

State of Iowa

1962

***EDUCATION BEYOND
HIGH-SCHOOL AGE
The Community College***

**A Report Prepared in Accordance
with House Resolution 6,
Fifty-ninth General Assembly**

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December 1, 1962

LETTER OF TRANSMITTAL

To Members of the Iowa General Assembly:

I am pleased to submit to you the report developed by the Iowa State Department of Public Instruction in accordance with the directives of House Resolution 6 of the Fifty-ninth General Assembly.

The State Committee on Public Area Community Colleges was composed of two types of representatives. First of all, eight staff members from the Department were designated. Then, twenty-one persons were nominated by various agencies throughout the state. While the State Department of Public Instruction takes full responsibility for the report, important contributions were made by the Committee as a whole. However, no member of the Committee should be held responsible for agreeing with the points in this report.

On behalf of the State Board of Public Instruction and myself, I wish to acknowledge not only the fine work of the Departmental Study Committee but also the foresight and thoroughness employed in the study and development of this report. I am certain that if the members of the legislature, educators of the state, and the people of Iowa will carefully examine and study this report, they will find much assistance in initiating and developing a comprehensive system of public post-high-school education programs and services to complement our existing program of higher education.

Respectfully submitted,



PAUL F. JOHNSTON
State Superintendent of Public Instruction

PFJ/dmv

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STATEMENT OF STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

This report, a responsibility placed upon the State Department of Public Instruction by the legislature, recommends a new concept for the development of the public education system of the State of Iowa. It recommends area education districts which will establish the legal framework to do two things—provide services to local districts more economically and efficiently than now being done by our structure of county school systems and also provide for a statewide system of community colleges which will make available opportunities for vocational and technical training to all people of the state.

This recommendation comes at a time when decisions must be made which will determine the future social and economic welfare of the State of Iowa. It comes amidst the time of great concern for financing public elementary and secondary education with its inherent burden on local property of the state and, also, when there is a crying need for additional funds for capital outlay and operating expenses for the institutions of higher learning controlled by the State Board of Regents.

It has been suggested that the proposed recommendations with the resulting changes in our educational system envisioned by this report are ill-timed because of the inequitable financial aspects of our present system. It might be better said that a revision in our support of public education at all levels has been too long postponed. The future welfare and economic growth of the State of Iowa are dependent on our facing squarely the decisions that must be made. Iowa cannot afford the loss of two more years in completing our educational system.

The Department's recommendation on the financing of area education districts is a matter of great concern to many people. The recommendation states, "When a public area community college is operated by an area education district, such district should assume the responsibility for capital outlay; and the current operating expenditures of the college should be shared by the state and the district in proportions to be determined from time to time by the General Assembly . . ."

There are those who advocate that community colleges should be financed entirely by state funds. They believe that any proposal to provide additional educational opportunities for the people of this state—however essential to our growth and development—should not be contemplated if it is going to be financed in any part by local property taxes.

In developing the recommendation, we took into consideration the financial structure presently available to support public elementary and secondary education and the financial needs for our institutions of higher learning. We could not take the position that any level of our present educational structure should be weakened in the process of establishing these new area education districts.

It is our position that an area community college, to serve the needs of people, should be responsive to their needs and be dependent upon the area for at least a portion of the funds necessary for its operation.

Further, our recommendation assumes that the burden on local property taxes for elementary and secondary education will not be ignored, and a sound program of financing this segment of our educational system will be established.

While it is not a direct recommendation of this report, the legislature could well afford to consider providing some funds to each area district for capital outlay. Matching funds up to a limit of \$750,000 would provide an incentive for the various districts to move quite rapidly in providing this educational opportunity for the people of the district.

Our recommendation, insofar as operating funds are concerned, is such that the state could provide a part or all of the funds necessary.

The method and the amounts of money necessary to get a statewide system of community colleges under way should not be utilized as roadblocks to an educational program which is so vital for the welfare and economic development of this state.

It must be recognized that the establishment of a statewide system of community colleges will cause changes which will be of concern and even temporary discomfort to many individuals, organizations, and institutions because of their responsibilities for and interests in specific segments of our present structure of education within the state, both public and private. Even so, the need for the community college is indisputably clear.

The problem of finance and other related problems can be resolved quite fairly and equitably if the interests and the welfare of the entire state are kept in focus.

A handwritten signature in cursive script that reads "Paul F. Johnston". The signature is written in dark ink and is positioned above the printed name and title.

PAUL F. JOHNSTON
State Superintendent of Public Instruction

December 1, 1962

TABLE OF CONTENTS

INTRODUCTION 1

PART ONE—RECOMMENDATIONS

CHAPTER

I. Recommendations for the Establishment, Control, Operation, and Financing of Iowa Public Area Community Colleges....	7
Recommendations	7
Discussion of Each Recommendation	8
II. A Plan for the Establishment of Public Area Community Colleges in Iowa	20
Gibson Report and House Resolution 6	20
Definition of Educational and Service Functions	21
Problems of and Consideration of Present Junior Colleges.....	21
Previous "Area" Community College Proposals	23
Development of Criteria	23
Application of the Criteria in the Development of Sixteen Area Education Districts	28
Summary	30
Supplement Chapter II: Proposed Area Education Districts..	32
III. Role of the Area Education District in Providing Educational Leadership and Services Intermediate Between the State and Local School Districts	49
General History	49
Status of Proposed Legislation	51
Image of the Present County Office	52
Role of the Proposed Area Education District	54
Summary	58
IV. General Explanation of the Proposed Legislation for Area Education Districts	59

PART TWO—SUPPORTING EVIDENCE FOR RECOMMENDATIONS

V. Background and Summary of the Gibson Report Relating to Public Area Community Colleges	63
Iowa Study Committee on Higher Education	63
Appropriations for Study of Higher Education	63
Preliminary Plans for Study	63
The Gibson Study	64
Proposed Community College Program for Iowa	67
Organizing the Community Colleges	69
Gibson's Summary Statement About Two-Year Colleges	69
Specific Recommendations	70
VI. The Democratization of Educational and Cultural Opportunities Through the Community College	71
The People's College	71
Evidence of Need for Expanded and Broadened Opportunities for Higher Education	72
Summary Comment	80

VII.	Community College Occupation-Centered Education.....	81
	Role of the Community College	81
	Technical Occupations	82
	Additional Occupations	82
	Concluding Statement	85
VIII.	Role of the Community College in Serving Persons Desiring to Secure Baccalaureate Degrees	86

**PART THREE—STUDY OF THE AVAILABILITY OF
VOCATIONAL AND TECHNICAL EDUCATION IN
IOWA PUBLIC EDUCATIONAL INSTITUTIONS**

IX.	Status of Publicly Supported Vocational and Technical Edu- cation in Iowa	90
	Agriculture	90
	Business Education.....	93
	Distributive Education	94
	Homemaking Education	95
	Industrial Education	96
	Industrial Arts	97
	Trade and Industrial Education	97
	Cooperative Education	99
	Apprentice Training	99
	Practical Nurse Education	99
	Technical Education	99
	Adult Vocational Education	100
	Summary	100
X.	Recommendations Regarding Ways and Means to Provide Vocational and Technical Education at the High-School Level of Education for Iowa Youth and Adults.....	102
	Reorganization of School Districts	102
	Purchasing Vocational Education from Other Districts	103
	Developing a Regional or Area Vocational School at the Local Level	103
	Developing a Regional Vocational Program at the Intermedi- ate Level	104
	Developing a Regional or Area Vocational Program at the State Level	104
	Developing Regional Vocational Programs Through Colleges and Junior Colleges	104
	Developing Regional Programs by a Special or Separate Agency	104
	Issues Considered by the Study Committee in Making Its Recommendations	106
	How Iowa Can Meet the Problem: Three Recommendations..	107
	BIBLIOGRAPHY	108
	APPENDIX A. House Resolution 6	114
	APPENDIX B. Map Showing Location of Iowa's Sixteen Public Com- munity or Junior Colleges	115

INTRODUCTION

Public two-year colleges have developed rapidly in the United States during the present century. The enrollment in these institutions is increasing at a more rapid rate than that of any other segment of post-high-school education.

On every hand, there is growing evidence that our rapidly changing manpower needs call for regionally located, community-oriented and community-controlled colleges designed to serve the educational needs of all persons, regardless of their occupational goals, who are beyond high-school age.¹

Changing Role of the Junior College

Two-year colleges—whether public or private—originally tended to limit their curriculums to the first two years of college work needed by persons who were planning to go on to other colleges and universities to earn the bachelor's degree. Consistent with this purpose, they were at first referred to as junior colleges. While enrollments in junior colleges are increasing each year because of the greater number of persons who are seeking a four-year college education, the broad needs of youth as well as adults of our communities are placing added educational demands upon these institutions. Raymond C. Gibson, in his study of Iowa junior colleges completed in February, 1961, makes the following statement:

The need for technicians, tradesmen, craftsmen, and other types of workers with education beyond the high school but with less than a bachelor's degree is increasing, both because of the growth in population and the changing nature of the nation's work. The demand is for workers with a broad general as well as a technical education. This gap in higher education is being filled in several states by a dynamic system of community colleges.²

The public junior college movement in Iowa, starting with the opening of Mason City Junior College in 1918 and Burlington Junior College in 1920, has had an honorable history. Sixteen public community or junior colleges are now operating in the state. Many thousands of students have been served by these institutions at low cost to

them. While certain steps have been taken to offer two-year, occupation-centered curriculums, adult or continuing education courses, and community services, the predominate emphasis in these Iowa institutions—like those of a similar type in the rest of the nation—has been placed on serving those students whose intention has been to transfer after one or two years to senior colleges or universities for the purpose of pursuing a program leading to a bachelor's degree.

Recently the people of Iowa have become increasingly aware of the need to broaden the role of our public junior colleges. In recognition of the fact that these institutions have an opportunity to perform many educational services needed by the people in the areas which they serve, the Fifty-seventh General Assembly authorized local boards of education to refer to these institutions as community colleges. As indicated below, the Fifty-eighth and Fifty-ninth General Assemblies gave further attention to the community-college idea.

Gibson Report

The Fifty-eighth General Assembly authorized the Iowa Legislative Research Bureau to conduct a study "of the needs and facilities available for higher education in Iowa." (Senate File 521) The Bureau secured the services of Raymond C. Gibson, Professor of Higher Education, Indiana University, to direct the study. The report, hereinafter referred to as the "Gibson Report," itemizes four distinct functions of community colleges:

a. General education studies which will transfer to senior colleges. These studies should form an integral part of all other community college functions.

b. Guidance and counseling functions to assist local students in planning their education and careers.

c. In-service training of workers in local industries. Enrollments from this source are likely to exceed those of full-time day students. Such a program can be of great benefit to workers in adjusting to rapid changes in industry, business, and agriculture.

d. Terminal education involving from one to three years beyond high school and leading to an associate in arts or an associate in science degree. Terminal curricula should be

¹In fact, as this report will show, these colleges are being called upon to give certain services even to high-school-age students.
²Raymond C. Gibson, *The Junior Colleges of Iowa* (Study No. IV of *Resources and Needs for Higher Education in Iowa*, 4 studies; State House, Des Moines: Iowa Legislative Research Bureau, 1961), p. iv.

developed on the basis of research concerning community needs. Technical institute curricula should come under this category and be a part of the regional community college. Any regional vocational education programs at the high school or post high school levels should be a part of the regional community college.³

House Resolution 6

Early in 1961, the State Board of Public Instruction announced its plans to give careful attention to the long-range development of community colleges. Then on April 25, 1961, the Iowa House of Representatives adopted House Resolution 6, ". . . directing the department of public instruction to prepare a statewide plan for the development of public area community colleges . . ."⁴

House Resolution 6 determined the broad divisions or boundaries of this report. It provided that a plan for a statewide system of community colleges be prepared so as to include all areas of the state taking into consideration the program now offered by the existing junior colleges of the state. It directed that proposed legislation to implement the findings and recommendations and the plan should relate to but not be limited to the following matters:

1. Criteria for establishment of such colleges;

2. Organization, legal control, supervision and financial support of such colleges;

3. Regional location of such colleges;

4. Functions to be performed by such colleges in offering:

a. the first two years of regular college work including preprofessional education,

b. vocational and technical education,

c. programs for in-service training and re-training of workers,

d. guidance and counseling services to assist local students in planning their education and occupational careers, and

e. community services;

5. Relationships of such community colleges with other parts of the educational system in this state.

This resolution also directed the same agency to study the present situation and make recommendations concerning high-school-level voca-

tional and technical education programs by stating,

. . . that as part of such study the department of public instruction shall study the availability of vocational and technical education in Iowa high schools, and from this study recommend to the General Assembly and local school authorities ways and means to provide the necessary vocational and technical training for Iowa youth and adults at this level of education, such study to be concerned primarily with the availability of and plans for vocational and technical education in the fields of trades and industry and business, both at the high-school level and the adult education level.

Basic Assumptions upon Which Recommendations Were Developed

In addition to the specifications of this resolution, the committee carried on its work with the following assumptions or premises as guides:

1. Public area community colleges should be developed in such a manner that they fit into the pattern for the administrative structure of public schools in the state.

2. A regional education district authorized to establish a public area community college should be of sufficient size to provide the human and financial resources needed for an adequate educational and service program, but each such district should be formed without the creation of any additional legal taxing units.

3. Quality education in all areas and especially in occupation-centered curriculums requires a high level of financial support.

4. An area community college should be located within one-hour's driving time of a substantial majority of its students; therefore, it must be recognized that, if this college is to be large enough to offer at an economical cost a broad enough educational program to serve the varied educational needs of the majority of persons in the area district which it serves, the location of the central campus may need to be such that certain students will reside beyond the optimum commuting distance.

Method of Conducting Study

The study started in August, 1961, when State Superintendent of Public Instruction, Paul F. Johnston, appointed David H. Bechtel from the

³Raymond C. Gibson, *Resources and Needs for Higher Education in Iowa, 1960-1970: A Summary Report* (State House, Des Moines: Iowa Legislative Research Bureau, undated), p. 41.

⁴See APPENDIX A for complete text of this resolution.

staff of the Department of Public Instruction to serve as director of the study.

A seven-member departmental committee composed of members from various divisions of the Department was also appointed to work with the director of the study, with each member expected to devote a day and a half each week to the project.

The Department has had a continuing interest in the problems of the Iowa public community colleges as evidenced by action taken on January 15, 1961, when State Superintendent Paul F. Johnston presented to the State Board of Public Instruction "an overview of areas in education which need to be explored and are in the purview of the State Board of Public Instruction." In this report nine areas were presented for the deliberation of the Board. Four of these nine areas dealt directly with matters related to this present study. Superintendent Johnston's comments are quoted below:

Vocational Education

An evaluation of the present vocational program carried on in the schools should be made. Such an evaluation would give the foundation to determine and develop an understanding of the vocational education needs to meet the future requirements for the people of the state. This evaluation would necessarily cover not only education at the secondary level but also at the community college level; it would have implications for adult education.

Junior or Community Colleges

We need to carefully assess the strengthening of our present colleges and develop a carefully planned program for a statewide system of community colleges. The blueprint for the community colleges would give attention to the educational program offered, location of the colleges, financing, and their relationship with other segments of the educational system. (Report by Dr. Gibson, Director of the Study of the Problems of Higher Education in Iowa, on community colleges to be published in the near future will need to be studied before we make definite plans for action.)

Adult Education

We need to develop a program of adult education based on a study of the particular

needs of the people of the state. The success of such a program will require personnel of the Department to work full time in this field.

Technical Schools

To what extent we will need technical schools to meet the requirements of industry and the people of Iowa will have to be determined. This area may well be developed with (or as a result of) our study and plans in vocational education and community colleges. It could be possible that, in addition to vocational and technical education planned for secondary education and community colleges, a definite need might emerge for two, three, or four highly specialized technical schools operated directly by the Department.

The second force giving direction to this study came on April 12, 1961, with House Resolution 6 of the Fifty-ninth General Assembly.⁵ This resolution directed "the department of public instruction to prepare a statewide plan for the development of public area community colleges and to study and make recommendations concerning high-school vocational and technical education programs."

On May 8, 1961, Superintendent Johnston appointed a five-member Department Committee on Area Community Colleges to investigate and recommend ways and means of carrying out both his proposed program report to the State Board and House Resolution 6.

On June 13, 1961, this committee reported to Superintendent Johnston a suggested plan for a long-range study of community colleges and for implementing House Resolution 6. In this plan the following recommendations were made:

1. That the State Superintendent appoint a full-time director of the study on community colleges who will head a staff committee of five, seven, or nine members whose duties will be to do research and writing and explore the possibility of getting graduate students to work part time with the director and the committee.
2. That the State Superintendent appoint a "stable of consultants" from Iowa to be called on individually or collectively as resource persons.
3. That the State Superintendent appoint a State Committee on Area Community Colleges with himself as chairman.

⁵See APPENDIX A for House Resolution 6.

Superintendent Johnston accepted the recommendations of this committee and, on June 16, 1961, presented them to the State Board which took action approving them. It authorized him to appoint a committee to gain the reflections and experience of other concerned groups in the state and to assist the Department in carrying out the provisions of House Resolution 6. Representative individuals (twenty-one in number) from industry, labor, agriculture, education, and the legislature were invited to work on this project with the departmental members assigned to it. Collectively, this total group was designated as the State Committee on Public Area Community Colleges. The seven departmental members along with the director met weekly to study and develop ideas and plans to be reviewed by the total group.

Throughout this report references to the "study committee," the "departmental committee," or merely the "committee" should be interpreted to mean the members from the Department. The term "State Committee" refers to the entire group.

The State Committee met a number of times to discuss and evaluate the ideas developed by the departmental staff committee. Many additional ideas and reactions were obtained from individual conferences with nondepartmental members of the group.

Departmental members of the committee visited California and Florida to review their community college programs. Visits also were made to Georgia and Kentucky to observe the operation of their area vocational-technical schools. The programs offered by many other states were considered either through prior knowledge on the part of staff members or by review of the current literature on these state programs.

Two basic approaches which the Department could follow in preparing the report were considered. The first was to work in "closed session" with the State Committee and any additional consultants deemed necessary and not attempt to make information concerning the progress of the report available to interested groups and organizations in the state until the final presentation to the members of the General Assembly on December 1, 1962—the deadline set in House Resolution 6. The second method involved not only conducting the study but also attempting to keep those showing interest informed of the specific parts of the report as it was developed. While the latter approach involved more time and effort of those

associated with conducting the study, it was felt that such time would be well spent and would add materially to the final report. Thus, the latter approach was chosen.

While the State Committee as a whole was used extensively to discuss issues presented by the Department, it also served as a collecting and evaluating agency for opinions of various individuals, groups, and organizations throughout the state. The departmental members of the committee also made themselves available either to meet with or speak to those professional as well as lay groups showing interest.

Exchanges of ideas and information relating to the problems and issues involved in developing a plan for a statewide system of public area community colleges took place at regular or special sessions of a variety of agencies. Meetings and conferences or workshops of various types gave further opportunities to include many points of view in the deliberations. The following list is representative of the wide range of contacts which helped to further the study:

1. Visits to the existing sixteen public community or junior colleges in conjunction with meetings with their local boards of education
2. Meeting with the deans and superintendents of the Iowa public community or junior colleges
3. The Iowa Vocational Association
4. The Legislative Committee of the Iowa County Superintendents Association
5. Annual Summer Junior College Workshop
6. Thirteen regional meetings with the Iowa Association of School Boards
7. Thirty-two regional meetings with county boards of education and county superintendents to which local school district administrators and boards were invited
8. The State Board of Regents
9. Annual State Distributive Education Conference
10. Annual State Vocational Agriculture Conference
11. Meeting with representatives from industrial arts and trade and industrial education
12. Meeting with representatives from business and distributive education
13. Iowa College Presidents Association
14. Annual County Superintendents Conference

In order to resolve the issues identified through working with these groups, it was necessary for the departmental committee to make extensive use of consultants familiar with the problems of evolving a statewide system of community colleges. These leaders expanded the perspective of these committee members who worked with them, enabling them to apply proven principles in considering the interests and ideas of the groups listed above.

In addition to Iowans whose counsel was secured, the following outstanding leaders and educators in the field of community colleges or vocational-technical education accepted invitations and came to Iowa to serve as consultants to the seven-man departmental committee: Max J. Lerner, Director, Industrial Education, Lorain, Ohio; Thomas Merson, Consultant, American Association of Junior Colleges; James L. Wattenbarger, Director, Division of Community Junior Colleges, Florida Department of Education; Durwin M. Hanson, Professor and Head, Department of Industrial Education, North Carolina State College; and Raymond J. Young, Director, Community and Junior College Administrative Institute, Center for the Study of Higher Education, University of Michigan.

The chronological development of the study went in this fashion: developing a definition of functions of the community college setting forth

the major areas of educational opportunity; developing criteria for establishing a statewide system of community colleges for Iowa; setting forth a plan to include all areas of Iowa in area education districts each with sufficient human and economic resources to operate a public area community college; and developing the final plan and proposing legislation to provide the legal basis for the establishment of a statewide system of public area community colleges in Iowa in accordance with the recommendations of the study.

The State Board of Public Instruction was given frequent progress reports throughout the duration of the study. The members of the legislature were kept informed by mail through periodic summary of the progress being made on the study.

Form of Report

This report consists of three parts. The first part sets forth the recommendations for legislative action. The second part contains supporting evidence for the recommendations given in the first part. The third part of the report gives the results of the study of vocational and technical education called for by House Resolution 6 and includes, as directed by the resolution, recommendations regarding ways and means to provide vocational and technical education at the high-school level of education for youth and adults.

