member in FY 1972, for vocational education personnel development.
7. For the budget request to provide full state funding for community colleges and area vocational-technical schools.
8. For initiating the development of a comprehensive State Plan for Post-Secondary Education.
9. For the development of the "Handbook for Implementing Vocational Education in Kansas." This should contribute significantly to improved communications with local districts.
10. For the employment of a staff member in the Planning, Research and Evaluation Section to study the feasibility of initiating a much needed research coordinating unit in Kansas.
11. For the program of employee training for new and emerging industries and its contribution to economic development in Kansas.
12. For the work done in upgrading vocational education for handicapped students at the Kansas School for the Deaf.
13. For the exemplary program of the Unified Schools Association at Hill City, Kansas. This project explores the possibility of cooperative action by a number of small schools to provide vocational education for rural youth.

## RECOMMENDATIONS

The recommendations included in this section have been compiled from two evaluations done by the Advisory Council during the past year and from the annual evaluation report. The recommendations on career education have been abstracted from the Council's report "An Evaluation Report of Exemplary Programs in Vocational Education" and the recommendations on teacher education and certification have been abstracted from the Council's report "An Evaluation of Vocational Teacher Education and Certification Procedures in Kansas."

These recommendations are presented here to provide a summary of the recommendations made during the year, and for the convenience of the State Board in their review of these recommendations.

### Career Education

1. The State Board of Education should develop and disseminate policies which clearly state its position on career education in the public schools of Kansas.

In effect, the State Board has already moved to implement this recommendation. Sub-goals 1. C. 1 and 1. C. 2 of the "State Wide Goals for Education in Kansas" adopted in July, 1972, includes career education as one of the goals.

2. The State Board of Education should develop a leadership capability at the State level to plan and coordinate the development of career education.

At present, all of the funds and most of the leadership at the State level has been provided by the Division of Vocational Education. However,

career education is not synonymous with vocational education. Career education involves elements which are outside the jurisdiction and the expertise of vocational educators. There appears to be a need for an across-the-board group which can involve specialists in elementary and secondary curriculum, elementary and secondary guidance, special education, accreditation and teacher certification in addition to the present input from vocational education. This group can function as a planning and coordination device for career education throughout the State.

3. As soon as possible, the State Board of Education should begin a study of fiscal resources available to local districts which wish to continue successful career education programs after the termination of their exemplary program grant.

At present, the formula for state aid in Kansas does not appear to include any incentive for districts which are willing to assume responsibility for innovative and exemplary programs. Little objective information appears to be available on the excess costs, if any, of career education over conventional education. This study should include an adequate assessment of excess costs, possible alternative sources of funding, legislation to provide financial incentives where necessary for innovative programs and other similar facets of financing career education on a long-term basis.

Since 1970, five states have passed legislation to promote and implement career education. At the end of 1971, career education legislation was pending in two states and had been proposed in twelve other states.

4. The State Board of Education should sponsor a research project to develop and validate suitable evaluation instruments and procedures for career education.

There are at present some commercial and some teacher-developed instruments for evaluating student outcomes. Some of these have limited application and others need to be field tested and validated. The study

should be designed to (1) identify the desirable student outcomes to be measured, (2) identify or develop suitable tests for measuring these outcomes, and (3) develop recommended policies and procedures for self-evaluation by the participating districts.

5. Unified School District 379 and the State Division of Vocational Education should make a comprehensive evaluation of the diversified occupations cooperative training program to reconcile differences between the program as operated and the state plan regulations.

The cooperative training portion of the exemplary program was designed around the needs of students in a rural community. At present this program does not meet the requirements of the state plan for cooperative programs. This creates problems in certification, reimbursement, etc.

This program has been judged highly successful by school personnel and employers. It could possibly be a partial answer to vocational education in rural areas, but at present, more information is needed to justify revisions in the program and/or changes in state requirements.

### Teacher Education

1. The Vocational Teacher Education programs should be based on an analysis of the competencies needed for specific assignments in each of the vocational services.