PART ONE RECOMMENDATIONS

PART ONE gives the recommendations of the Department of Public Instruction for the establishment of a statewide system of public area community colleges as called for by House Resolution 6, Fifty-ninth General Assembly.

CHAPTER I contains seventeen recommendations which indicate the principles which should be followed in the establishment, control, operation, and financing of public area community colleges.

CHAPTER II presents a specific plan for the establishment of public area community colleges in Iowa.

CHAPTER III shows how the area education district, in addition to operating area community colleges, can provide educational leadership and service intermediate between the State Department of Public Instruction and local school districts.

CHAPTER IV summarizes the legislation to be presented to the Sixtieth Iowa General Assembly, and which, if enacted, would set up the legal framework under which public area community colleges could be organized and operated.

CHAPTER I

Recommendations for the Establishment, Control, Operation, and Financing of Iowa Public Area Community Colleges

This chapter first lists the recommendations which should guide the establishment and orderly development in Iowa of a statewide system of public area community colleges. Then each such recommendation is repeated and discussed at some length.

Recommendations

Recommendation 1. The State of Iowa should provide a legal framework for the establishment of a statewide system of area-controlled public community colleges.

Recommendation 2. The State of Iowa should establish area education districts whose elected lay boards would replace existing county school boards and assume educational functions intermediate between the state and local school districts and, when authorized by vote of the people in such districts, would establish and operate public area community colleges.

Recommendation 3. The Iowa State Board of Public Instruction should be designated as the state agency responsible for the orderly development and supervision of public area community colleges.

Recommendation 4. The State Board of Public Instruction should be authorized to establish an Advisory Committee on Community College Education comprised of representatives of public and private two-year and four-year colleges and universities, such a committee to be concerned with problems of integrating community-college education with other aspects of higher education.

Recommendation 5. Before an election for the establishment of a public area community college may be held in any area education district, the proposition should have the prior approval of the State Board of Public Instruction based on the results of careful studies by the area education district which have preceded application for such approval.

Recommendation 6. Existing provisions of the Iowa Code relating to the establishment of community or junior colleges should be repealed; but approved institutions of this type in operation on

the effective date of the legislation should be permitted to continue under the existing sections governing their control, supervision, and support.

Recommendation 7. Iowa public area community colleges should offer a comprehensive educational program for persons of post-high-school age but recognizing that there should be provision for high-school-age pupils who have educational needs which cannot otherwise be met.

Recommendation 8. The educational offerings of the Iowa public area community colleges should be concerned with programs terminating after two years of study or less, but some curricular offerings of a technical nature may require more than two years for completion.

Recommendation 9. The statewide system of public area community colleges should provide (within the system as a whole and to the greatest extent possible within each college) educational opportunities and services in each of the following areas; but not necessarily limited thereto:

- a. The first two years of regular college work including preprofessional education
- b. Vocational and technical education
- c. Programs for in-service training and retraining of workers
- d. Programs for high-school completion for students of post-high-school age
- e. Student personnel services
- f. Community services

Recommendation 10. Programs and services offered by individual Iowa public area community colleges should be determined by local surveys of the educational and service needs of the area education districts with consideration also given to the needs of the state and the nation.

Recommendation 11. Individuals residing in an area education district, which either does not operate a public area community college or does not offer in its college a program meeting their specific occupational goals, should be entitled to attend an area community college in another area education district of the state, in which case the sending district should be required to reimburse

the receiving district for the actual per-student costs incurred by the receiving district in educating its resident students.

Recommendation 12. When a public area community college is operated by an area education district, such district should assume the responsibility for capital outlay; and the current operating expenditures of the college should be shared by the state and the district in proportions to be determined from time to time by the General Assembly and incorporated in the foundation program when adopted by legislative action.

Recommendation 13. The total cost to individuals attending public area community colleges should be kept at a level so as not to discourage students of low income families from attending.

Recommendation 14. In an area education district offering community college education, the administrative officer of the college should be designated as community college dean; and he should be responsible to the superintendent of the area education district.

Recommendation 15. Criteria for establishing area education districts should be the same as those criteria for adequacy of public area community colleges with consideration being given to the following items:

- a. Recognition is taken of the cultural, social, and economic "community characteristics" existing in an area or region.
- b. The capability of establishing a single administrative structure for its public area community college with its attendance center or centers located so as to be within one-hour's driving time of the majority of the students to be served.
- c. A minimum area assessed taxable valuation of \$150,000,000.
- d. A minimum area high-school enrollment of 5,000 public, private, and parochial pupils in grades nine through twelve.

Recommendation 16. If a public area community college is established in an area education district in which an approved public community or junior college is operating, the local district operating such an institution should be reimbursed for the current value of its capital investment allocated to separate community college facilities provided said institution discontinues its operation; and the local district has no other local educational need for such facilities.

Recommendation 17. The area education district board should be required to employ an area

superintendent who, in addition to having general administrative jurisdiction over the public area community college, should exercise educational and administrative leadership in providing cooperatively agreed upon services to local school systems located within the boundaries of the area district.

Discussion of Each Recommendation

Recommendation 1. The State of Iowa should provide a legal framework for the establishment of a statewide system of area-controlled public community colleges.

The present legal basis for the establishment and operation of community or junior colleges in Iowa limits them to local school districts. There is no provision for securing a wider, regional tax base which would be needed to make it possible to broaden the functions and services of these colleges. Furthermore, while such institutions do accept students from other school districts, the citizens in these districts have no voice in the establishment of the curriculum offerings or the staffing and control of these colleges.

The Gibson Report pointed out the need for a larger community college district under a separate board which would be totally independent of the present system of control by a local school board of the district in which the college is located.¹ Specifically, the Gibson Report says,

The most casual observation and limited insight concerning organization and administration of educational institutions are sufficient to convince anyone that the present local school districts are inadequate administrative and fiscal units for community colleges.²

Iowa now has sixteen public community or junior colleges; but they are not regionally located and their programs—for the most part—are limited to the offering of the first two years of a four-year, college-degree education. Such programs are commonly referred to by the terms "liberal arts," or "preprofessional."

Although the statewide system envisaged in this report would not be limited to the college transfer function, it would bring even this restricted type of educational opportunity within

¹Gibson, *The Junior Colleges of Iowa*, op. cit., p. 22.
²*Ibid.*, p. 29.

the geographic and financial reach of many persons who now are deprived of it.

The history of the limited and non-regional development of the public two-year college in Iowa with its typically small enrollment and college-parallel curriculum suggests that the existing legal framework is not adequate to support the expanded post-high-school educational opportunities needed for a modern Iowa.

The Gibson Report made the following comment in its summary of the need for a new unit for the support and control of community colleges:

Regional community colleges should be organized in terms of large local units comprising from one to four or more counties. There should be a local community college board with the power to tax the local community for support.³

The Gibson Report and House Resolution 6 together support **Recommendation 1**. The recommendations which follow give the broad framework within which regional or area community colleges could be developed and kept within the existing three-level (state, intermediate, and local) administrative and support structure for Iowa's public school system.

Recommendation 2. The State of Iowa should establish area education districts whose elected lay boards would replace existing county school boards and assume educational functions intermediate between the state and local school districts and, when authorized by vote of the people in such districts, would establish and operate public area community colleges.

CHAPTER III of this report is devoted to a discussion of the role of the area education district in Iowa's structure for the operation, support, and control of public education on a state-wide basis.

The recommendation that the elected lay boards of area education districts—in addition to providing cooperative educational services to local districts—should establish and operate public area community colleges when authorized by vote of the people in such districts, is based on two of the assumptions presented in the INTRODUCTION. In the first place Iowa already has the county school system which, even though the

county is no longer regarded as a large enough area upon which to operate educational services intermediate between the state and local school districts, is a significant and essential part of Iowa's administrative structure for public education. The second assumption is that the creation of an independent area community college district with taxing authority in addition to that of the already existing county school system should be avoided.

Authorities in community college administration say that, ideally, the person employed as the administrator of a community college should be directly responsible to the area education district board without being required to report to that body through a general administrator (superintendent) who would be concerned with the administration of cooperative services to local school districts as well as the responsibilities associated with a community college.

There are many good arguments in support of this position. However, in the light of the two assumptions cited herein, the recommendation as stated appears to be the best practical solution for Iowa. The financial resources of an area education district of the size recommended in this report would enable its board to offer a salary which would attract as its overall administrator a highly competent, professional educational administrator who would be able to represent adequately the interests alike of the local school districts and community college. This general superintendent for an area education district should have the services of assistant administrators as needed.

When the area education district operates a community college, it should be required to employ an assistant administrator who would be designated as community college dean with legally specified duties and authority. Large, complex universities have several different colleges, departments, and agencies within them with all reporting to their controlling boards through single overall administrators known as presidents or chancellors. The area education district would place no greater or more complicated set of responsibilities than these upon its general superintendent.

This report assumes that area or regional community colleges must be based on a high level of local interest and participation if they are to be sensitive to the entire range of differing educational needs of youth and adults to be served. To this end it is recommended that, like other legally

³Gibson, *A Summary Report*, op. cit., p. 48.

constituted school districts, each area education district should be governed by an elected lay board of education. Furthermore, it is essential that a strongly favorable vote of the people in the district should be required before a community college is founded.

The community college—says the Gibson Report—should not be established for the sole purpose of offering only the first two years of regular four-year college work.⁴ Raymond J. Young, writing in his capacity as Chairman of the Subcommittee on Junior College Problems of the North Central Association of Colleges and Secondary Schools Commission on Research and Service and expressing the consensus of his committee, asserts that this two-year college should be permitted to offer regular freshman and sophomore college programs. But he emphatically cautions against permitting the increased demands of youth desiring to pursue regular baccalaureate programs of college education to crowd out the equally strong and increasing need of society and individuals (youth and adults) for “. . . comprehensive post-high-school programs of technical, semi-professional, and advanced vocational types of education, . . .”⁵ Continuing he says,

In many instances, circumstances may require existing institutions to seek action for expanding the legal district of control beyond the single high school district that gave it birth. The expanded district should encompass all surrounding high school districts from which most students are drawn. The expanded district is then truly the institution's “community.” With its own board of control, more adequate financial bases, and autonomous administrative staff, the junior college can become truly the type of comprehensive institution educational theorists and leaders have envisioned for four decades. New ones should be established on this basis at the outset. The organizational and control pattern of thirty years ago is no longer adequate to meet the demands of the present and future decades, because of the inherent restrictive characteristics of this pattern borne out by experience since that time.⁶

If an institution is to have a “community,” it is logical for the entire district to be served by it

⁴*Ibid.*, p. 41.

⁵Raymond J. Young, “Crucial Times for North Central Area Junior College Development,” *The North Central Association Quarterly*, XXXVI (Spring, 1962), 326.

⁶*Ibid.*, p. 327.

to have its own board of education elected so as to be representative of the entire area. The plan suggested herein meets these conditions. It also provides for an “autonomous administrative staff” albeit the chief of this staff will have overall administrative responsibilities which embrace the community college and which extend also to the administration of cooperative educational services to local districts existing within the area education district.

Recommendation 3. The Iowa State Board of Public Instruction should be designated as the state agency responsible for the orderly development and supervision of public area community colleges.

In the states whose two-year colleges have shown the most growth, as independent institutions as contrasted with two-year centers or extensions of state colleges or universities, the laws specify some state-level agency as being responsible for the orderly development and supervision of these institutions.⁷

The Gibson Report says,

State authority with respect to community colleges should be exercised through the State Board of Public Instruction and the State Department of Public Instruction, which should have the responsibility for coordinating community college education in the state.⁸

If the structure for public area community colleges is to fit into the existing three-level pattern for the operation of comprehensive public education in Iowa, and if an existing agency is to be used, the Gibson recommendation appears to be fully valid as the basis for **Recommendation 3** of the present report. Leaders in the development of community colleges favor the establishment of or the utilization of an already existing state agency “. . . to provide for the orderly development of the systems of local community colleges.”⁹ **Recommendation 4** deals with the problems of coordinating community-college education with other aspects of the higher education in the state.

⁷D. C. Morrison and S. V. Martorana, *Criteria for the Establishment of 2-Year Colleges*, United States Department of Health, Education, and Welfare: Office of Education, Bulletin 1961, No. 2 (Washington: U. S. Government Printing Office, 1960), pp. 18, 64-66.

⁸Gibson, *A Summary Report*, *op. cit.*, p. 49.

⁹K. C. Skaggs, “The States Must Be Given Encouragement and Guide Lines for Establishing Sound Systems of Junior Colleges,” *Junior College Journal*, XXXI (May, 1961), 581.

Recommendation 4. The State Board of Public Instruction should be authorized to establish an Advisory Committee on Community College Education comprised of representatives of public and private two-year and four-year colleges and universities, such a committee to be concerned with problems of integrating community-college education with other aspects of higher education.

Obviously, no post-high-school educational institution can operate in a vacuum without regard to its relationships to other institutions. This is especially true when problems relating to the transfer of students from two-year colleges to senior colleges and universities are involved. **Recommendation 4** was prepared in recognition of this fact.

The Gibson Report suggested that there should be a legally defined Community College Commission, but its membership was to be limited to six college presidents. The present report broadens the membership of this group and refers to it as an Advisory Committee on Community College Education. The records show that, over the years, the State Board of Public Instruction has made extensive use of advisory committees. Thus, it appears unnecessary to go beyond authorizing the establishment of such a committee or other committees. There will be problems of community-college education which do not bear directly on senior college or university education for which other advisory committees will be useful. However, it would be difficult to anticipate the desirable makeup of such groups with sufficient accuracy to warrant the defining of their membership by statute.

Recommendation 5. Before an election for the establishment of a public area community college may be held in any area education district, the proposition should have the prior approval of the State Board of Public Instruction based on the results of careful studies by the area education district which have preceded application for such approval.

Before the people in an area education district are asked to vote to authorize the establishment of a community college, the district board should

be required to secure the approval of the state-level agency which has been designated by law.

While the area education districts recommended in this report have been drawn in terms of minimum criteria relating to taxable valuations and population resources, these factors alone do not indicate that a community college should actually be established in every such district. It is one thing to establish the legal framework within which community colleges could be founded. It is not possible, however, to predict exactly how the unmet educational needs within any specific area will have developed by the date when any given area is ready to consider voting on the proposition to initiate an institution of this type.

The application for approval to call an election for voting on the proposition to establish a community college within an area education district should be accompanied by the results of a complete local survey made by school officials and citizens of the area. Such a survey should indicate the educational needs of the area, the educational programs to be operated to meet them, and the probable location of the college and associated centers of attendance (if any); it should also present evidence showing the existence of a positive attitude among the people of the district toward this proposed expansion of educational opportunities for its youth and adults. **Recommendation 5** simply provides an assurance that there shall be a legally established procedure for state-local cooperation preceding the vote in order to give reasonable assurance that an affirmative vote on the proposition to establish a community college would indeed result in an institution which would be adequate to serve the educational needs of the area.

Recommendation 6. Existing provisions of the Iowa Code relating to the establishment of community or junior colleges should be repealed; but approved institutions of this type in operation on the effective date of the legislation should be permitted to continue under the existing sections governing their control, supervision, and support.

House Resolution 6, calling in part for "a plan for a statewide system of public area community colleges, . . . to include all areas of the state," has been regarded in this report at face value. That

is, it has been assumed that a definite **plan** rather than a **set of procedures** which, when followed, would result in a **plan**—was requested. Accordingly, this report presents recommended area education districts with the boundaries thereof to be established by the General Assembly.

The Resolution, in also stating that the plan shall take into consideration the program now offered by the existing junior colleges of the state, has been interpreted to mean that each existing junior college as well as its program shall be taken into consideration. As a practical matter, however, it is almost impossible to achieve the latter condition, at least on a permanent basis, and at the same time to present a sound and feasible statewide plan. **Recommendation 6** takes the position that no additional community or junior colleges should be founded on the basis of the existing provisions of the Iowa Code. But no one knows how rapidly the new area community colleges proposed in this report will come into being. In the meantime, increasing enrollments in Iowa's existing sixteen public community or junior colleges make it clear that no gap in the educational opportunities they are providing—however poorly distributed geographically and limited in scope these services are—should be permitted to occur. Consequently, **Recommendation 6** also specifically suggests that the continued existence of these sixteen institutions be permitted on the basis of their present control, supervision, and support.

If the present sixteen community or junior colleges were geographically well distributed throughout Iowa, it would be reasonable to predict that each of them eventually could become the site of the central campus of the public area community college established in the area education district in which it is located. But, in proposing the boundaries of the area education districts, it was not possible to define them in such a manner that each existing community or junior college would be found to be centrally located.

In certain area education districts, it will no doubt be both desirable and necessary for certain satellite attendance centers to be operated in order to meet as adequately as possible all the educational needs of youth and adults in these regions. Even so, however, officials and citizens in local districts already operating public two-year colleges quite correctly foresee the time when the continued independent operation of their colleges—even though legally permitted—may not be defensible. Strong loyalties as well as the tangible

business and cultural benefits brought to any city which has a college located in it tend to prevent these persons from viewing such a prospect with enthusiasm. Before they can do so, they need to convince themselves that the overall benefits which will accrue to the entire region, the entire state, and even to the nation will in turn benefit the local city and its people more than enough to compensate for the anticipated short-term economic or commercial and cultural losses resulting from the discontinuance of the college. Educational opportunity must be extended to people so as to meet their varied needs if society as a whole is to be benefited. Too high an insistence on protecting a local institution could defeat the goals envisioned by House Resolution 6.

It is impossible to place each of Iowa's existing sixteen public community or junior colleges at the center of an adequate area education district as defined in **Recommendation 15**. This conclusion is based on the simple fact that these institutions are not evenly distributed throughout the state. The plan suggested in this report has been based on judgment, but such judgment has been based on the criteria of **Recommendation 15**. It appears likely that any independently developed plan based on these same criteria would be similar to the one presented herein although it could differ in certain specific ways.

An easy alternative which would merely delay the facing of this problem but not solve it would be one wherein the General Assembly would permit the establishment of public area community colleges in those regions where cities interested in becoming centers of community college districts would take the initiative in defining areas surrounding them which would meet the conditions of **Recommendation 15**. However, this type of first-come, first-served system appears not to have been contemplated by House Resolution 6 when it specifically called for a plan and "proposed legislation to implement" it. Furthermore, such a system would give no assurance of serving all areas of the state.

Recommendation 7. Iowa public area community colleges should offer a comprehensive educational program for persons of post-high-school age but recognizing that there should be provision for high-school-age pupils who have educational needs which cannot otherwise be met.

The total range of services to be rendered by the proposed new statewide system of public area community colleges was made quite clear by House Resolution 6, and it is further set out in **Recommendation 9.** **Recommendation 7** emphasizes the potential role of the community college in meeting the educational needs of selected high-school-age pupils. However, the existence of a community college does not relieve each local district of the responsibility for providing a broad program of academic, practical arts, and vocational education in its high school.

It is a fairly common practice to permit academically gifted pupils to complete work in regular college classes while yet enrolled in high school. **Recommendation 7** recognizes that this concept of giftedness or special talent should be extended to include high-school pupils who have occupation-centered competencies of a high order which should be developed without waiting until they have reached post-high-school age. Further discussion of this idea appears in other parts of this report.¹⁰

Recommendation 8. The educational offerings of the Iowa public area community colleges should be concerned with programs terminating after two years of study or less, but some curricular offerings of a technical nature may require more than two years for completion.

Basically the community college is a two-year institution. Actually, many programs offered by it take less than two years to complete. Some programs take only a few weeks or months. It is possible, however, that certain programs of a technical nature will be developed which will require more than two years for students to attain the levels of competence needed for initial employment. It is not anticipated that such programs will be very numerous, but provisions for them should be permitted. This is not to suggest that community colleges should be regarded as likely to become four-year, degree-granting institutions. The proposed legislation will provide that these community colleges may offer not more than the first two years of regular college-transfer work. In the case of certain types of degree programs, it is even best for students to make the transfer to the senior institution after

¹⁰See page 84.

only one year of work at the community college.

Recommendation 9. The statewide system of public area community colleges should provide (within the system as a whole and to the greatest extent possible within each college) educational opportunities and services in each of the following areas; but not necessarily limited thereto:

- a. The first two years of regular college work including preprofessional education
- b. Vocational and technical education
- c. Programs for in-service training and retraining of workers
- d. Programs of high-school completion for students of post-high-school age
- e. Student personnel services
- f. Community services

While House Resolution 6 makes reference to "the existing junior colleges of the state," it calls, not for the establishment of additional institutions of this type, but for "... a plan for a statewide system of public area community colleges," Increasingly the public junior college is being regarded as the predecessor of the community college. In practice the junior college has tended to concentrate its services primarily upon the freshman and sophomore years of regular college or university work, and both the Gibson Report and House Resolution 6 recognize this function as a highly important one which should be continued. But they call attention also to the need for a type of post-high-school educational institution which will accept students with a very wide range of abilities and occupational objectives and provide the variety of educational programs needed to serve all of them.

Michigan is a state which illustrates the trend toward using the term "community college" to indicate the broad type of educational services which ought to be given by public two-year colleges. In 1918, that state enacted legislation providing for the establishment of junior colleges. While the laws relating to junior colleges in that state were amended from time to time, it was not until 1951 that the name community college was the legally designated term for public two-year colleges. The purpose of the Michigan Legislature in adopting the name, community college, in 1951, has been reported as follows:

. . . to (1) designate the institution as a locally controlled public college rather than a state or privately controlled college; (2) indicate a broader educational role in providing a comprehensive program oriented to community needs; and (3) avoid an invidious inference that the name "junior" referred to some inferior form of higher education.¹¹

Iowa, likewise, has amended its law slightly in recognition of the community-college point of view. In 1959, the Iowa General Assembly amended Section 280.18 so as to authorize the local school board to refer to its public two-year college either as a community or junior college.

There is today a marked increase in the number of occupations (often collectively referred to as being vocational, technical, and semiprofessional) requiring preparation which goes beyond high-school graduation but which does not lead to a four-year college or university degree. Consequently, the community college of the future needs to serve students (including both youth and adults) who are planning to enter upon a vocation immediately after they leave that college. Many programs of preparation which need to be offered will frequently call for only a few months of study; others will take at least two years to finish. Some will be devoted to in-service education of employed workers who desire to upgrade themselves in their present jobs. Still other programs will offer retraining opportunities for persons whose jobs have been eliminated by automation or other changes.

Today a person without a high-school diploma is doubly handicapped when he seeks employment. Many employers will not consider anyone who has not earned a high-school diploma. Furthermore, such a person frequently is not eligible to enroll in the program of preparation which he needs to complete to become qualified for the occupation in which he wishes to be employed. Due to a variety of reasons, a significant number of capable students drop out of school before they graduate from high school. The community college should provide an opportunity for such persons to return at a later date and complete their high-school work. The present high schools are not well adapted to give this service. For one thing, the older person often is free from his work only in the evening. In addition such persons hesitate to attend school with teenagers

¹¹Ferris N. Crawford, *Some Facts Concerning Community Colleges in Michigan* (Lansing, Michigan: Lynn M. Bartlett, Superintendent of Public Instruction, 1961), p. 2.

even if regular high-school classes are available to them.

There is no magic merely in calling public two-year institutions of higher learning community colleges instead of junior colleges. However, the new term does serve to emphasize the rapidly developing need for a new type of American institution of higher learning.

The recent report of the President's Commission on National Goals cites the need for institutions such as community colleges which will serve students who vary to a great extent in their needs for education beyond high-school age. It says,

We are moving toward more explicit recognition of the diversity in our higher educational institutions. An important ingredient in this diversity is the junior college or community college.

.....
Whatever the label, *there should be roughly within commuting distance of every high school graduate (except in sparsely settled regions) an institution that performs the following functions:*

- (a) *offers two-year terminal programs for students not going on to a four-year college career.*
- (b) *offers transfer programs for students who do wish to complete a four-year program.*
- (c) *serves as a technical institute for the community, serving local needs for vocational and sub-professional education.*
- (d) *offers continuing education to adults.*

States should expect these institutions to take care of a substantial percentage of the future college population (perhaps 50 per cent of all who enter college for the first time).¹²

For many years proponents of the junior college have emphasized the need for these institutions to broaden their services to meet the needs of everyone in their communities. Even so, such institutions (especially the sixteen public ones now operating in Iowa), in practice, have placed most of their emphasis on programs for students who wish to become four-year college graduates. The chief reason why existing junior colleges

¹²*Goals for Americans*, The Report of the President's Commission on National Goals (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1960), pp. 81-82.

have not been able to serve these broader purposes to which they subscribe is the lack of the adequate administrative and financial structure such as is provided in this statewide plan.

It is widely agreed that the diversity of the students who seek to be served by the community college makes it imperative that guidance, counseling, job placement, and other special services be provided by such an institution.

A true community college will occupy an important role in the area of community services. It will have the resources to provide programs and services for individuals and groups interested in cultural, civic, recreational, or other community betterment endeavors. It should be recognized that—in addition to its need for a supply of competent workers—industry prefers to locate in a community which constitutes an attractive environment for the company's varied personnel and their families. The community services which the community college is in a position to render will be a tangible asset for the region (area education district) which it serves.

Recommendation 10. Programs and services offered by individual Iowa public area community colleges should be determined by local surveys of the educational and service needs of the area education districts with consideration also given to the needs of the state and the nation.

The community college is the fastest growing institution of higher education in America. In order for this growth to have meaning to the people of the area which it serves, it is important that the community college shall meet the educational and service needs appropriate to it existing in that area. These needs undergo continuous modification with changing conditions in our society. Too often educational institutions do not modify their programs in order to meet such needs.

One of the basic reasons why local citizen control of the community college through the elected lay board of education for the area education district is necessary is to make sure that this institution shall always serve the needs of the people for whom and by whom it is being operated. In order to discover the nature of these needs, careful, periodic surveys are necessary.

The emphasis should always be placed upon the

needs and aspirations of people rather than too narrowly upon the immediate needs of the local area. It is just as important to a person who plans to be employed in another region of the state or nation to have his educational needs adequately met as it is to the individual who continues to reside in the area served by the community college. Consequently, this recommendation stresses the three types of information to be looked for in the conduct of local surveys: local and regional, state, and national needs. In today's world even international needs cannot be ignored.

Recommendation 11. Individuals residing in an area education district, which either does not operate a public area community college or does not offer in its college a program meeting their specific occupational goals, should be entitled to attend an area community college in another area education district of the state, in which case the sending district should be required to reimburse the receiving district for the actual per-student costs incurred by the receiving district in educating its resident students.

The demand for certain educational programs will be so strong that it will be practicable to offer them in every community college. The most obvious example is the program which offers regular freshman and sophomore college education. Probably most aspects of education for business, distributive, and office occupations should be offered in each community college. Automobile mechanics might be another example. On the other hand, many important occupations—printing, for example—do not require the services of such a large number of persons that it would be feasible to offer programs of preparation for them in all community colleges. In the case of such occupations, one or more area community colleges which were located favorably for doing so might offer programs. Then, as suggested in **Recommendation 11**, students from other area education districts whose colleges did not offer these programs could find a public institution with a program to meet their needs.

It might well be that each community college would offer one or more programs of a special type which were not generally available in all such institutions. **Recommendation 11** suggests a method of handling the financial aspects of this

situation so far as the students and the area education districts involved are concerned.

Obviously certain controls or regulations would be necessary in order to avoid abuses resulting from the whims or passing fancies of students who might wish to enroll in occupationally oriented programs for which they had not demonstrated any aptitude or talent. These regulations should provide that students must first be screened by the college officials in the receiving district and judged eligible to enroll in the special program of preparation available in the receiving district but not in the sending one. Of course, after such professional screening and approval has been completed, the sending area education district should be mandated to pay the per-student cost for that person in accordance with established figures based on the formula set forth in the recommendation. Otherwise, an area education district which was unwilling to pay such costs could block such a student from taking advantage of his educational opportunity partially at public expense. It is important that the State Board of Public Instruction be given legal authority to set up regulations to ensure the uniformity of computing costs to the receiving district and to establish an orderly procedure for handling the arrangements for the transfer of students to the colleges where they can secure the preparation which they are qualified to take.

Recommendation 12. When a public area community college is operated by an area education district, such district should assume the responsibility for capital outlay; and the current operating expenditures of the college should be shared by the state and the district in proportions to be determined from time to time by the General Assembly and incorporated in the foundation program when adopted by legislative action.

A legal area education district with a board of education and with power to levy property taxes over the geographical area to be served by its community college is recommended in this report. The usual procedure in Iowa is for the local districts to assume responsibility for capital outlay with the state participating to an increasing degree in paying the costs of current operating expenses. This report takes the position that this same general pattern should apply

to the educational costs of area education districts.

The fact that the voters in an area education district are willing to assume the responsibility for capital outlay for their community college should constitute sufficient evidence of their belief in the value of this institution to warrant the state in making substantial contributions to operating costs. Over the long pull it would appear that an area education district would be better served by state aid for operation than it would be if the state provided the funds for the building of the plant and tended to let its obligation rest at that point.

The area community colleges should be included in a foundation program when adopted by the state legislature. Such a method of financing would ensure a basic amount of money per student provided by a similar financial effort in each area education district. The difference between the amount which the area education district is required to provide and that necessary to meet the base amount per student should be supplied by the state from its tax sources.

There should be no legal barrier which would prevent an area education district from accepting such additional moneys as might become available from other sources.

Recommendation 13. The total cost to individuals attending public area community colleges should be kept at a level so as not to discourage students of low income families from attending.

Aside from the State of California, community or junior college students typically pay tuition fees. Even so, there is widespread agreement that the ultimate goal should be for public community college instruction to be available to the individual student essentially free of charge. To this end, legislation in Iowa relating to community colleges should not mandate that public area community colleges be required to charge tuition in accordance with any legally established formula. This decision should be left to the area education district board.

We have rejected—in theory if not always fully in practice—the proposition that the student should bear the entire cost-burden of his education. Society as a whole benefits when persons of all ages become better educated, regardless of the

type of occupation or profession they follow. In speaking of the education of young people, Marion B. Folsom says,

We as a Nation have far too much at stake to take the sanguine view that we shall have only as much education as our young people are willing to pay for. *Through reasonable tuition rates we must induce young people to get an education, because their education will be of benefit—directly or indirectly—to those who paid the difference between the tuition and the real cost of education.*¹³

There is ample evidence that cost is a limiting factor in the equality of educational opportunity. (See page 87 of this report.) **Recommendation 13** stresses the public's stake in minimizing financial barriers to education as much as possible.

Recommendation 14. In an area education district offering community college education, the administrative officer of the college should be designated as community college dean; and he should be responsible to the superintendent of the area education district.

As stated in the discussion of **Recommendation 2**, a modern, complex university has many colleges and schools which operate within it; yet the administrative officer of each such unit reports to the university president who in turn reports to the controlling board. Likewise, it is recommended that there be a single administrative officer who is directly responsible to the lay board for the area education district. The dean of the community college as well as other administrative officers which the board may appoint will report to this general superintendent who will be directly responsible to the board.

The legislation proposed to implement this report will prescribe the level of qualifications to be met by the dean of the community college and specify his areas of authority and responsibility.

The organization for institutional control varies from state to state. In general, however, the administrator of the college reports directly to the controlling lay board of education only in those cases where there exists a district which is

responsible for a community or junior college alone. One of the guiding assumptions of this report (see page 2) is that it should avoid the suggestion that any new taxing district be added to the existing structure for educational administration in Iowa. **Recommendation 14** is consistent with this assumption.

Recommendation 15. Criteria for establishing area education districts should be the same as those criteria for adequacy of public area community colleges with consideration being given to the following items:

- a. Recognition is taken of the cultural, social, and economic "community characteristics" existing in an area or region.
- b. The capability of establishing a single administrative structure for its public area community college with its attendance center or centers located so as to be within one-hour's driving time of the majority of the students to be served.
- c. A minimum area assessed taxable valuation of \$150,000,000.
- d. A minimum area high-school enrollment of 5,000 public, private, and parochial pupils in grades nine through twelve.

The American people have a strong faith in education. When they believe that unmet educational needs exist, they tend to create an institution whose purpose it is to fill the "gap." The junior college represents such an invention. At first this institution was looked upon as an extension of the secondary school to include Grades 13 and 14 and as a substitute for the freshman and sophomore years of college or university work. Gradually, however, this institution began to take on characteristics of its own and to embrace non-collegiate programs of education while continuing to offer regular college work.

Before criteria or guidelines for the establishment of area education districts which will have the human and financial resources upon which to found and operate sound area community colleges can be listed, two things are essential. First, there must be a definition of the community college as an institution. Second, it must be decided what broad types of service its educational program is to include, how and by whom it is to be

¹³Marion B. Folsom, "Who Should Pay for American Higher Education?" *Economics of Higher Education*, United States Department of Health, Education, and Welfare: Office of Education, Bulletin 1962, Number 6, Selma J. Mushkin, editor (Washington: U. S. Government Printing Office, 1962), p. 198.

administered, and who is to pay for it and how.¹⁴ Area vocational schools, technical institutes, and adult education centers have operated (again in response to needs) under various auspices and within various institutional frameworks. All of these educational enterprises are tending now to develop into a single, comprehensive, locally controlled and largely locally financed, public institution for persons of post-high-school age; but confined to programs whose duration is usually two years or less. This institution is the community college.

The tendency is for the community college to operate on an area district basis rather than as a part of a local school system operated by a single school district. It needs to be a relatively sizeable enterprise if it is to give the broad type of educational service described more fully elsewhere in this report. Because this institution is financed to an important degree by taxes levied within the area district, such districts must have the financial ability to support the college without placing an undue financial burden on the people.

Pence, after an extended study and evaluation of criteria used over the nation for the establishment of a two-year community college or an area district capable of establishing, operating, and supporting a truly comprehensive community college, states that he has been able to determine that the following five criteria are of first importance:

- ... (1) a determination of the unmet educational needs of a given geographic area;
- (2) a survey of the high schools of the area to determine the enrollment that such a college might be expected to have;
- (3) a decision as to whether the potential enrollment is sufficient to make possible a good educational program that could be operated with reasonable economic efficiency;
- (4) a decision as to whether the community has the financial ability to support such a program;
- and (5) a decision as to whether local citizens are interested in supporting such a program.¹⁵

The Gibson Report concluded that unmet educational needs of the type which area community colleges could meet were so widespread in Iowa that a statewide system of such institutions was needed. The Fifty-ninth General Assembly tended

¹⁴Adapted from Don Pollard Pence, *Criteria for a System of Area Education Districts for the State of Oregon* (Salem: Oregon State Department of Education, 1960), pp. 113-114.

¹⁵*Ibid.*, p. 115.

to show its acceptance of this conclusion when the House of Representatives adopted House Resolution 6 and when the Senate and House provided the funds to make the present report possible. Thus, this report has been based on the assumption that Iowa does have the unmet educational needs which can be served by a statewide system of regional or area community colleges.

CHAPTER II of this report will review the manner in which the criteria presented in **Recommendation 15** have been applied. It suggests the creation of sixteen area education districts within which—consistent with what Pence calls “the basic American concept of local autonomy”¹⁶—public area community colleges could be established. This could be accomplished for each area at such time as local interest and approval became strong enough to cause such an institution to be voted and supported albeit with state financial assistance in accordance with **Recommendation 12**.

Recommendation 16. If a public area community college is established in an area education district in which an approved public community or junior college is operating, the local district operating such an institution should be reimbursed for the current value of its capital investment allocated to separate community college facilities provided said institution discontinues its operation; and the local district has no other local educational need for such facilities.

This recommendation tends to be self explanatory. Existing public community or junior colleges may well continue to operate for an indefinite period of years. In response to enrollment pressures at the elementary- and secondary-school levels, to say nothing of increasing college enrollments and extensions in curricular offerings, a number of these institutions are being crowded out of facilities which they have shared with their local high schools. Consequently, in several cases, capital outlays for separate college facilities are being made. The establishment of an area community college may result in the closing of a junior college presently operating. It would be only just that an appropriate financial settlement of the nature suggested in **Recommendation 16** be legally provided in such circumstances.

¹⁶*Ibid.*, p. 107.

Recommendation 17. The area education district board should be required to employ an area superintendent who, in addition to having general administrative jurisdiction over the public area community college, should exercise educational and administrative leadership in providing cooperatively agreed upon services to local school systems located within the boundaries of the area district.

The area education districts suggested in this report would come into immediate existence on the effective date of the legislation suggested herein. Thus, it would be necessary for the area education superintendent to be employed at the time. There would be the appointment of a community college dean only in the event that the voters in the area education district should vote favorably on the proposition to establish and maintain a community college.

CHAPTER II

A Plan for the Establishment of Public Area Community Colleges in Iowa

This chapter shows how the study committee has translated its recommendations relating to the extension of Iowa's system of public two-year colleges into a definite plan for legislative consideration.

Gibson Report and House Resolution 6

While, as indicated in the Introduction, the Gibson Report has been generally accepted by the study committee as the basis from which further study was needed for the development of a statewide system of public area community colleges, the directive of House Resolution 6 of the Fifty-ninth General Assembly has been used as the key document in determining the direction and scope of this study.¹ The explanation accompanying this resolution made it clear that the legislature was interested in having the Department of Public Instruction submit a type of report different from the one they had requested of Gibson. It states,

The Gibson Report, authorized by the study committee last session, was not received in full until the middle of this session. It points out the problems but does not specifically give us the answers that we can use and the bills to implement them at this session.

As the discussion of **Recommendation 6** in CHAPTER I of this report points out, the Department felt that the legislature wanted a **definite plan with accompanying legislation**, not a **set of procedures**, which if followed by some agency would result in a plan.

Several other specific sections of House Resolution 6 gave added insight to the Department in the preparation of this report. They are quoted as,

House Resolution directing the department of public instruction to prepare a statewide plan for the development of public area community colleges

. . . public policy governing higher education in Iowa must recognize the educational and vocational aspirations of all persons who will need education beyond the high school;

.
the department of public instruction be directed to study and prepare a plan for a statewide system of public area community colleges, such plan to include all areas of the state and to take into consideration the program now offered by the existing junior colleges of the state.

. . . such recommendations and plan to relate to, but not limited to, the following matters:

1. Criteria for establishment of such colleges;
2. Organization, legal control, supervision and financial support of such colleges;
3. Regional location of such colleges;
-
5. Relationships of such community colleges with other parts of the educational system in the state.

In reviewing this directive, the study committee has considered the word "area" as the most significant term used in the resolution. The concept of an area supporting public education facilities is new to the educational structure of this state. The closest Iowa has come to such a concept is in allowing enrollment from an "area" to attend a locally supported and controlled institution. This is evident in our present junior college legal structure as well as in our area programs for vocational and technical education.

In neither of these situations, however, has there been any allowance made for such an "enrollment area" to have a voice in the local control and administration of the program or in requiring it to contribute to its financial support. Any differential in providing for the additional costs incurred by such a local district in maintaining programs has been only partially met through the use of state funds.

House Resolution 6 has been interpreted to mean that proposed public area community colleges would obtain their potential enrollment and a portion of their financial support as well as their control from their service area. This would be in keeping with the pattern of development of such

¹See APPENDIX A for complete text of this resolution.

community colleges in several other states.

The words "statewide plan" and "to include all areas of the state" have also been significant terms used in the directive. In conducting research on this problem, the committee has found it difficult to envision a statewide plan for a system of public area community colleges encompassing all areas of the state with potential enrollment and support coming from the service area of each without defining and establishing a specific area for each such college. The combination of these individually defined areas would provide the statewide system covering all of the state.

A third important aspect of the resolution centers around providing a higher education system that will meet the educational and vocational aspirations of all persons beyond high school. The consideration of this phase of the directive led the study committee to define the proposed functions of a public area community college and how a statewide system of such institutions would complement the existing public elementary, secondary, and higher education systems of the state.

Definition of Educational and Service Functions

In presenting a pattern of higher education in America, McConnell comments as follows concerning the role and functions of the community college:

Although the community college may be expected to relieve four-year institutions of the main burden of elementary instruction, this is by no means its only, or even its principal, justification. It performs other functions which are worthy in their own right. It enables many capable students to attend college who would otherwise find it financially impossible to do so. It opens its doors to students of more limited ability who nevertheless may deserve some formal training beyond the twelfth grade, if not a four-year course. In these two senses it widens opportunity; it assures the "right to try" in a system of higher education with a progressive increase in selectivity from two-year institutions to regional state colleges to centralized universities. The community college sorts out the students who have a good chance of doing successful work in four-year institutions and offers alternatives for those who are either uninterested in advanced education or deficient in ability. It provides for

the terminal student the first level of the training in general and technical education which is the requisite of a democratic, industrialized social order.²

With this role of the institution in mind, the following educational opportunities and services were proposed as functions that Iowa needed to have performed by area community colleges:

1. The first two years of regular college work including preprofessional education
2. Vocational and technical education
3. Programs for in-service training and re-training of workers
4. Programs of high-school completion for students of post-high-school age
5. Student personnel services
6. Community services

The complete expansion of the rationale and philosophy of making these educational and service opportunities available to the youth and adults of Iowa is not presented at this point in the report but is contained in CHAPTER I under the discussion of **Recommendation 9** and in CHAPTER VI. In summary, however, the study committee felt that these functions presented measurable gaps in or limitations of our present secondary and higher education structure. While in some instances their inclusion as potential offerings cannot be claimed as unique offerings of community colleges, they do represent areas of public educational responsibility that our present system can either not adequately perform or completely fulfill.

Problems of and Consideration of Present Junior Colleges

House Resolution 6 also directed the study committee to "take into consideration the program now offered by the existing junior colleges of the state." In reviewing this part of the directive, the word "program" has also been interpreted, as much as possible, to mean the existing colleges themselves.

By requesting that a "statewide system" be developed, the committee felt the legislature was asking that no more junior colleges be developed in Iowa; but in the establishment of a new plan, every effort should be made to allow the existing sixteen colleges to be absorbed into a comprehensive community college system. This has resulted

²T. R. McConnell, *A General Pattern for American Public Higher Education* (New York: McGraw-Hill Book Company, 1962), pp. 134-135.

in being one of the most difficult tasks faced by the study committee.

To gain perspective of this problem, a brief review of the development and present status of Iowa's existing junior colleges is necessary.

Mason City established the first public junior college in Iowa in 1918 although there was no legal recognition of post-high-school work in the state at that time. Iowa passed its first enabling legislation for such colleges in 1927 by providing that a local school district board, upon approval of the state superintendent and authorization of the district voters, could establish and maintain a junior college.

The early financial support was mainly from local taxation and student tuition. In 1949, state aid equivalent to \$.25 a day per student enrolled for twelve or more hours was established by the legislature. This was increased to \$1.00 a day per student in 1957 and in 1961 was again increased for out-of-district students only to \$1.50 per day per student.

The following statements about Iowa junior colleges by Medsker give additional insight into our present junior college system. He says,

The history of Iowa junior colleges is marked by a slow and painful struggle. Thirty-five institutions have been established but only sixteen are now in operation.