The only function of the teacher education program is to produce a qualified teacher. To do this, some objective guidelines are needed to determine the scope and content of the courses. This task analysis approach appears to be the most reasonable, and is the time-honored process for developing a vocational curriculum. Insofar as the Council can determine, the present method is based on the subjective judgement of the State staff and the teacher educators with little or no input from the local level.

For the purposes of this report, competencies are defined as the actual knowledge, skills and attitudes needed to successfully carry out the vocational teacher's responsibilities. Further, these competencies can be periodically revised to reflect new philosophies and techniques and can be used as a basis for the development of syllabi and for periodic evaluations of the effectiveness of the teacher education program.

It is suggested that the State Board of Education authorize each vocational service to establish an ad hoc committee representative of the State staff, the teacher educators, and selected vocational educators from the local level to develop such a list of competencies and to match the content of teacher education courses to these competencies.

This recommendation is consistent with current trends toward accountability in education. Lists of such competencies have been developed in several states and by various national agencies. These lists can provide a basis to be adapted to the needs of Kansas.

2. The Teacher Education Program for health occupations should be implemented as soon as possible.

This recommendation should have top priority. A position of teacher educator for health occupations has been approved, and this position has recently been filled. At present, vocational teachers of health occupations use selected courses already established for other occupational teachers. Until this recommendation is implemented, very little progress can be expected in the orderly development of an effective teacher education program for health occupations. The expansion of health services predicted by the Department of Health Education and Welfare and the resulting demand for para-professional health workers makes the implementation of this recommendation even more urgent.

3. The Teacher Education Programs should involve qualified persons with special expertise from the State staff or local level when appropriate.

This recommendation repeats a prior recommendation submitted to the State Board of Education in the first annual evaluation report of the State Advisory Council.

This recommendation stated:

The Board should promote some joint professional staff appointments within institutions of higher education for mutual benefit.

Selected persons actually involved in vocational education, can bring special expertise based on this experience and new insights which can be valuable to student teachers. For example, a person who has demonstrated excellence as a coordinator of occupations can be used to teach student coordinators in this occupational field. These persons can be utilized in summer schools or in extension courses. The use of these supplementary persons will help tie theory to practice and provide more flexibility in the teacher education programs. Some of the most prestigious colleges and universities supplement their teacher education staffs in this manner.

4. In Vocational Teacher Education Programs that involve practice teaching, consideration should be given to the orientation of the teacher to classroom problems in the early part of the program.

Several instances were reported where student teachers have completed all of the classroom portion of the teacher education program and then learned in the practice teaching portion that they have neither the aptitude nor the interest in working with young people.

The orientation of these students to a classroom situation as observers or teacher aides in the early part of the program will enable them to assess



their own interests and abilities and to make a more realistic decision as to whether they should continue in this field of study.

5. Reciprocal credit should be established among the teacher education institutions for courses of essentially the same content and purpose.

It is difficult for teachers to understand why courses with the same name, content and purpose are acceptable for certification or re-certification, from one institution and not from another.

This recommendation applies specifically to those teacher education courses that are general in nature. For example, Principles and Philosophy of Vocational Education and Administration of Vocational Education are general in nature, and should cover the broad spectrum of vocational education. The content should not be different for vocational instructors in different areas. Approved courses taught by qualified instructor in any accredited institution should be accepted for certification purposes.

6. Where two or more State Agencies are involved in setting teacher education requirements, some way should be cooperatively developed to control the extent of these requirements.

This problem occurs in the occupations which require State licensure. The licensing agency sets certain requirements for faculty that must be met before graduates are admitted to the licensing examinations.

In nursing, for example, the requirements of the State Board of Nursing and the State Board of Education have resulted in a pyramiding of requirements that makes it almost impossible to staff these programs with fully qualified instructors. The result is that provisional credentials are used extensively, but the commitment of the provisional teacher to become fully qualified within a designated time period places an almost impossible burden on persons who teach full time for twelve months out of the year.