...³

In depicting one of the state's major educational problems, he further comments,

Long known as a state with many small junior colleges, Iowa has to cope with the problem of providing junior college education in an agricultural state with relatively few heavily populated areas.⁴

In further commenting on the size of our present colleges and continued requests for state aid, he states,

Iowa is over one hurdle with increased state aid, but there is still no aid for capital outlay and hence no real encouragement for districts to establish junior colleges or to acquire facilities for them. The problem of size still remains and must soon be studied if the state is to realize a legitimate return on its investment in these institutions. . . .⁵

During the 1961-1962 school year, Iowa's sixteen junior colleges had a total full-time enroll-

ment of 3,766. This gave an average of 236 students per institution. The range in enrollment was from 89 to 627. Some of this lack of enrollment can be explained by the size of the communities in which our colleges are located. Only three of the sixteen are in cities of over thirty thousand, and not one of the sixteen is located in any of Iowa's seven most populous counties.

The lack of enrollment has caused serious curtailment in the curricular offerings of these colleges. Medsker summarizes this by saying:

... The low enrollments resulting from small districts have precluded any breadth of program, with the result that most Iowa junior colleges offer a straight (and small-scale) university parallel program.⁶

A second problem indirectly related to size is that of combined facilities and instructional staff with that of the local high school. Only seven of the present sixteen colleges have some form of separate physical facilities. Six of these seven, however, are required to share additional facilities with the high school. The remainder of the sixteen are directly housed for all their functions in the high schools of their respective districts. A similar situation exists in terms of the college faculty. In the 1961-1962 school year, 57 per cent of the total faculty of the sixteen colleges also had a high-school teaching assignment.

The most perplexing problem in developing a statewide plan for comprehensive community colleges that takes into consideration the existing sixteen is the geographic location of those presently in operation. Nine of these colleges are clustered in roughly a twenty-county area in the north central part of the state. Seven of these nine fall within an area approximately sixty miles wide and eighty miles long. The remaining seven are distributed primarily along the southern and southeastern boundaries of the state. (See APPENDIX B for map showing location of these colleges.)

In terms of distribution, the present junior college system has very little semblance of a statewide pattern for a system of such institutions. This is even more evident, as was pointed out earlier, when the distribution of the present sixteen colleges is compared to the distribution of the state's population.

Knowing the limitations of the present junior colleges in terms of their size, curricular offerings, physical facilities, and geographic distribu-

³Leland I. Medsker, *The Junior College: Progress and Prospect* (New York: McGraw-Hill Book Company, 1960), p. 232.

⁴*Ibid.*, p. 231.

⁵*Ibid.*, p. 234.

⁶*Ibid.*, p. 232.

tion, the study committee has attempted to project a plan for community college education based on the area concept of support and control that fulfilled the requirements set forth in the legislative directive of House Resolution 6.

Previous "Area" Community College Proposals

The proposal of area supported and controlled community colleges for Iowa is not new to those acquainted with community college literature. In 1948, Starrak and Hughes coauthored a book entitled *The New Junior College* which in 1954 was revised under the title of *The Community College in the United States*.⁷ This publication contained a complete plan for the development in Iowa of area or regional community colleges and included a map showing the proposed locations for thirty-five such colleges with their service areas outlined. A proposed bill for the legal establishment of such colleges was also included in this publication.

Also, in 1950, the state's junior college deans at their annual workshop at Iowa City prepared a plan for the future development of community colleges in Iowa.⁸ While neither of these proposals was immediately adapted, many of these original ideas were incorporated into the plan as proposed in this report.

Development of Criteria

With the proposed desirable educational and service functions outlined by the committee, the second step in the development of a plan centered around isolating adequate criteria for the establishment of community college areas. It will be noted that the committee was interested in establishing criteria for community college districts or areas, not in developing criteria for the establishment of a college in such an area. While there is a relationship between these two lists of criteria, it is necessary to keep the separate purposes of each in mind. It was felt that there was no indication in House Resolution 6 that the legislature desired to mandate the establishment of community colleges.

The study committee attempted to create a plan that identified areas or regions that were adequate to support a comprehensive community college program but that allowed the people of

such a district the authority of determining whether a college was created or not. Thus, the criteria proposed in this report relate only to the factors of adequacy. The factors of readiness to avail themselves of the potential of such a defined adequate district are left to the concern of the local people.

The two basic criteria for determining the adequacy of an area or district center around its potential to provide the human as well as the financial resources to support the educational program desired.

Human Resources Necessary

In defining the human potential necessary for the adequate support of a community college, reference is most commonly made to the total population of the area, the high-school enrollment in the schools of the area, or the number of high-school graduates produced by the schools of the area. Adequate conversion ratios have been developed for all of these populations, but the study committee felt that the literature reviewed supported the use of the total high-school (9-12) enrollment as being the most applicable to the Iowa situation.

Regardless of the population base that is used, the end purpose is to determine the number of potential enrollees in the community college. As a result, some figure is selected as being an "adequate" or a "minimum" college enrollment necessary to support the desired educational program; and this figure is then converted in terms of the base population necessary to allow an efficient and effective operation of the college.

Many studies have been conducted on this problem. Pence, in his study of the Oregon situation, has the following to say in terms of his conclusions on necessary college enrollments:

College enrollment—seems to be considered the most important criteria. The problem is to determine the minimum enrollment on which a college can operate at a reasonable economic efficiency and still offer sufficient curricula to meet the needs of full-time students. Forty of the references have given minimum figures, running from 40 to 400 students. Approximately half the references use the figure of 200. Some have indicated and others have implied that they are thinking of a single function or single curriculum operation, meaning either transfer or vocational-technical curriculum. Two hundred

⁷James A. Starrak and Raymond M. Hughes, *The Community College in the United States* (Ames: The Iowa State College Press, 1954). Publisher's name now Iowa State University Press.

⁸*Educational Needs: Iowa's Young Adults* (Des Moines: Department of Public Instruction, State of Iowa, 1951).

full-time students would provide sufficient base for a two-year college offering only liberal arts. The extra adults and special part-time students will supplement these. Three hundred full-time students would seem more realistic for a comprehensive community college offering both transfer and terminal programs. Several writers would allow the college two or three years in which to develop this potential.⁹

Morrison and Martorana in proposing guidelines for action in establishing two-year colleges had the following to say concerning enrollments:

Relatively few sources used in this study recommended a 2-year college of less than 200 students. The 200-400 range of enrollment for a beginning college was the one most frequently found, the upper limit being preferred especially where the college planned was to be comprehensive in its program. Different methods can be used to estimate the potential enrollment. Among these, however, estimates based on high school enrollment or high school graduates and those related to the number of persons 18 or 19 years old in the area appear most often. Relatively few sources supported use of enrollment estimates made in terms of total population.

A potential enrollment of 400 full-time students at the end of 5 years would appear to be necessary to provide adequate breadth of program for a 2-year college. . . .¹⁰

The California State Department of Education tends, in their standards for determining the feasibility of junior college districts, to support Morrison and Martorana. They say,

A minimum enrollment of 400 is generally required. Isolation of the area and sparsity of population must be taken into consideration in relation to this standard.¹¹

The majority of the writers quoting minimum figures seem to be giving conservative estimates and also estimates that tend to be more favorable for the establishment of a traditional college parallel curriculum rather than the comprehensive program purported to be the function of the community college. This can be illustrated by the following comments by Wattenbarger concerning estimating potential enrollment:

. . . One can assume that by using a 200 minimum enrollment potential for the freshman and sophomore years a total enrollment in excess of this number may well be expected.¹²

Wattenbarger's comments have been well borne out in the development of community junior colleges in Florida. They have had growth in "excess" of minimum predictions. With this growth has come the expansion and diversification of the curriculum. Much of this growth, however, has been due to the general population expansion of the state. One might wonder if minimum criteria were established for areas that were not experiencing population growth or maybe even population decline, if enrollment in "excess" of the minimum would be encountered. In developing criteria for Iowa, this problem was given serious consideration.

There were also serious doubts in the minds of the committee if the breadth of program desired for the people of this state could be offered on enrollments of two to three hundred. This problem seems to be parallel in some ways to that of establishing adequate enrollment at the secondary level for comprehensive high schools. As a state educational agency, we are well aware of the necessity of minimum enrollments of approximately 500 to offer programs meeting the majority of educational needs of pupils at this level of education. Again, the narrower college transfer or college preparatory program can be effectively offered with secondary enrollments of 250, but this is a minority education program and falls far short of our democratic ideal of purposeful education for all people. Even with high school enrollments of 500, only limited offerings in vocational education can be made. Knowing this, it is difficult to envision a comprehensive post-high-school program with its main function oriented toward terminal vocational programs being able to operate with less than a minimum enrollment of 500 day-school students.

The committee decided to use the college enrollment potential of 500 as a firm requirement feeling even then that the feasibility of offering more than a limited breadth of program did not become apparent until enrollments approaching 1,000 or more were achieved.

From the minimum enrollment figure of 500

⁹Pence, *op. cit.*, p. 102.

¹⁰Morrison and Martorana, *op. cit.*, p. 61.

¹¹Hugh G. Price, *California Public Junior Colleges* (Sacramento: California State Department of Education, February, 1953), p. 36.

¹²James L. Wattenbarger, "How to Estimate the Potential Enrollment for Your Proposed Junior College Area," *Florida's New Community Junior Colleges, Program and Proceedings of the Fifth Annual Junior College Conference*, January 25-26, 1957, W. Hugh Stickler, editor (Tallahassee: Florida State University, 1957), p. 12.

determined as necessary to support the desired educational program, the committee projected this back to the high-school population necessary to produce such an enrollment. Since the objective was to determine adequacy of a district or area, the task was to determine the population necessary to produce a **potential** enrollment.

As was previously mentioned, conversion ratios from high-school enrollment to potential college enrollment have been adequately established. There is also general agreement among the various authors on this subject with regard to what this ratio should be. Wattenbarger states, ". . . the potential enrollment of day students should be calculated on a basis of one junior college student for every three students enrolled in high school grades ten through twelve. (1:3)."¹³

In talking about a potential enrollment of 400 students, Morrison and Martorana concur with this ratio by saying,

. . . To insure such a potential, an enrollment of 900 students in the 3-year high schools of the area or 1,200-1,500 students in 4-year high schools is considered a minimum.¹⁴

Thus, it can be seen that between 20 and 30 per cent of a high-school (9-12) enrollment could be considered as the **potential** full-time day-school enrollment of a community college.

In developing a plan for Iowa, the committee felt that establishing a minimum criterion of 5,000 students enrolled in public, private, and parochial schools in grades nine through twelve would obtain **potential** enrollments of approximately 1,000 community-college students and would almost insure the 500-level enrollment that was agreed upon as being the necessary minimum.

Financial Resources Necessary

The second basic criterion in determining the adequacy of an area or a district is its ability to financially support the educational program desired. This is a more difficult criterion to determine than the one of potential enrollment.

Traditionally, the support for community or junior colleges has come from the following three sources: state funds, local district or county funds, and student fees or tuition. The proportions of these sources are further modified by the local district and/or the state educational philosophy. Regardless of their distribution and the

proportion of their distribution, their total must still equal the operational and capital outlay expenditures of the individual institution concerned.

In quoting current operational costs of community junior colleges, Wattenbarger states,

. . . A sound educational program cannot be built upon the promise that it is cheap. An average cost in many sections of the country at present would range between \$500 and \$900 per student for current operating expenses. . . .¹⁵

Morrison and Martorana in further commenting on costs and diversity of programs say,

. . . If the greater diversity includes a considerable number of technical programs, the cost per student will be higher. As an example, one institution indicated that the operational cost of a new technical program was \$1,200 per student per year. The size of the institution, the salaries of the staff and administrators, the quality of the guidance program—these and many other factors are involved in per student costs. . . .¹⁶

In presenting instructional costs of technical institute curriculums, Henninger cites per student per year figures up to \$1,560.¹⁷

Since the report proposes that Iowa establish community colleges with a broad offering of terminal, technical, and vocational curriculums as well as the preprofessional and college transfer programs, operational costs of \$1,000 per student were used by the study committee in further cost calculations.

With this scope of program, contemplated capital outlay costs were also established which would allow separate campus facilities to be developed that could adequately house such a community college. In reporting the present range of such operational costs, Wattenbarger says,

. . . Costs vary considerably from region to region, and it is impossible to establish a figure which would meet the building needs of all sections of the country. From \$2,400 per student up to \$4,500 per student would take care of the basic capital needs for instruction in most sections of the country.¹⁸

¹³*Establishing Legal Bases for Community Colleges*, Proceedings of a Conference Sponsored by the Commission on Legislation of the American Association of Junior Colleges, October 20-21, 1961, Chicago, Illinois; Washington 6, D. C.: American Association of Junior Colleges, 1962), p. 11.

¹⁴Morrison and Martorana, *op. cit.*, pp. 39-40.

¹⁵Adapted from G. Ross Henninger, *The Technical Institute in America* (New York: McGraw-Hill Book Company, 1959), pp. 115-116.

¹⁶*Establishing Legal Bases for Community Colleges, op. cit.*, p. 12.

¹⁷*Ibid.*, p. 12.

¹⁸Morrison and Martorana, *op. cit.*, p. 61.

Henninger gives additional information on this subject. He says,

In New York, as of 1957-1958, there were in operation, under the supervision of the State University of New York, six "Agricultural and Technical Institutes" and eleven locally sponsored "Community Colleges." Although the specific costs vary among these institutions, experience over a period of years has led to a general formula for projecting capital costs for new construction. To develop a new campus from the ground up, the per capita cost is figured at \$4000. Thus on this basis a campus fully equipped and ready to operate to accommodate 1000 students would represent a capital cost of approximately \$4,000,000.¹⁹

The committee concluded that the figures cited by Henninger could be taken as representative of the capital outlay investments necessary for the development of facilities in this state.

Using the potential enrollment figure of 1,000 students, it was possible to obtain estimated total operational and capital outlay costs per year. With 1,000 students enrolled and operational costs of \$1,000 per student, this portion of the total cost would be \$1,000,000 a year. Again, using the enrollment of 1,000 and the capital outlay figure of \$4,000 per student, the total cost of facilities and equipment would be \$4,000,000. To distribute this cost on a yearly basis, it was assumed that twenty-year bonds could be sold for 4 per cent. This would require principal and interest payments of approximately \$300,000 per year. Thus, the total cost of operating the proposed institution enrolling 1,000 students would be \$1,300,000 a year.

This total cost figure was used in determining the necessary minimum taxable valuation that would be judged adequate to support such an institution. This required that some assumptions be made in terms of the distribution of the normal sources of community college revenue: state funds, local or county district funds, and tuition and fees.

Recommendation 12 in CHAPTER I of this report proposes that the expenditure for capital outlay be borne by the individual area education district.

In reviewing the history of the educational support pattern in this state, there was clear evidence that the people of Iowa had a strong belief in local

support of "local" educational programs. This applied to operational as well as to capital outlay funds. There was no evidence to indicate that as a state there was a past history or future trend in the direction of appropriating state funds for capital outlay to any public educational systems other than the three state institutions of higher learning. Even for these three institutions, the expenditures for physical facilities from state revenue has always been conservative. There was ample evidence, however, indicating that state revenue sources were being increasingly looked toward for partial assistance in financing local operational costs. Thus, the recommendation was made that capital outlay be the responsibility of the local district and that state funds be looked toward for assistance in financing operational costs.

The present aid law for community or junior colleges provides either \$180 a year for an in-district student or \$270 a year for an out-of-district student to the local community college to assist in paying operational costs. It was hoped that, if the recommendations of this report were accepted, state aid to any newly established community colleges could be increased to a minimum of \$300 per year regardless of whether an in-district or out-of-district student was involved. No attempt, however, was made to legislate such aid; but the recommendation states that operational costs "should be shared by the state and the district in proportions to be determined from time to time by the General Assembly."

Thus, the local district would be obligated to pay a portion of the operational expenses plus having the full responsibility for capital outlay. Equalization of the local financial support is anticipated by further recommending that such a support pattern should be "incorporated in the foundation program when adopted by legislative action."

The final source of revenue needing some distributive assumptions made for it was tuition and fees. The philosophy of the study committee was to make community college education truly public education and, thus, tuition free. It was also realized, as is explained in the expansion of **Recommendation 13** in CHAPTER I, that this point of view, while generally agreed upon in philosophy, is now more a goal toward which to work than a reality. The present pattern of support for higher education in this state reflects that the majority of its people feel that, at this level of education,

¹⁹Henninger, *op. cit.*, p. 119.

the student should be required to assist in the financing of his education by paying a reasonable fee or tuition. In this report, however, there is no proposed legislation mandating that such a tuition be charged. Instead, it is recommended that the decision be left to the controlling board of the institution concerned. This report assumed that some tuition would be charged; but, as a basis for figuring adequate valuations, tuition charges of not more than \$200 per year were predicted.

To make up the total yearly cost (\$1,300,000) of providing and operating a community college serving 1,000 students, the final distribution of estimated revenue sources was as follows:

Operating Income from Students and State Aid	
Student Tuition (\$200 × 1,000)	\$200,000
State Aid (\$300 × 1,000) ..	300,000
	\$ 500,000
Operating Income from the Area Education District	500,000
Capital Outlay Income from the Area Education District	300,000
	\$1,300,000

Using these estimated projections, a total area education district valuation of \$150,000,000 was deemed necessary to support the educational program. With this taxable valuation base and the anticipated additional revenue sources of tuition and state aid, a proposed area education district could provide community-college education to all post-high-school-age youth and adults of the area for less than a six-mill local levy.

In projecting these educational costs, every effort has been made to quote estimates that were high enough and enrollment projections that were adequate to insure that the taxable valuation base selected was sufficiently sound to support at a reasonable level of adequacy the type of institution just described. These projections have been made without taking into consideration supplemental federal aids for both capital outlay and operational costs which might come into the picture in the future. The study committee was of the opinion that the financial criteria as presented represented a reasonable and efficient way of providing for Iowa community-college education.

Commuting Distance of Majority of the People

A third criterion that was considered necessary for the development of a plan was availability or accessibility of the college to potential students. Historically, the junior and community college concepts have both been built around the idea of these institutions being mainly commuting colleges. Such a philosophy is apparent in the present tendency to use the term "community" in describing them. However, the developments in transportation and methods of communication have drastically changed earlier beliefs in regard to a community college's area of effective influence. In summarizing travel criteria, Pence says,

... The early writers in the field were concerned more with the extended secondary school type two-year college designed to serve an immediate area within a given public school district, and as a result their idea of commuting distance to an "area" college was not developed. The review of the literature shows that the miles have increased with the years, until today some are thinking in terms of up to 50 miles radius.²⁰

In attempting to apply the travel radius in terms of miles, it became apparent that this introduced additional variables to such a criterion: availability of and types of roads, the topography of the area, and population density and distribution. Morrison and Martorana seem to present a more realistic criterion in terms of accessibility. They say,

... At present, 1 hour each way devoted to travel would appear to set the practical limit of maximum daily commuting time. Experience has shown that beyond this limit the student potential drops rapidly.²¹

It was this criterion of time that was adopted by the committee as being the most applicable to the Iowa situation. However, the pattern of population distribution of Iowa and its lack of density in specific sections made it unrealistic to assume that community-college enrollments adequate to support broad educational programs could be maintained if such institutions were located so as to be within a maximum of one hour's commuting distance of all potential students. In the final development of this criterion, the committee proposed that an area be capable of establishing a single administrative structure for community-college education that would allow the establish-

²⁰Pence, *op. cit.*, p. 110.

²¹Morrison and Martorana, *op. cit.*, p. 63.

ment of a "center or centers located so as to be within one-hour's driving time of the majority of the students to be served." (See CHAPTER I, Recommendation 15, Item b.)

Existing Community Characteristics

The final criterion that was selected as necessary for proposing the establishment of districts adequate to support community colleges was that of recognizing existing "community characteristics" of the state. Public two-year colleges have always been strongly oriented toward fulfilling local or community educational needs. As is pointed out in CHAPTER VI of this report, there has been a marked shift toward broadening the definition of educational needs to include more than the university parallel program. Just as this change has taken place in the definition of needs, a similar change has occurred in our definition of the community.

Our early concept of a community centered around an intimate "face-to-face" acquaintance with and knowledge of the people of the community. The boundaries or limits of early communities were determined mainly by the methods of transportation and communication of the time. Technological advances in both transportation and communication have dramatically expanded the ability of people to maintain such close "face-to-face" relationships.

With the increased ability of people to communicate has come the expansion of the boundaries of recognizable communities. These boundaries will continue to expand, and a definition of a community that is adequate for 1963 will most likely be inadequate for 1980.

While the mobility of the defined boundaries of a community must be recognized, and such constant change makes it difficult to project the service needs of people, education will always be one such need. The most prevalent mistake made, however, in such planning is not in defining the service area as too large, but in constantly basing it on an area too small for success.

Iowa does have definable "community" areas that go beyond the boundaries of its largest cities. In defining economic community areas, Karl Fox, Head of the Department of Economics and Sociology at Iowa State University, says,

... As I look at a map of Iowa with its 2,800,000 people and 57,000 square miles of area, it seems to me that I can divide it into something like 12 areas. Three of these areas

have metropolitan centers of 200,000 or more, three of about 100,000 and two of about 50,000; four have central cities of 25,000 to 35,000. There are five other cities in Iowa (not counted as part of the 12 metropolitan cores or central cities already mentioned) of 20,000 to 35,000, but it seems to me that they are economically tributary to various of the larger centers.

On the average, each of these 12 areas contains a little less than 5,000 square miles, equivalent to a square measuring 70 miles along each edge. The average population per area is about 250,000; the average number of counties per area is 8 or 9, and in general the area boundaries . . . do not coincide with county lines. The central cities of adjacent areas are rarely less than 50 miles or more than 100 miles apart; 70 miles would be a fair average.²²

In developing a plan for a statewide system of public area community colleges, the study committee felt that a criterion requiring the consideration of existing "community characteristics" such as defined by Fox should have high priority.

The final criteria that were adopted by the committee are summarized as follows:

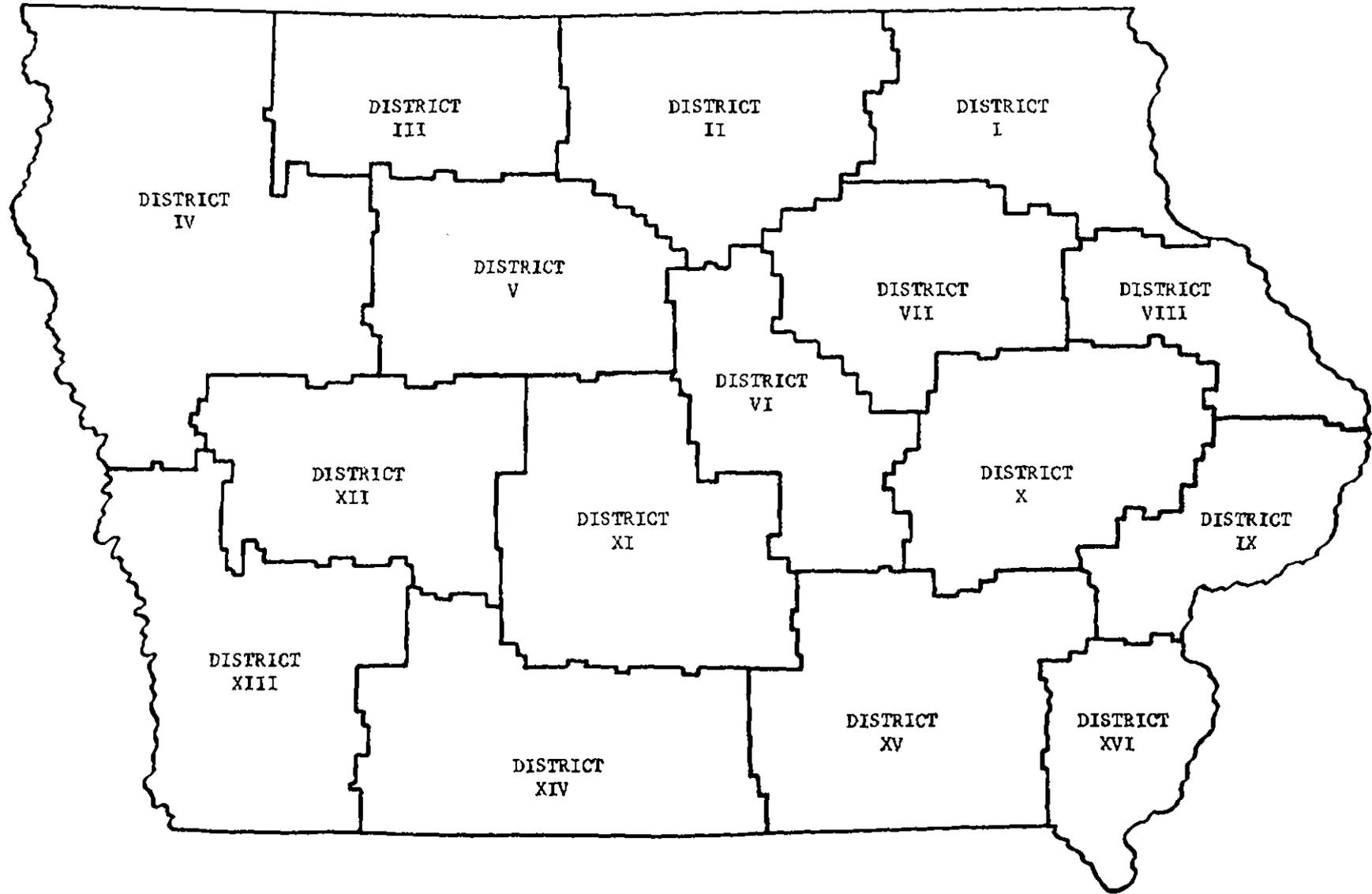
1. Recognition is taken of the existing cultural, social, and economic "community characteristics" existing in an area or region.
2. The capability of establishing a single administrative structure for its public area community college with its attendance center or centers located so as to be within one-hour's driving time of the majority of the students to be served.
3. A minimum area assessed taxable valuation of \$150,000,000.
4. A minimum area school enrollment of 5,000 public, private, and parochial pupils in grades nine through twelve.

Application of the Criteria in the Development of Sixteen Area Education Districts

The application of these criteria to the State of Iowa resulted in the sixteen proposed area education districts that appear on page 29. Each individual district is shown in detail in the supplement to this chapter. It can be seen that all districts meet the minimum criteria of high school enrollment and taxable valuation.

²²Karl A. Fox, "Delineating the Area," paper presented at the Conference on Area Development, January 3-10, 1962, at Athens, Georgia.

PROPOSED SIXTEEN AREA EDUCATION DISTRICTS



However, no attempt was made to keep districts at or near the minimum developed. The criteria were mainly used to insure that the most "inadequate" areas of the state, in terms of population and taxable valuation, were still incorporated into "adequate" educational districts to offer the minimum proposed community-college program.

An attempt was made to equalize, as much as possible, each district in terms of its ability to pay for educational programs and services. The variance of from \$23,630 to \$36,057 in the average money behind each high school (9-12) child indicates that this was not entirely possible. Because of this, the recommendation was made that the financing of community-college education be incorporated into any financial foundation program adopted by the legislature.

All boundaries of the proposed area education districts are drawn along school district lines as they existed July 1, 1962. No school district was divided so that it could appear in more than one area education district. In some instances, however, it was necessary to divide existing county school systems. This was done only when such a division appeared to provide a more equitable distribution of human and financial resources of the area as well as to equalize travel distances.

The proposed plan possesses the capacity to allow districts to make boundary adjustments. Such adjustments could be made in the following three ways:

1. Through local school district reorganization. In reorganizations occurring in districts that comprise area education district boundaries, the newly reorganized district shall automatically become a part of the area education district in which the majority of its population resides.
2. Through mutual consent and subsequent legal action of the concerned area education districts.
3. Through appeal to the State Board of Public Instruction.

A review of the sixteen districts indicates that all the major population centers of the state fall approximately within the geographic center of some district. This would be true of Districts II, V, VI, VII, X, XI, and XV. Districts IV, VIII, IX, XIII, and XVI fit this same pattern to a more limited degree with the major population centers being on either the eastern or western borders of the state. In the state all incorporated cities of 10,000 or more are in these 12 districts.

Districts I, III, XII, and XIV have no major population centers but do possess the capacity to provide community-college education in excess of the minimum criteria recommended. In preparing a total plan for the state, it proved impracticable to incorporate these four districts into the other twelve that are proposed without seriously violating the criterion of commuting distance.

Since these districts would not have the same capacity to provide cooperative training stations and the industrially related opportunities that those districts possessing metropolitan centers could provide, the curricular offerings of these four districts might differ in breadth of technical and vocational education from the remaining twelve. This individual district variance in curricular offerings is to be expected. The plan as proposed by the committee was to provide a statewide system for community-college education.

While House Resolution 6 requested that the Department recommend the "regional location" of proposed community colleges, the study committee felt that the proposal of the sixteen districts fulfilled this criterion. No attempt was made to recommend the campus site within each area education district. The population and geographic centers of each district would give some evidence as to possible locations. The majority of the area education districts were projected as being able to provide community-college education in a single campus setting within each district. However, in an area such as District IV, the option to have multi-campus centers was made possible.

While the existing community characteristics, population and its distribution, and highway facilities were used to develop the area education districts, it was realized that none of these characteristics was static and that future changes would require adjustments. The potential for this capacity to adjust was given every possible consideration in the development of the plan. Continued study, however, with resulting modifications under the methods outlined in this report will be necessary if this system is to retain the capacity to meet the educational needs of post-high-school-age youth and adults of Iowa in an effective manner.

Summary

The plan for providing community-college education as proposed in this chapter presents to Iowa

a new concept in educational structure. To implement it in the full scope of the intent of the study committee will require that many revisions be made in the present provisions for two-year community-college education in Iowa. In reviewing the directive of House Resolution 6, the study committee has been confident that the legislature fully realized that such change was necessary. To realize these changes will require that professional as well as lay persons place the interest and welfare of all Iowans for educational opportunities above short-range individual or community interests.

It has also been evident that the legislature had

a sincere interest in making appropriate educational programs available for all youth and adults of post-high-school age and, by directing that this study be done, was expressing confidence in the potential of area community colleges to provide such programs and services.

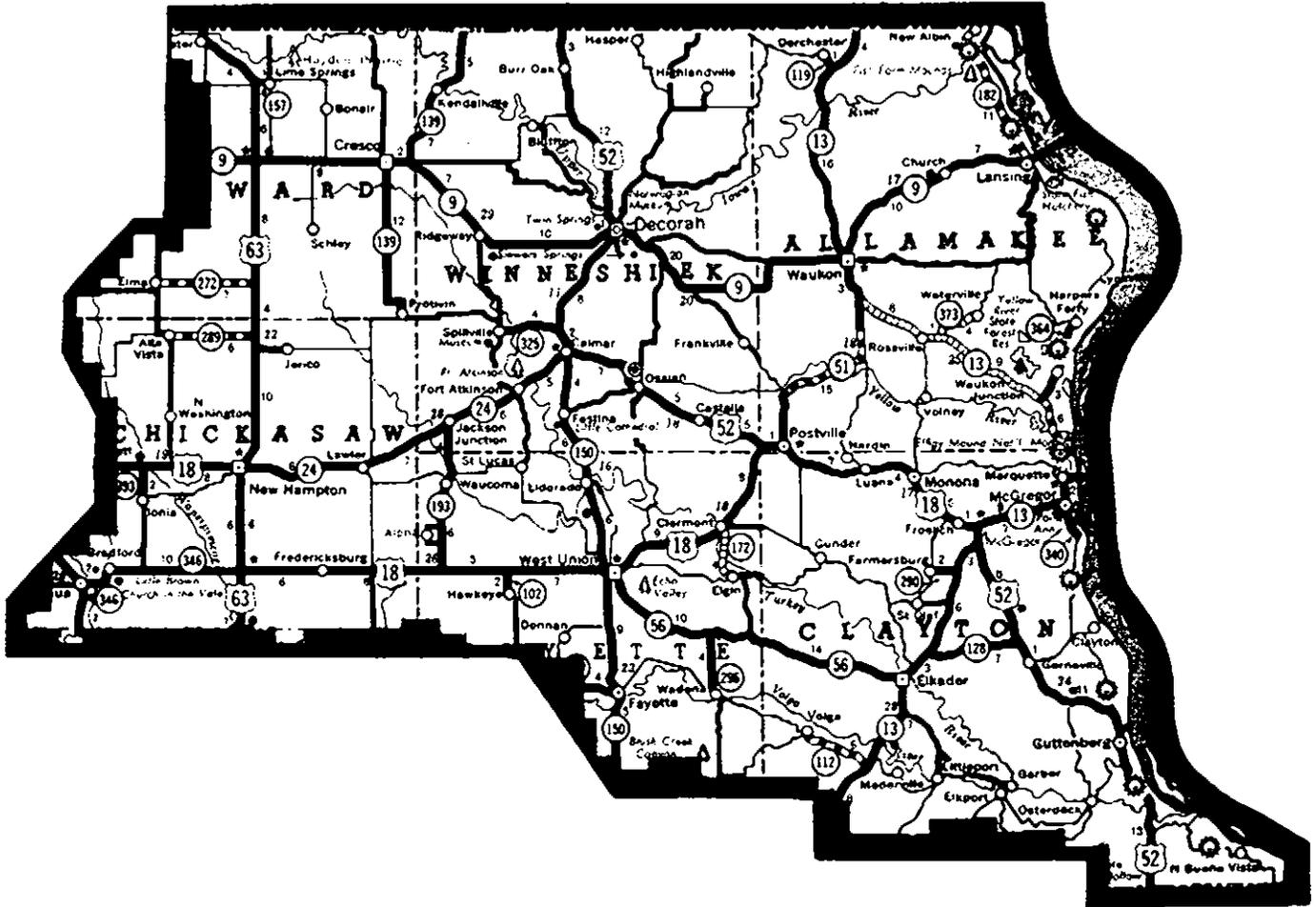
The sixteen area education districts as outlined possess the capacity to fulfill the intent of the legislature—making public area community-college education available in Iowa. The plan as presented in this chapter provides that the development of the potential of these districts is dependent upon, and left to, the responsibility of the people of the state.

Supplement CHAPTER II
Proposed Area Education Districts

DISTRICT I

Taxable Assessed
Valuation
\$186,626,397

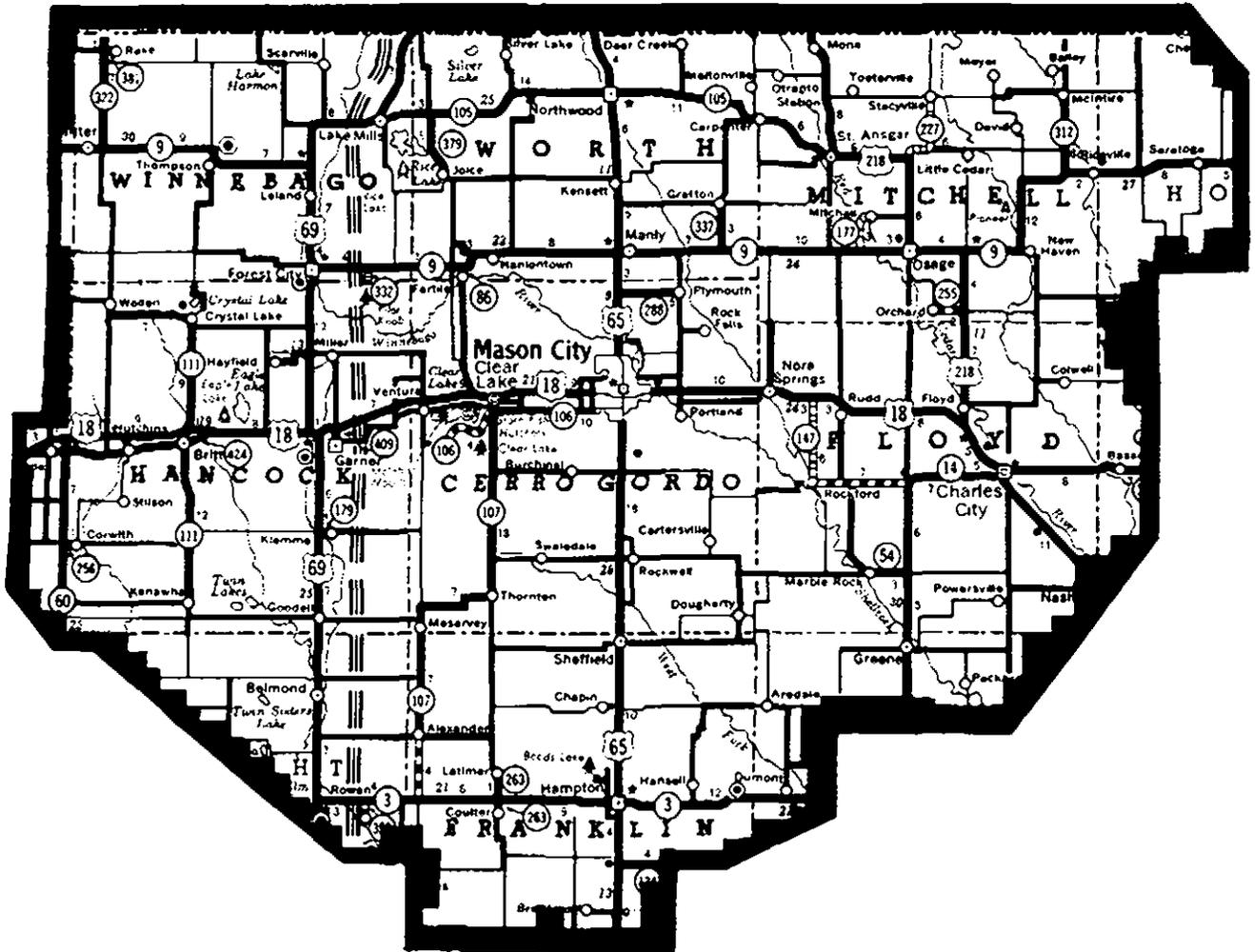
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
6,655



DISTRICT II

Taxable Assessed
Valuation
\$320,548,571

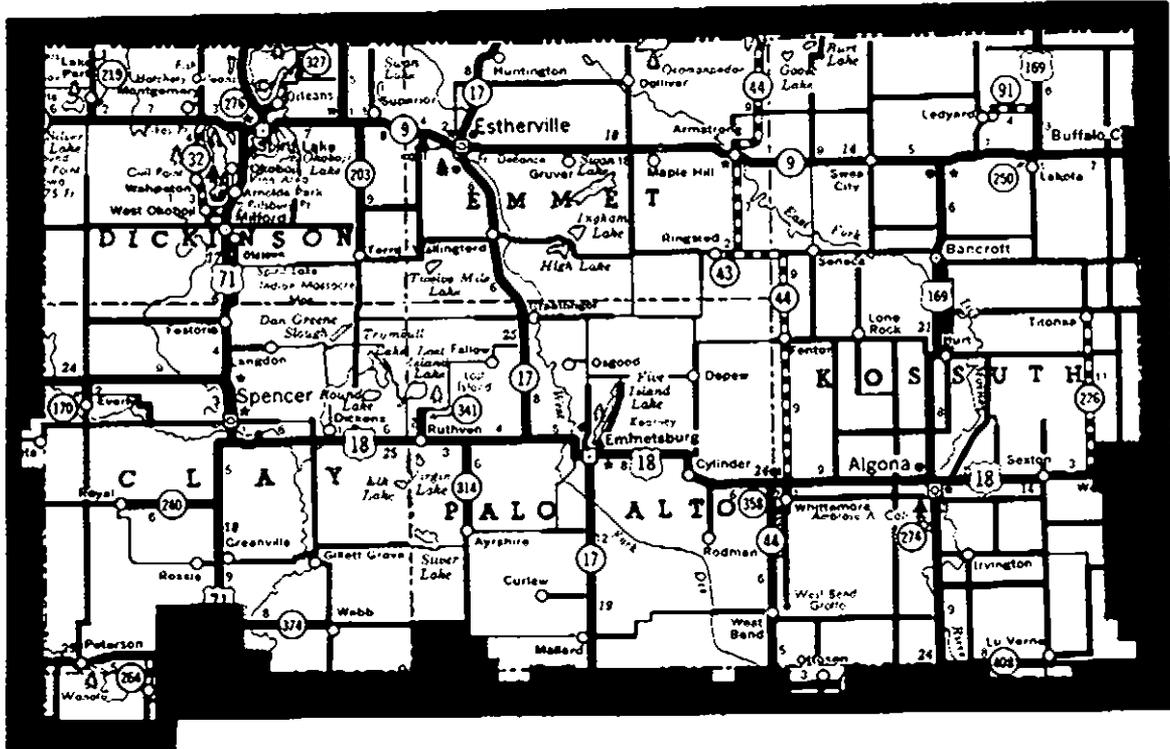
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
9,797



DISTRICT III

Taxable Assessed
Valuation
\$210,055,716

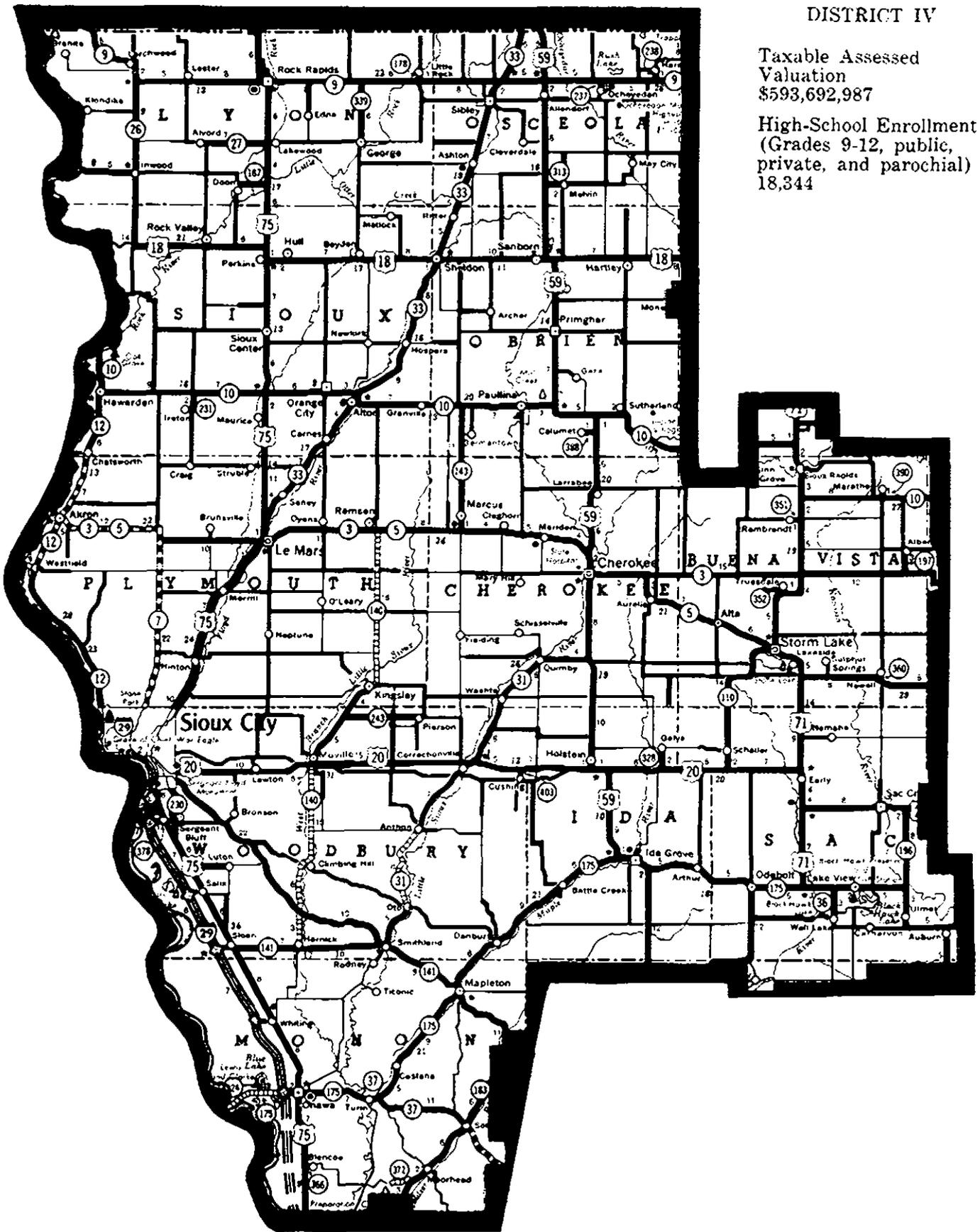
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
5,996