7. A State Council of Vocational Teacher Educators should be established to provide communications among institutions offering Vocational Teacher Education, the State Staff, and local district personnel.

There appears to be limited coordination and communications among the various institutions offering vocational teacher education programs. A council that could meet periodically with members of the State Staff to evaluate and coordinate their respective activities should promote better communications among the institutions, the State Staff and local districts, and should make a valuable contribution to the professional development of vocational education personnel.

8. Vocational certificates should be organized around types designed for a specific purpose and available for use by all services in the Division of Vocational Education.

At present, there appears to be a feeling that certain types of certificates are for the exclusive use of certain services. For instance, the non-degree certificate is considered to be a trade and industrial education certificate. Where other services use this certificate, they usually look to the trade and industrial education service for certification.

A qualified teacher in any field needs three types of competencies.

These are:

1. Competency in the subject field
2. Proficiency in teaching techniques that enable him to effectively communicate his subject to others, and
3. A syndrome of attitudes, values, and certain intangible personality traits which help the teacher to provide leadership and to create a classroom climate in which learning can take place.

Teacher education of all types is concerned primarily with areas one and two. Area three is nebulous and difficult to assess. Why one teacher

can achieve this leadership and another cannot has defied the best efforts of educational researchers for many years.

In addition to the adult certificate, there are three types of certificates currently in use in the Division of Vocational Education. The types are:

1. The certificate for which competency in the subject field is gained through on-the-job experience and teaching proficiency is achieved through a specialized vocational teacher education program. Typical examples of this type are the certificates used by carpentry, machinist, and auto mechanics teachers, but this type of certificate may be used equally well by a horticulturist in the agriculture services, by a dental assistant in the health services, or by a food services teacher in the home economics service.
2. The certificate for which competency in the subject field is gained through college courses and teaching proficiency is obtained through the specialized vocational teacher education program. Examples of persons who might use this certificate are engineering technology teachers who hold an engineering degree or nurses who hold a degree in nursing.
3. The certificate for which both the competency in subject matter and proficiency in teaching methods is obtained in college courses for the baccalaureate degree. Examples of teachers using this certificate are most of all agriculture, home economics and business occupations teachers.

The basis for each type of certificate is the way by which the prospective teacher qualifies for certification. Experience both in Kansas and throughout the Nation has shown that all three approaches can produce excellence in teaching. Each type is designed for a specific purpose, and none is inherently good or bad. As vocational education expands and becomes more diversified, all of the services will need to use all three types to some extent.

It is expected that the requirements for each type will vary among the vocational services, but it is equally possible that a core of courses common to each type can be found. This type of organization should help eliminate some of the restrictions which now limit the development of vocational education.

9. The State Board of Education should take steps to continue the present position of educational personnel development coordinator.

The development of personnel is one of the most important functions of the State educational agency. The present coordinator works under a Federal grant which expires December 31, 1972, and is employed under contract with Kansas State College, Pittsburg.

The alternative to continuing this position, either through a renewal of the Federal grant or State monies, is to return the educational personnel development function to the various State supervisors who already have a full-time work assignment.

Some of the activities which this person can carry out are (1) coordination of teacher education programs among the various institutions of higher education, (2) promote and plan in-service workshops at the State and local level, (3) coordinate certification problems for local teachers

and administrators, (4) serve as a communication link with the Division of Teacher Certification, The Professional Standards Board, and local school districts, and (5) serve as a focal point for the evaluation of educational personnel development.

10. Teacher Education Programs should be periodically evaluated by a follow-up study designed to test their effectiveness.

The frequency with which teachers stated that teacher education courses were not "relevant" or "helpful in the classroom" would indicate that teachers and teacher educators do not agree on what is being taught, or perhaps teachers do not understand the reason for some of the content. Whether this is a valid criticism could be easily determined by follow-up evaluation of recent graduates.

Such a study should include an assessment of the number of graduates who actually enter teaching as a basis for a cost analysis of the program and the extent to which the teacher education program is effective in developing the desired performance characteristics.