DISTRICT IV

Taxable Assessed
Valuation
\$593,692,987

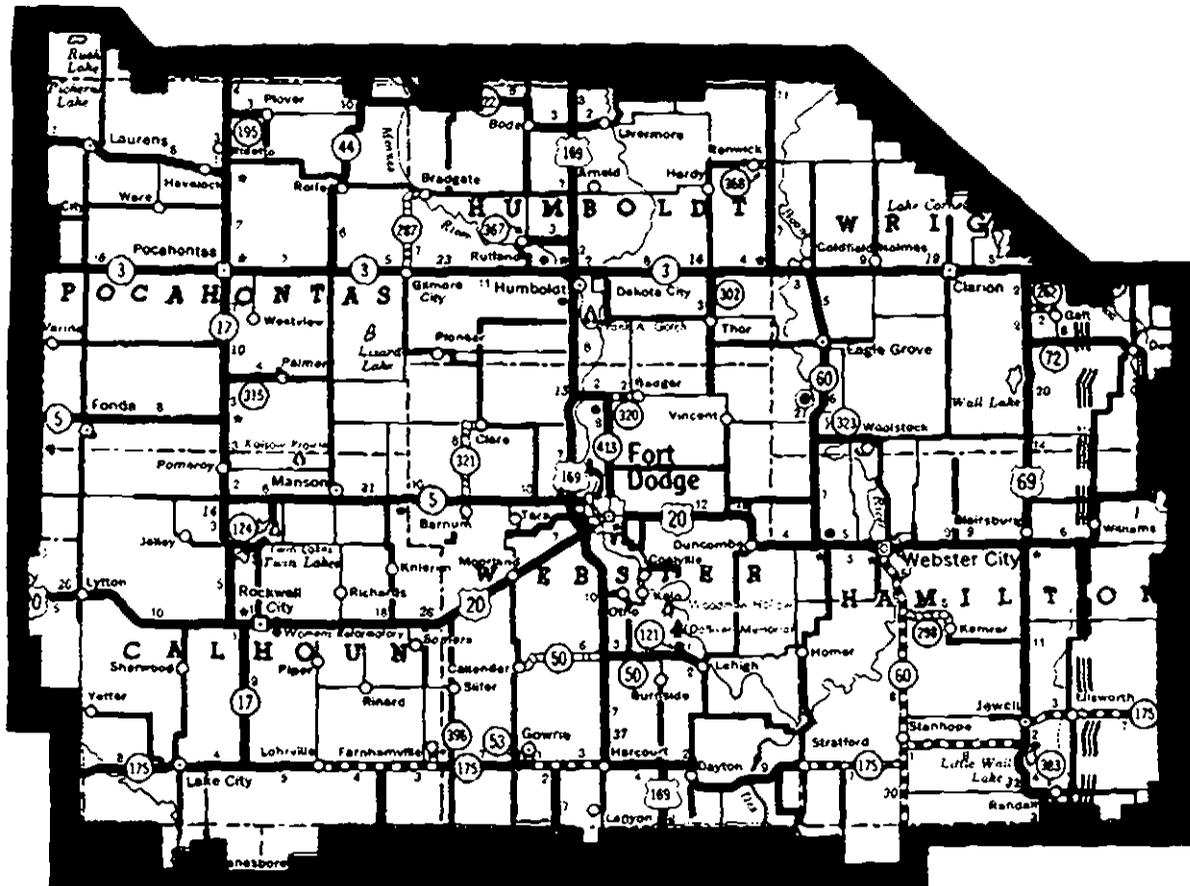
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
18,344



DISTRICT V

Taxable Assessed
Valuation
\$314,199,869

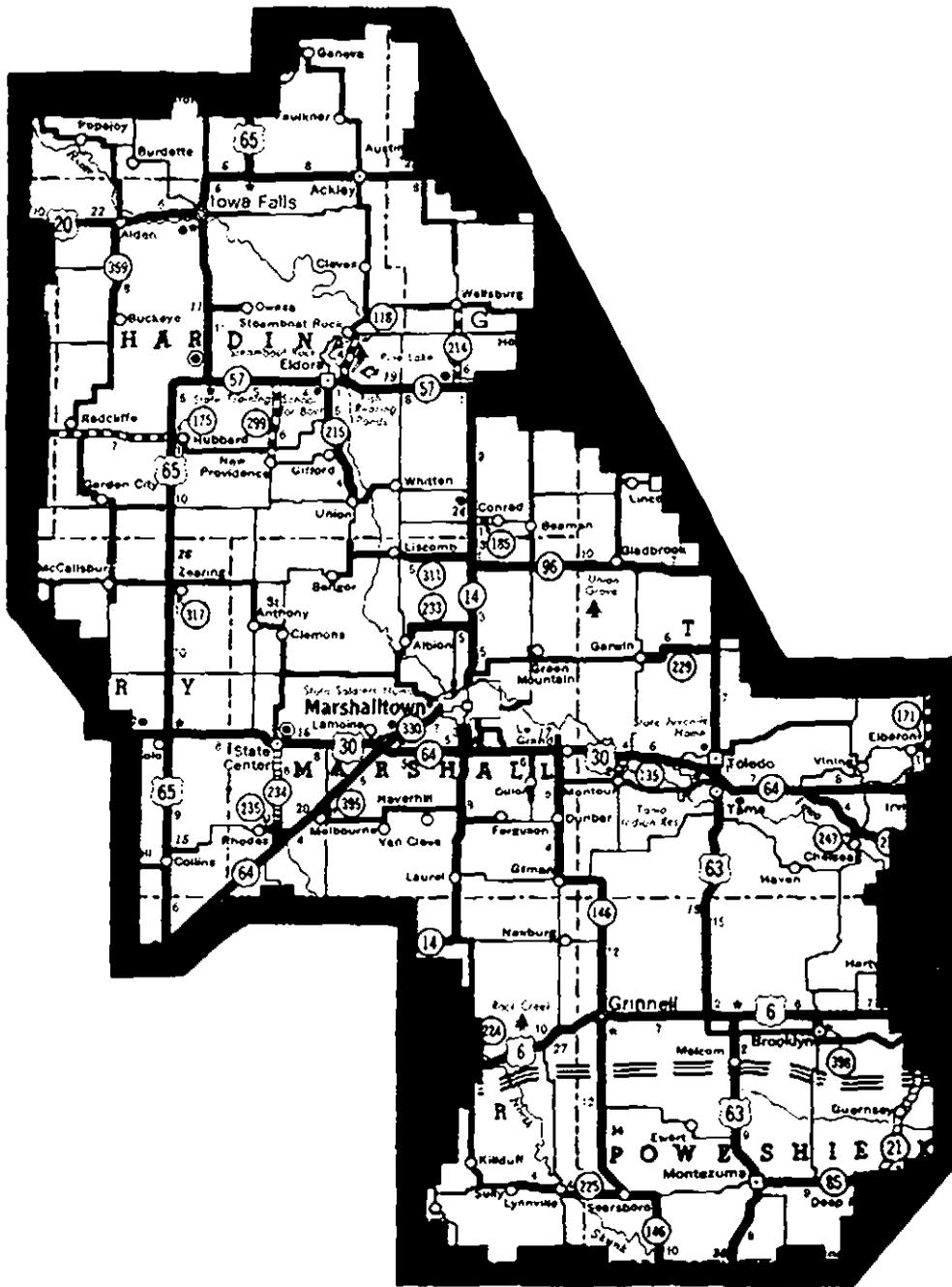
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
8,714



DISTRICT VI

Taxable Assessed
Valuation
\$249,612,448

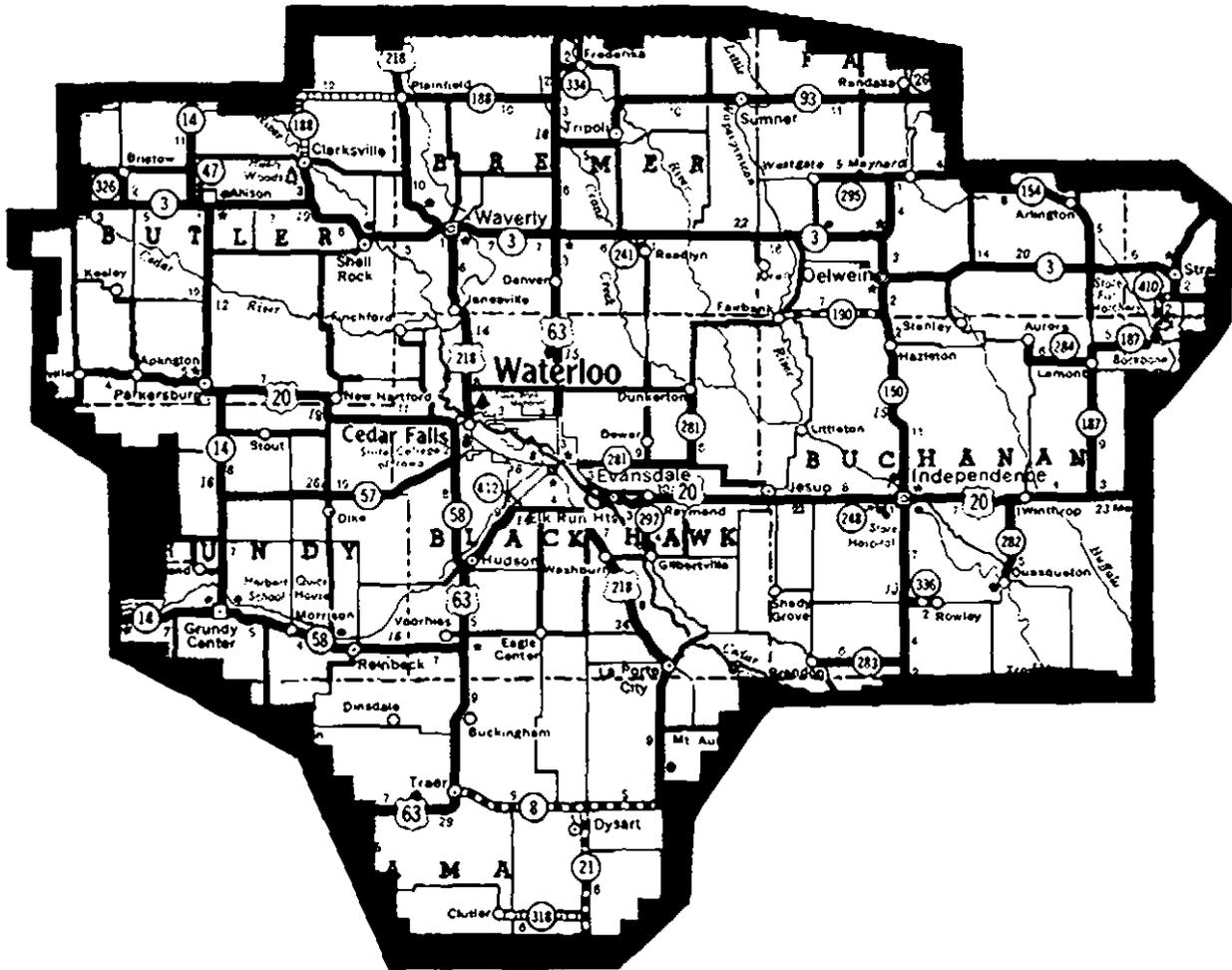
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
7,311



DISTRICT VII

Taxable Assessed
Valuation
\$402,616,990

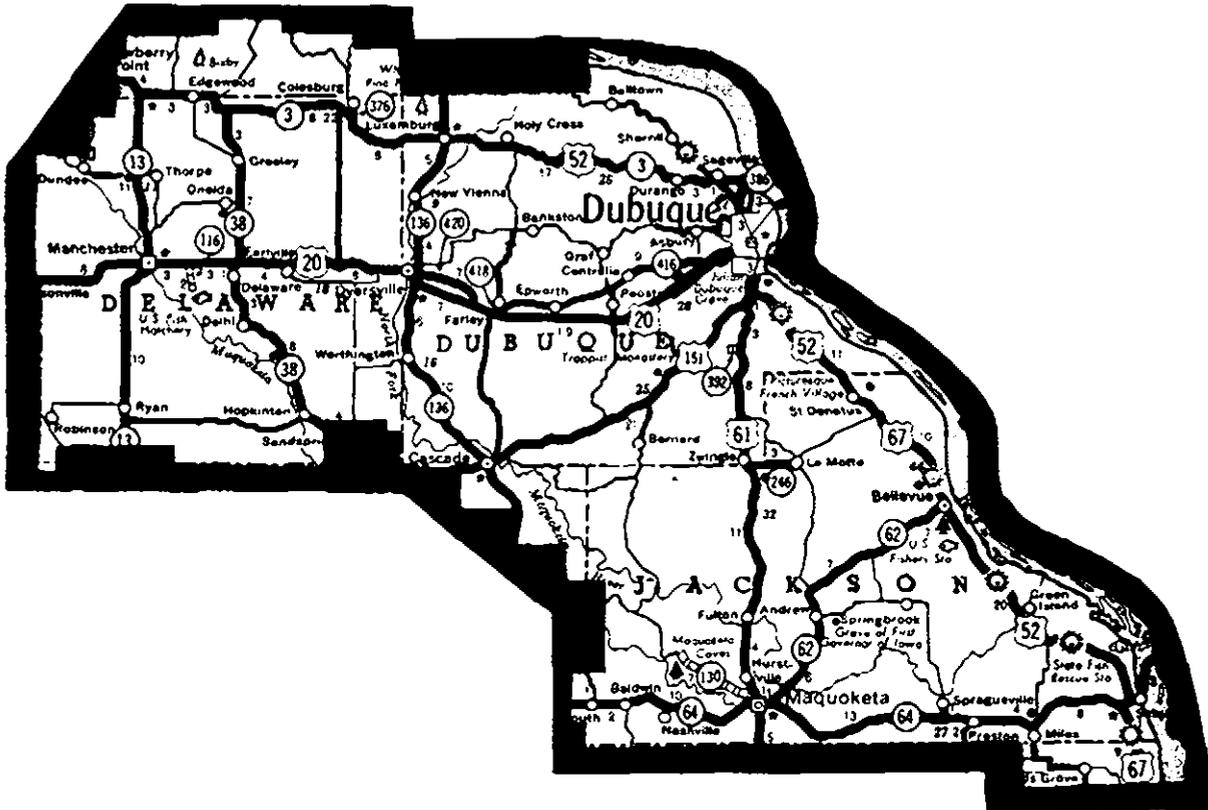
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
14,017



DISTRICT VIII

Taxable Assessed
Valuation
\$196,639,632

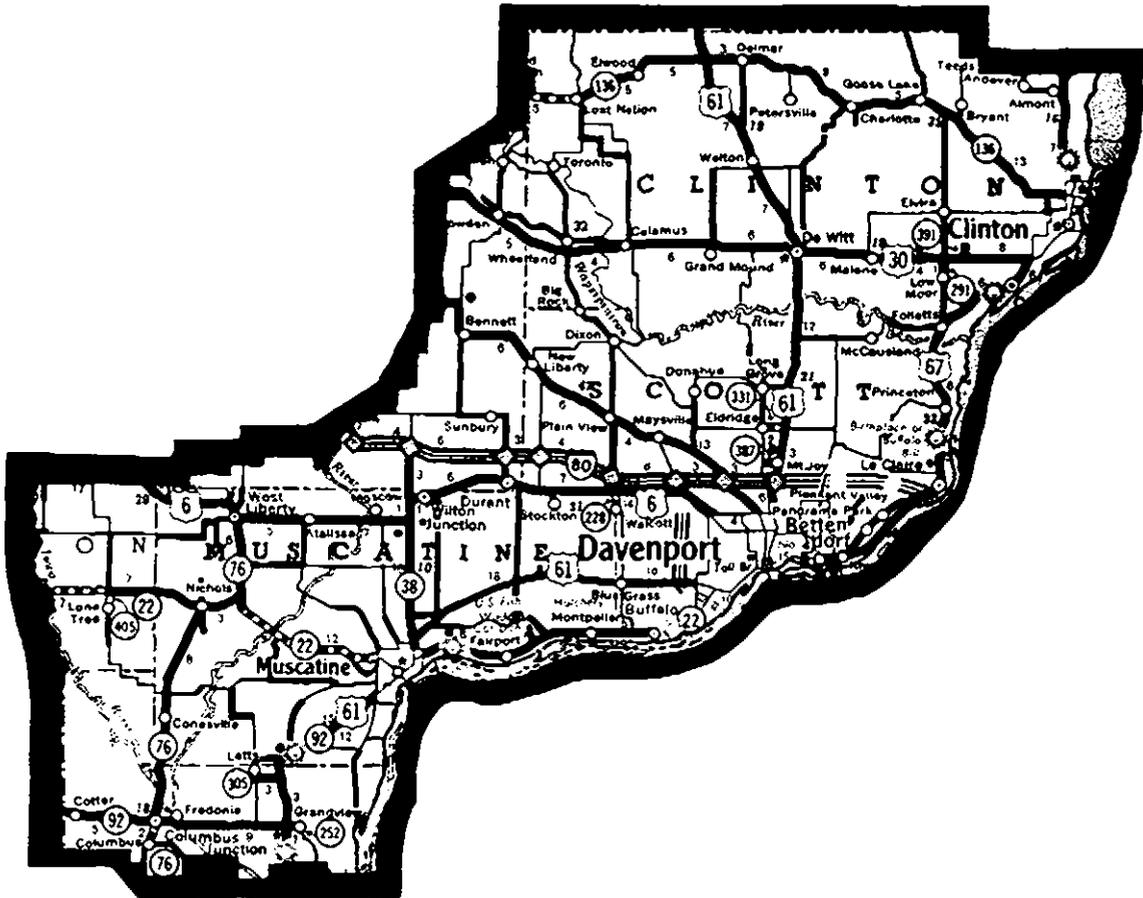
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
7,747



DISTRICT IX

Taxable Assessed
Valuation
\$385,274,087

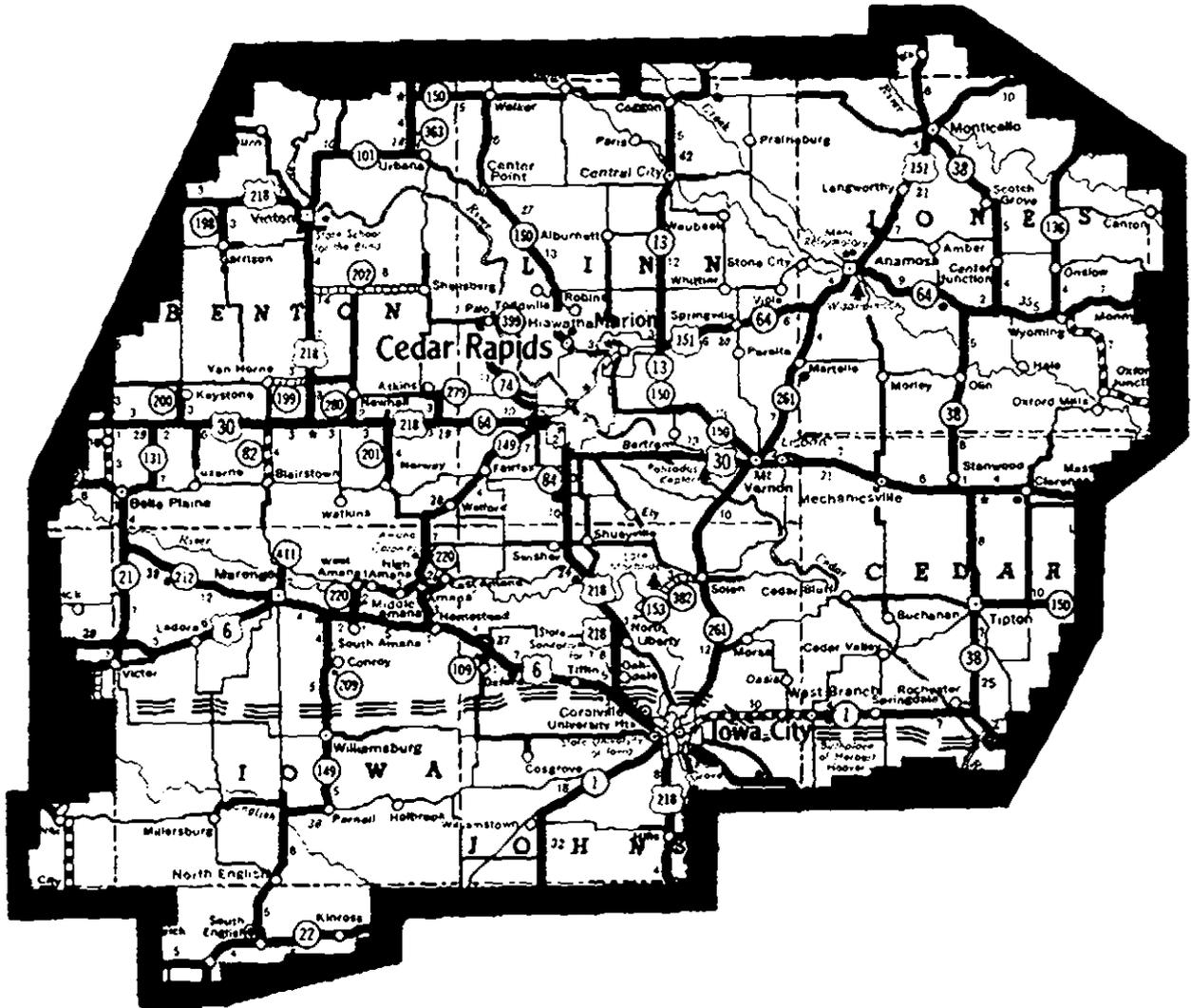
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
14,344