#### Vocational Teacher Certification

1. The Division of Teacher Certification should be designated as the official agency for issuing all vocational certificates, including temporary and provisional, and for the maintenance of appropriate records pertaining to the certification of each teacher.

At present, most of the vocational certificates are issued by the Division of Teacher Certification. The computerized procedures for checking the proper certification of teachers mandates that all certificates, including temporary and provisional, should be issued through this Division. In implementing this recommendation, a careful analysis of responsibilities that will combine the resources of the Division of Teacher



Certification with the expertise of the vocational specialists should be developed.

Some information pertaining to vocational teacher certification remains with the appropriate service in the Division of Vocational Education and some in the files of the Division of Teacher Certification. Neither of these files is complete. It is suggested that there should be a single certification file for each teacher and that this file should contain all of the information upon which certification is based. If necessary, supplementary card files for convenience could be maintained by each vocational service.

2. All requirements for vocational teacher certification should be fully documented and made a part of the permanent certification file of the teacher.

Certification of teachers should be regarded as a legal process and each requirement should be substantiated in writing. For example, if occupational experience is a requirement for certification, then letters from employers documenting this occupational experience should be a part of the teacher's permanent certification file. Similarly, if approval of the appropriate State supervisor is required for certification, this should be in writing as an endorsement on the application form or as a supplementary letter.

3. Requirements and procedures for each vocational certificate should be developed in much more detail and made a part of the Certification Handbook.

Requirements as outlined in the State Plan for Vocational Education are sufficient for persons familiar with the terms and policies of vocational education; however, for persons in the field with limited familiarity with vocational education, these outlines can be confusing. For example, a requirement "two years of occupational experience" or "a bachelor's degree" are not very specific. What kind of occupational experience? How recent

must it be? Is a bachelor's degree in any field acceptable? The requirements should be spelled out in sufficient detail so that assumptions by teachers and administrators at the local level are unnecessary.

The inclusion of these outlines in the Certificate Handbook will provide for the widest possible dissemination to concerned individuals.

4. Teacher Education Institutions which plan to offer courses for certification or re-certification should coordinate these courses with the Assistant Commissioner for Vocational Education prior to their initiation.

Recently there has been a trend for colleges and universities offering teacher education programs to expand their offerings with courses which have not been approved by the State Department of Education. Considerable unpleasantness has developed since teachers have enrolled in these courses and have later learned that they are not acceptable for certification or re-certification.

In general, it appears that the proliferation of vocational teacher education courses should be discouraged except where existing programs are not able to meet the needs.

5. Duplication in application forms and other materials should be minimized.

At present, applicants complete the Form 107 of the Division of Teacher Certification and Form VE-10 of the Division of Vocational Education. Because of the diversity of requirements in vocational education some sort of supplementary application form will be required, however, at present, these two forms overlap in many respects and result in a duplication of information.

6. The requirement of a recommendation from the parent teacher education institution should be eliminated for re-certification purposes.



Both teachers and administrators complain that the re-certification procedures are too restrictive, and that the requirement of a recommendation from the parent teacher education institution prevents the teacher from electing the courses which may be most valuable, but are offered at a different institution.

As an alternative, experienced teachers who have completed their basic teacher education program could select courses for re-certification from a prescribed list of approved electives. These could be taken at any properly accredited institution. If a recommendation is needed, one from the local administrator might be more meaningful than one from the parent institution.

Further, there is evidence that this requirement is a source of considerable resentment on the part of teachers who feel that they are tied to a single institution for re-certification purposes. Because re-certification is required every three or five years, this means virtually throughout their professional life. Administrators resent this because they feel that they have no voice in the re-certification process.

7. Alternatives to college credit should be developed for the re-certification of vocational teachers.

The reliance on college credit as the only criterion for re-certification restricts occupational teachers in selecting the most appropriate experiences for upgrading.

For example, certain corporations and labor organizations conduct excellent upgrading programs for persons in their respective occupational fields (i. e. General Motors or the International Typographical Union). Vocational teachers have typically been welcome in these programs, but

under present policies, these experiences cannot be used for re-certification because they do not involve college credit. Where this type of activity is used for re-certification, it should probably be controlled by requiring prior approval from the Assistant Commissioner for Vocational Education.

8. A method should be developed to insure that all areas for which a teacher is qualified and which are coded on a single certificate have a common expiration date.

This problem arises because some certificates are issued for different periods of time. For example, a teacher who holds a three or five year certificate may subsequently qualify for a one-year vocational credential. Under the present system, these cannot be coded on a single certificate. It is possible that a supplementary or special certificate should be authorized.

9. The status and use of Adult and Provisional Certificates should be reviewed.

At present, an adult certificate is used to some extent in the Division of Vocational Education. This certificate is used by some services and not by others. Basic Education does not use any type of adult certificate but maintains an adult teacher registry.

The only legal authorization for the adult and provisional certificates that could be found is in the State Plan for Vocational Education, and not all of the services list these certificates here. There does not appear to be sufficient information about the requirements, uses, and types of services for which these certificates are valid.

10. Consideration should be given to reducing the number of vocational certificates as outlined in the State Plan.

The State Plan lists a number of certificates which have only small differences in requirements. Consideration should be given to broadening

the authorization for services under these certificates and adjusting the requirements accordingly.

As a minimum, it is suggested that the use of the following certificates be considered:

- a. A basic teaching certificate  
Type I  
Type II  
Type III
- b. A coordination certificate
- c. A vocational supervision certificate
- d. A vocational administration certificate

Existing certificates listed in the State Plan should be fitted into these categories wherever possible.

### Rural Youth

It is recommended that the State Board of Education and the Division of Vocational Education continue to encourage and support innovative and exemplary programs designed to bring vocational education to students in the small rural high schools of the state.

In 1971, 212 out of 388 high schools in Kansas had an enrollment of 200 students or less. The students enrolled in these small high schools are the most difficult group to serve with adequate vocational education.

It is increasingly evident that conventional vocational education methods cannot meet the needs of these students. New and different approaches should be developed and field tested through pilot programs.

Specifically, some of the activities that might be considered are:

1. The feasibility of using itinerant teachers and coordinators for a number of these schools within a designated geographical area.
2. The development of vocational curricula specifically designed for the limited physical and financial resources of these districts.

3. A re-study of administrative regulations such as certification requirements, reimbursement policies, attendance regulations, etc., which may interfere with the development of these programs.

4. An assessment of the diversified occupation program such as the cooperative program developed through the exemplary program at Clay Center and the feasibility of generalizing this type of program to other rural districts.

The consortium of 16 small high schools headquartered at Hill City, Kansas has made some progress in this area. The experience of this group should be a valuable in-put to the further development of vocational education for rural youth.

#### Extension of AVTS Facilities

It is recommended that the Division of Vocational Education sponsor a series of conferences to identify techniques that will enable area vocational-technical schools to serve more students.

In 1971, the area vocational-technical schools in Kansas reported that there were 1200 persons on their waiting lists. At the same time, there appears to be a reluctance in some schools to extend their services beyond the traditional forty hour week or to revise their administrative regulations to serve more students.

Examples of the techniques that might be tried are (1) the increased use of extended day and/or Saturday classes, (2) flexible enrollment to replace dropouts from a program, and (3) the increased use of cooperative programs to utilize training resources in the community.

## Uniform Management Data

It is recommended that the State Department of Education devise and implement a uniform budget and student accounting system for area vocational-technical schools and vocational programs in community colleges and disseminate summaries of this information through the Statistical Services Section.

There does not appear to be very much budget and enrollment information available for these schools and some of the information that is available does not inspire confidence. The diversity of reporting systems makes comparisons among institutions almost impossible.

This type of information is essential for planning secondary and post-secondary vocational education, the evaluation of cost effectiveness and to support budgetary requests to the legislature.