DISTRICT X

Taxable Assessed
Valuation
\$477,369,736

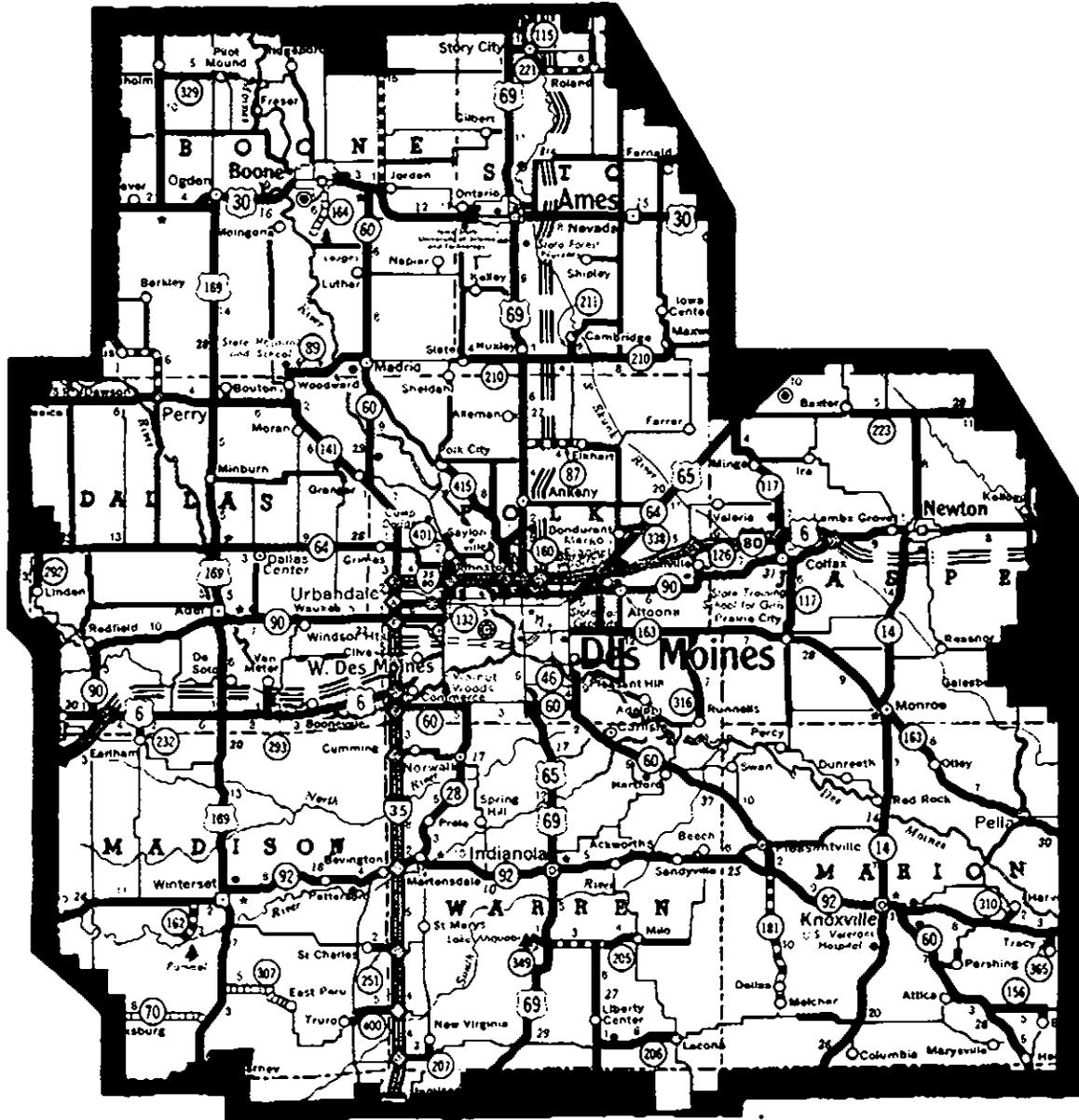
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
16,014



DISTRICT XI

Taxable Assessed
Valuation
\$722,346,584

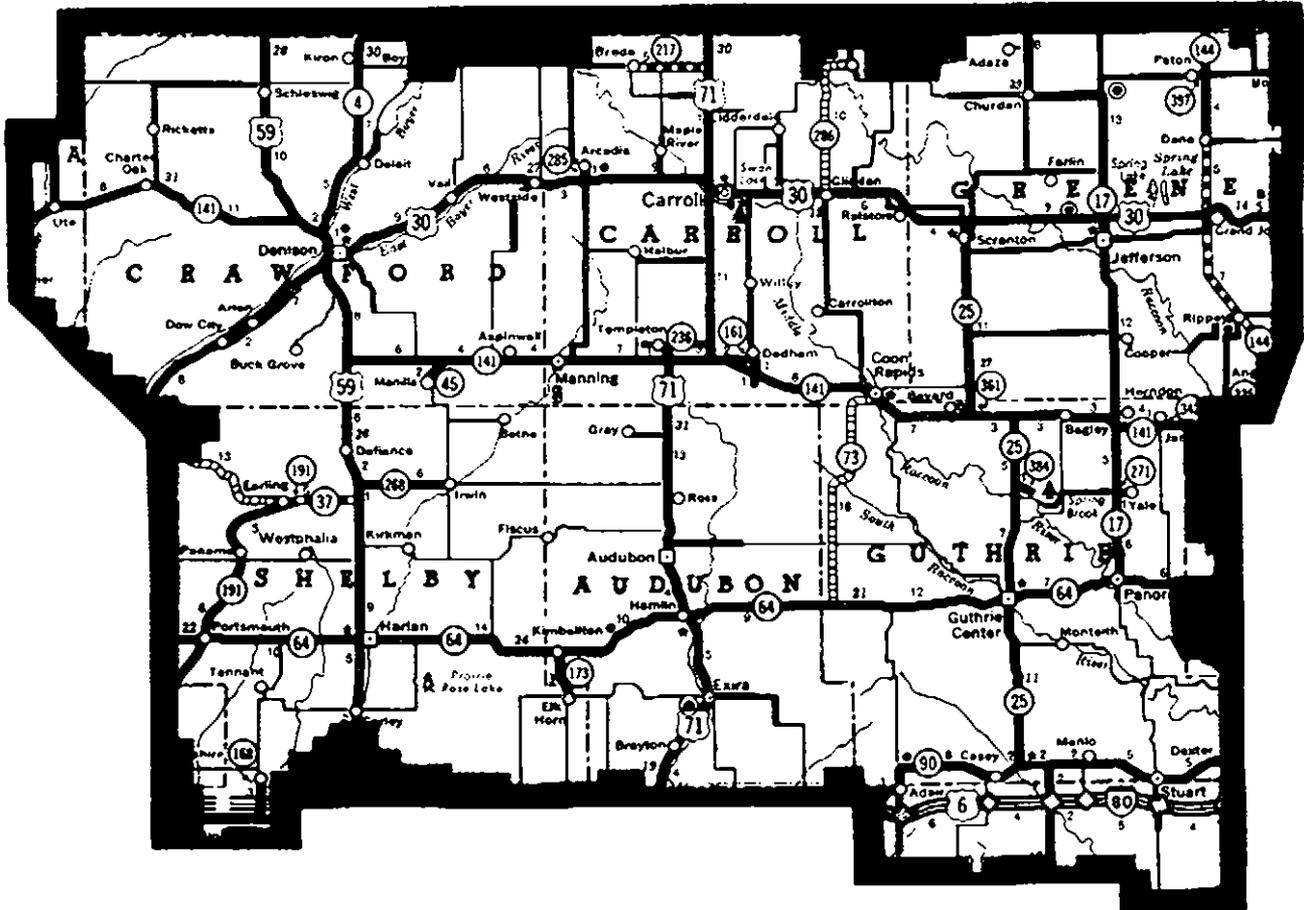
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
27,742



DISTRICT XII

Taxable Assessed
Valuation
\$239,904,045

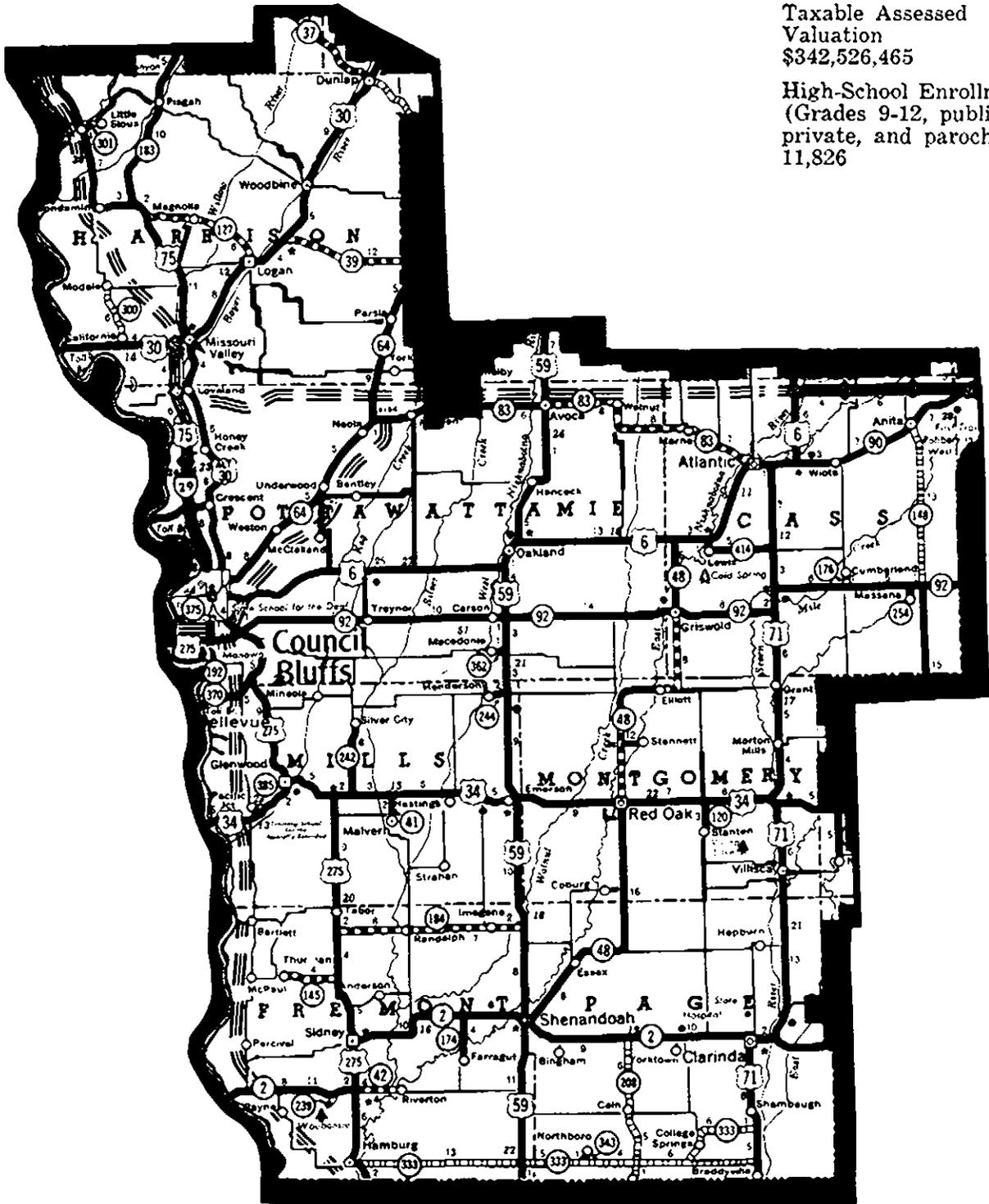
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
7,265



DISTRICT XIII

Taxable Assessed
Valuation
\$342,526,465

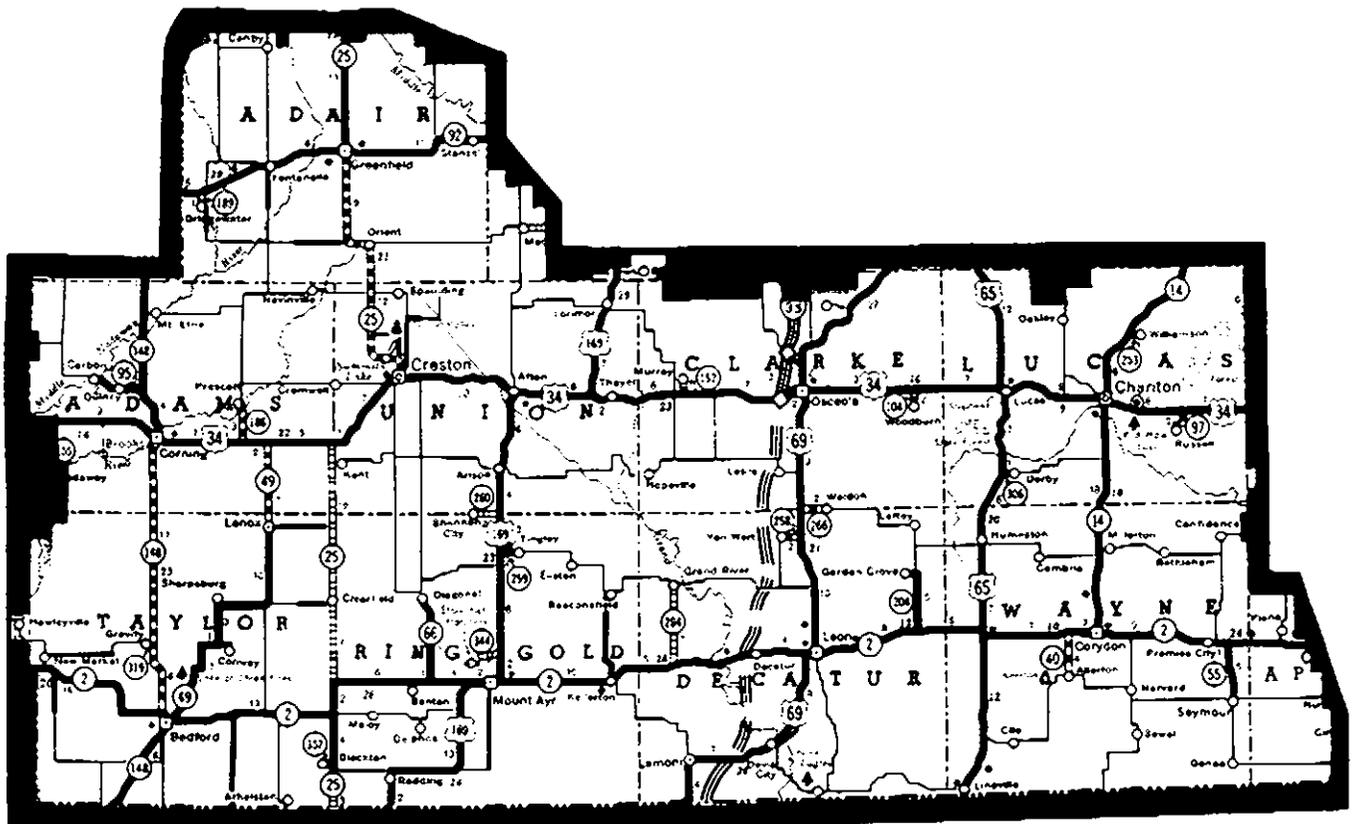
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
11,826



DISTRICT XIV

Taxable Assessed
Valuation
\$178,174,385

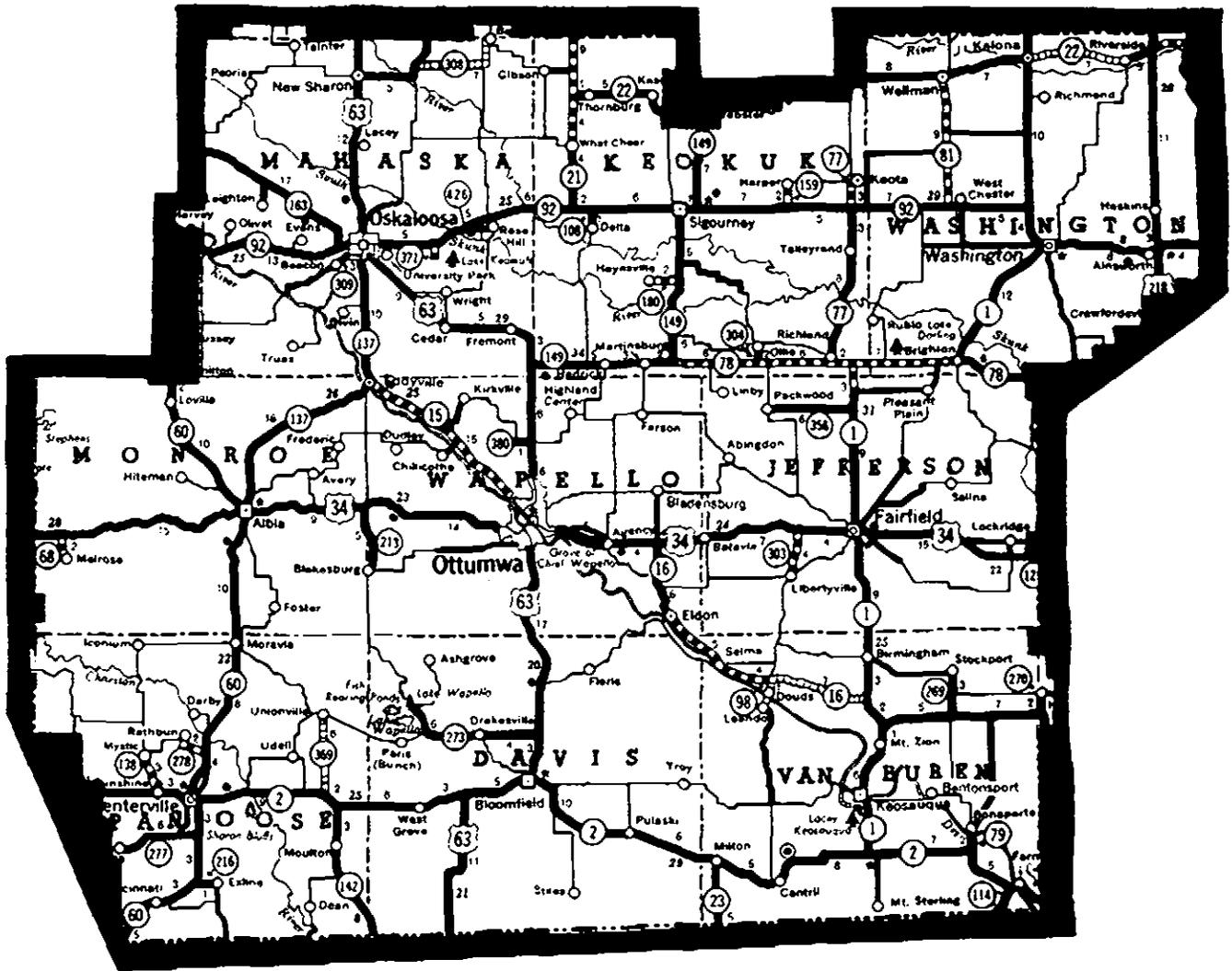
High-School Enrollment
(Grades 9-12, public,
private, and parochial)
5,655



DISTRICT XV

Taxable Assessed
Valuation
\$283,013,323

High-School Enrollment
(Grades 9-12, public,
private, and parochial)
10,317



DISTRICT XVI

Taxable Assessed
Valuation
\$168,532,446

High-School Enrollment
(Grades 9-12, public,
private, and parochial)
7,132



CHAPTER III

Role of the Area Education District in Providing Educational Leadership and Services Intermediate Between the State and Local School Districts

Earlier chapters have presented the recommendations and a plan for the establishment of a statewide system of public area community colleges in Iowa. (See especially CHAPTER I, Recommendations 2, 15, and 17.) It has been recommended that area education districts, comprising all the territory in the state, be created. These new districts—in addition to having authority to operate public area community colleges when authorized by vote of the people residing therein—would absorb existing county school systems and assume those educational functions now being handled by them as well as those additional ones which the state might assign to this intermediate level of administration in the future. The present chapter describes these functions in some detail, both as they now exist and as they promise to develop; it also discusses the role of the area education district in discharging these functions.

General History

Education as a state function evolved from the tenth amendment to the Federal Constitution. The emergence of an intermediate level of school organization can be traced directly to the acceptance of the idea that public education is a state function and responsibility.

Early state laws with regard to education were mainly permissive measures allowing groups of people the right to form local school districts and to levy taxes to support them. The concept of the state's responsibility at this period in history was limited generally to the "encouragement of schools." The effect of this permissive attitude at the state level, coupled with a prevailing desire to keep the administration of the school system close to the people, resulted in the rapid development of many small local districts.

Most states first moved to establish a chief school officer and charged him with the responsibility of providing guidance, general supervision, and regulation of local units. However, the early channels of communication between the state officer and the local unit were poor. Transporta-

tion and communications were slow and cumbersome, and this, coupled with the multitude of small school districts that had been developed, made it impossible for any school officer working from the state capitol to supervise and enforce regulations with any degree of thoroughness.

There was also the need for a professional school official who was more familiar with local conditions than a state superintendent could possibly be. The need to decentralize authority and place supervisory and regulatory responsibilities at a level close enough to actual school operation to be effective became apparent, and various efforts were made to establish some type of regional school official. The concept of such an intermediate unit of school administration is not new and some form of such a unit is now operative in thirty-four states.¹ The office of the county superintendent in Iowa was created by an act of the General Assembly approved March 12, 1858.

Primarily, the county office of education or intermediate educational unit was created as an arm of the state with its major functions, in the early years of operation, consisting of the visitation and inspection of schools and the supervision of both the educational program and local school authorities. The responsibilities for regulation and general supervision delegated by the states to this unit were fairly specific. However, the actual functions performed by this office became less the functions of an arm of the state and more those of a local educational leader. Administrative direction and guidance for local district boards of education and instructional improvement were increasingly considered as the major areas of activity.

In areas served by early units, there were frequently a hundred or more local school districts. In Iowa less than 40 years ago, our counties were divided into an average of more than 50 districts with many of them approaching 100 separate

¹*Encyclopedia of Educational Research*, a project of The American Educational Research Association, a Department of the National Education Association, Walter S. Monroe, editor (third edition; New York: The Macmillan Company, 1960), p. 1198.

basic units. The idea of a professional school administrator for each local district had not yet emerged, and it was this role that was assumed by the intermediate or county superintendent.

Since the original regulatory and supervisory responsibilities delegated by the states to intermediate units were designed to provide control and communication to their many local schools, such a pattern was not directly applicable as local units consolidated and reorganized into fewer but larger districts. Iowa experienced this movement with strong district consolidation from 1913 to 1920. Little additional progress was made until 1945 when basic changes in reorganization laws were made by the legislature.

No progress, however, was made during this time in adjusting the functions of the intermediate unit to the new emerging pattern of local school district organization. Robert M. Isenberg in the 1954 Yearbook of the Department of Rural Education of the National Education Association brings the results of the lack of such adjustment into clear focus by making the following statement:

... The interrelationships of autonomous local school districts, intermediate units, and the state education department are such that any major changes which take place at one point in the structure compel adjustments at the others. . . .²

In 1948, Iowa took a significant step in adjusting the county office to meet the new demands on it by creating a county school system involving an elected board of education and an appointive county superintendent of schools. Permission was also given to exercise educational leadership in providing requested educational programs and services.

Two additional important aspects of this legislation were provisions for two or more county systems to provide these services cooperatively and also for two or more county systems to combine to employ one county superintendent to serve the multiple county area. Thus, it was recognized, and provision was made for the newly created county school system to expand its service area and also, if desired, to consolidate with another one in terms of its administrative officer.

School district reorganization in Iowa again became an active issue around 1954, and this interest has resulted in the continued steady re-

duction of the number of school districts. At the present time, many of our county school systems are composed of five or fewer high school districts with indications that, in the future, many will be comprised of only one or two such districts. Thus, the county is no longer an adequate geographic basis for an intermediate unit which needs to be in a position to discharge "... functions appropriate to a modern educational program. . . ."³

While there is some opinion which favors the elimination of the intermediate unit of school administration as being no longer necessary, the recommendations of this report are based on the point of view which says,

The developing concept of the intermediate unit recognizes that even after reorganization most local districts cannot provide comprehensive programs of educational services. On a regional or larger area basis, that is, within an appropriate intermediate district, a high level of specialized administrative and educational services is possible. When a number of the separate and autonomous local districts, both large and small, share in a cooperative area-wide program, virtually all the services which previously have been available only in large urban school systems can be provided in an effective and defensible manner for all. The possibility of a wide range of specialized educational services without the requirement of "too large" local districts has caused a widespread interest in this new concept on intermediate unit functions. The types of functions now considered desirable at the intermediate level are: (a) providing educational leadership; (b) providing specialized educational services; (c) coordinating educational efforts among the various local districts within the intermediate district and between each of these local districts and the state.⁴

What is now needed is a reorganization of our county school systems into area education districts in accordance with **Recommendation 2** of this report. Such area education districts with their elected lay board and professional school administrator (superintendent) in each case would be in a position to discharge the educational functions characteristic of an adequate and efficient unit intermediate between the state and the local school districts.

²*The Community School and the Intermediate Unit*, Department of Rural Education, Yearbook 1954, Robert M. Isenberg, editor, Washington 6, D. C.: National Education Association of the United States, 1954), p. 139.

³*Encyclopedia of Educational Research*, op. cit., p. 1200.
⁴*Ibid.*, p. 1200.

The present inadequacy of the county office in Iowa was recognized as an impending problem by educational leaders in the early 1950's and, during the summer of 1957, the Association of County Superintendents requested the State Superintendent of Public Instruction to organize a research committee to study and evaluate the county school system in Iowa and to make recommendations for the future development of the intermediate unit of school administration. This request was accepted and an attempt was made to secure either federal or foundation funds to conduct such research. As neither was available, it was decided to do the studies in the graduate colleges of the state.

A number of such studies were conducted under the supervision of Virgil Lagomarcino of Iowa State University and H. C. DeKock of the State University of Iowa. The results of these research projects were compiled in a publication entitled *Effective Intermediate Units in Iowa*. In addition to summarizing the findings of the studies conducted at the two universities, the publication also proposed four different plans of organization for consideration as well as making recommendations for implementing the study data. One such recommendation said "Specific legislation should be enacted to authorize the formation and operation of an intermediate unit . . ."⁵

Status of Proposed Legislation

To carry out the recommendations of the report, the Iowa Association of County Superintendents appointed a special committee to draft proposed legislation for the Fifty-ninth General Assembly. This bill was presented to the legislature in 1961 as House File 443, but no action was taken on the proposal, and the county office and county school system continue to function as the intermediate unit of the state.

A basic concept of the report on *Effective Intermediate Units in Iowa* was the area or regional approach to provide units of adequate size. This same idea was written into the proposed bill, but no specific areas were indicated. The bill charged the State Board of Public Instruction with the responsibility of officially fixing the boundaries for the intermediate districts and contained provisions for the appointment of a nine-member committee to ". . . study

and make recommendations to the state board on the establishment of intermediate school districts within the state."⁶ Since no action was taken on this proposed legislation, no tentative districts were outlined.

In June of 1961, the Association of County Superintendents again requested the State Board of Public Instruction to establish a committee to study and draw boundary lines for intermediate districts. These districts would then be included in proposed intermediate unit legislation to be presented to the Sixtieth General Assembly. The board acted favorably on this request and accepted the assignment of outlining proposed intermediate unit districts.

The Department of Public Instruction had also received the directive of House Resolution 6 which requested that it ". . . study and prepare a plan for a statewide system of public area community colleges, such a plan to include all areas of the state . . ."⁷ In studying the patterns of such community college development and applying the lessons learned through our state's progress in school district reorganization, a major conclusion was indicated. It was apparent that, if Iowa wanted to develop a truly strong statewide system of public area community colleges to serve the broad post-high-school educational needs of people, some group or agency needed to identify those regions encompassing sufficient human and economic potential to establish and maintain such institutions. It was evident also that legislative action creating in each of these regions a legal area education district should be proposed.

Since both proposed items of legislation required the establishment of a defined supporting tax district or area, the election of a controlling board, and the appointment of an administrative officer, early consideration was given to making these area education districts for intermediate-unit services and community college purposes one and the same. Although the alternative of proposing separate districts to handle these educational functions was studied carefully, it was decided to recommend the establishment of area education districts which would both provide educational functions intermediate between the state and the local school districts and have the capability of being the supporting and controlling agencies for public area community colleges which might be authorized by vote of the people.

⁵*Effective Intermediate Units in Iowa*, Prepared by The Iowa Research Committee on the Intermediate Administrative Unit (Des Moines: Iowa State Department of Public Instruction, 1960), p. 83.

⁶House File 443, Fifty-ninth General Assembly of Iowa (February 22, 1961).

⁷See APPENDIX A for complete text of this resolution.

Image of the Present County Office -

As indicated earlier, there has been considerable discussion in Iowa concerning the continued necessity of any intermediate education structure between the state education agency and local school districts; and some have proposed that it be abolished. One opinion has been expressed that as local districts increase in size, they are able to provide all the necessary educational "services" presently being performed by county offices. It is also proposed that large units do not need any intermediate supervisory or regulatory controls and that, because of their size, they should be allowed to deal directly with the state agency. The proponents of this field of thought most commonly use such Iowa systems as Davenport, Des Moines, or Cedar Rapids to illustrate their position. This, however, is not the position taken by the Department of Public Instruction and many other educators in the state in regard to the necessity for the continuation of such an intermediate structure. Much of the difference between these two areas of thought concerns differences in definition of the functions of such a unit in the future in this state as compared with the role that it has played in the past.

The history of the intermediate unit indicates that it was initially conceived to decentralize state educational authority and to place regulatory and supervisory responsibilities at a level close enough to actual school operation to be effective. This is still a main operational function of such a structure. It is interesting to note that even "... a number of large metropolitan areas are experimenting with ways of decentralizing—trying to bring school administration closer to the people."⁸ Continuing in calling attention to the developing importance of the intermediate unit, the American Association of School Administrators and the Department of Rural Education, speaking jointly, say,

Still another important aspect of school district reorganization, until recently largely neglected, is the intermediate unit, so-called because it functions between the basic school districts and the state department of education. The need for the intermediate unit arises because a majority of school districts are not large enough to afford many of the

educational services needed and reorganization at the local level only cannot produce an organizational framework within which all operational functions can best be performed. Data already presented make quite clear the inadequacy of at least 80 percent of extant school districts. They are small and many of them will continue to be small, even with the fullest predictable reorganization. Under these conditions, it becomes necessary to develop a series of regional service agencies capable of providing and coordinating certain specialized educational functions.⁹

Although the intermediate and local units of educational administration have both been brought into being by state mandate, local school administration has tended to develop as an autonomous educational entity. Consequently, the local district administrator is willing to accept regulatory, supervisory, and leadership authority from the state level but often becomes somewhat disturbed when these same functions are delegated to an intermediate unit administrator operating closer to his local unit of administration. This feeling has very little to do with the efficiency of performing these functions or in providing adequate educational opportunities for all pupils in the state. It is centered in the false belief that the provision for such an intermediate office is an intrusion on local administrative authority. This feeling can be seen by the willingness in Iowa of local administrators to accept "services" from county offices but to view with alarm any hint of direct educational "leadership or supervision."

The American Association of School Administrators in their report, *School District Organization*, gave perspective to this problem by making the following statements about common elements in all levels of school administration. They state,

Despite differences in areas of jurisdiction and functions, all levels or types of school administrative agencies—local school districts, intermediate units, and the state education agency—hold a number of things in common:

Each is a product of state law, having been created either by means of constitutional mandate or legislative enactments.

Each derives its powers and functions from state law.

⁸*School District Organization: Journey That Must Not End* (Washington 6, D. C.: American Association of School Administration and Department of Rural Education of the National Education Association, 1962), p. 2.

⁹*Ibid.*, p. 8.

None has any inherent power to alter, abolish, or perpetuate its organizational identity.

None has any inherent power to take over the functions assigned to another level.

Each shares in the responsibility for administering public education.

Each owes its existence to one fundamental purpose: provision of adequate educational opportunities for all children in the state.

In these respects there is no hierarchy among administrative levels, with one level subordinate to the others. Instead, all are co-ordinate agencies. All are co-partners in achieving the common purpose, each with its own tasks to perform as authorized by state law.¹⁰

A recent publication on public school administration written by an educational leader with extensive experience in midwestern states, Stephen J. Knezevich, refers to the intermediate unit as a "betweenner," but, nevertheless, as being well established historically in the United States and rightly so. He says,

... Structurally and functionally, the intermediate unit lies between the state on the one hand and the local district on the other. It is an arm of the state but at the same time occupies territory that encompasses many local school districts as well. It is charged by the State Department of Public Instruction with certain educational responsibilities but also provides services to the local district.¹¹

Knezevich adds his endorsement of the idea that there is a need both for the retention and reorganization of intermediate units into larger areas so that they can "... provide specialized services at a reasonable cost per pupil that the local unit district could not provide because there were either too few pupils or the cost would have been prohibitive."¹²

Iowa still needs and will continue to need an intermediate unit as a decentralization of state educational responsibility. This can be demonstrated by reviewing some of our population

statistics. Results from the 1960 census indicate that Iowa has only seven counties with a population of 80,000 or above. Within these seven counties, however, reside one-third of the state's total population. This would indicate that roughly 7 per cent of the land area in Iowa serves as a residence for over 80 per cent of its people. When one looks at the less populous areas of the state, it can be seen that 58 of Iowa's counties have a population of below 20,000. Within these same counties reside less than one-third of the state's population. Thus, Iowa has roughly an additional 60 per cent of its land area supporting less than one-third of its population. It is highly doubtful that this situation will change substantially. Not one of the seven most populous counties lost population from 1950 to 1960. Of the 58 counties with a population of below 20,000, however, 49 lost population in this same ten-year period.

The 1960 census further indicates that 75 per cent of the counties in Iowa have a population of less than 25,000. It takes a population of 40,000 to 50,000 to produce an enrollment of roughly 10,000 pupils. To economically offer the majority of the supplemental educational functions necessary for effective education meeting the needs of all pupils, total enrollments of from 20,000 to 30,000 pupils are necessary. It can be clearly seen that, in some areas of Iowa, a combination of six or more counties would be necessary to produce such enrollments. The local districts of this state have not and will not be reorganized into units with total enrollments of this size. If our state's public education responsibilities are to be met, the continuation of an intermediate structure is necessary to supplement local district education efforts.

To exclude the present larger school districts from such an educational pattern would only complicate the problem, not reduce it. This would create four levels of administrative authority in Iowa: the state education agency, large local districts, intermediate units, and small local districts.

It would also reduce the degree of cooperation of such large local districts of the state with the remaining smaller local districts. Since all of the state's larger school systems are located in population centers, each is surrounded by many additional smaller school districts. Their administrators and boards all need to meet and solve their "local" educational problems cooperatively. To create the dichotomy of the few large districts

¹⁰*School District Organization, Report of the American Association of School Administrators Commission on School District Reorganization* (Washington, D. C.: American Association of School Administrators, 1958), pp. 67-68.

¹¹Stephen J. Knezevich, *Administration of Public Education* (New York: Harper and Brothers, Publishers, 1962), p. 160. Publishers' name now Harper and Row, Publishers.

¹²*Ibid.*, pp. 157-159.

reporting directly to the state level and the remaining districts being responsible to the state through an area intermediate office does not seem administratively or educationally sound. If Iowa is to have an intermediate structure, all the local districts need to operate with some direct responsibility to and cooperation with this intermediate office.

Much of the problem of Iowa's present county school office can be traced directly to the lack of sufficient area and consequent low number of local school districts encompassed by a single county. Even though the 1948 revision of the intermediate unit legislation mandated many specific responsibilities for the county superintendent to exercise educational leadership, the area designated for the application of these responsibilities was too small to be effective. As a consequence, much of the authority originally delegated to this unit has gone by default either to the local administrator or back to the state education agency. This is not stated as a criticism of the county offices, because they have carried much of the educational burden in curriculum improvement and school district reorganization. It is, however, stated to point out that in its present structure, the unit is inadequate to perform fully its legally intended educational functions.

This problem becomes even more serious as the increasing complexity of our educational system places added responsibilities on the state and local units of education. At a time when the intermediate office could be of maximum value in the state, its area of jurisdiction is too limited either to be effective or efficient. Also, its ability to enter into cooperative agreement with other county offices provides only limited relief to the problem.

The area of machine data processing could be cited as an example. At the present time, the state education agency is able to operate such data processing equipment. Only very few of Iowa's present local districts, including the larger city systems, have any data processing equipment and that which is available has only limited application. Thus, the areas of financial, pupil, and property accounting; pupil scheduling; and other school records services that can be so efficiently handled by machine processes are now unavailable to the majority of local districts. The state agency is too far removed to handle the operation for local districts; the local districts

are unable to afford other than limited equipment; and the intermediate office which could offer such facilities cannot justify the costs on the basis of a one-county operation.

Thus, the educational leadership, in this instance, in providing complete data processing facilities to decrease processing errors and release local professional staff for additional instructional time, is not exercised by the present county office. The end result is that our educational program suffers. This one illustration could be magnified in many other situations.

The present structure of the county office has also limited the attractiveness of the position of county superintendent. Even so, Iowa has been fortunate to have had the quality of educators in these positions that we have had in the past years.

Even in a reorganized intermediate structure, much of the effectiveness of the office will be dependent on the quality and experience of the administrator. The plan as proposed in this report would merit and provide an adequate tax base for the employment of a highly competent educational statesman. It would be folly to assume that this office could operate its functions with an administrator less qualified than those employed by local school districts. With the trend of many local districts toward employing administrators with the doctorate degree, it would be assumed that this same level of preparation would soon be expected of the area education district superintendent. It would also be expected that he would have had varied experience in school administration with emphasis on supplemental educational and service programs and also orientation toward community-college education. It would be a necessity that the boards of the area education districts seek the employment of educational administrators with outstanding competence for these proposed sixteen positions.

Role of the Proposed Area Education District

The preceding portions of this chapter have attempted to give the reader a historical background of the intermediate unit nationally and in Iowa as well as to present some of the problems of the existing county school system, the image it holds in Iowa's educational structure, and the necessity for its continuation as a level of educational administration under a reorganized plan in this state. The function of the area education district in providing community-college education

is proposed in CHAPTER II, while this present chapter is dedicated to proposing this district's function as an intermediate unit of education.

The role that such a unit should provide can be rather simply defined. This would be to provide necessary supplemental educational programs and services at a level of administration operating between the state agency and the local school district. This definition implies that, in the offering of such programs and services, the educational benefit of the individual child would be the clear objective. At times the local school agency could provide a needed program or service more efficiently or effectively than could any other unit at the intermediate or state level. Frequently, however, the offering of such programs and services would necessitate that they be done with the cooperative agreement and arrangement between the state agency, the area education district, and the local school district.

It is doubted that there would be any general disagreement on the above definition but that there could be considerable disagreement and misunderstanding on who defines necessary supplemental education programs and services and whose final authority determines the necessity of their being offered.

Certain specific duties, powers, and responsibilities of this intermediate office are itemized in the proposed legislation; but these pertain only to regulatory and supervisory responsibilities deemed necessary by the legislature to be delegated to this unit of educational administration. These can be classified as administrative duties. There never has been any plan, however (and such is not intended in this proposal), to delegate by law specific education programs or services to an intermediate level of administration. The authority to operate such functions if requested by cooperating local districts is made clear, but no authority to initiate such services or programs is to be allowed without the cooperative permission of the local district(s) concerned.

It can be seen from the above remarks that, in the area of educational programs and services, the local district has the authority and responsibility to initiate the request for such assistance to the area education district. The area education district has no authority to initiate, only the authority to provide cooperatively such services and programs when requested. Thus, it is the local district which defines necessary supplemental educational programs and services and authorizes

that they be offered.

In discussing educational programs and services to be offered by an area education district, it is essential to keep in mind that any service or program offered from such a unit cannot be substituted as a fulfillment of state educational requirements placed on local school districts. For example, if such standards for local districts require that two units of modern foreign language be taught, this requirement for an approved local school could not be met by the intermediate unit's offering these two units of language for the students of a local district. If, however, there were students in sufficient numbers desiring another unit or more of language beyond the required minimum offering of their local districts and these districts did not desire to offer the additional units but were willing to have them offered in cooperation with the area district, this offering by the area education district could be defined as a supplemental educational program. When defining necessary educational programs and services, then, all minimum programs required by state standards for local districts can be eliminated as legitimate offerings of area education districts.

It can be recognized from the above illustrations that it is almost impossible to define what services and programs will be provided by any specific area education district. These have to be determined by local district desire, cooperation, and initiation. Because of this, it is also impossible to define the role of an area education district by listing specific services.

It is, however, possible to define certain accepted educational functions in terms of the population or incidence ratio necessary for their efficient and effective operation. From these figures, it is then possible to get a much clearer idea of the feasibility of Iowa's existing school districts to operate these programs and services locally and also to gain a better understanding of the potential of area education districts in providing supplemental programs.

The following areas are presented to give the reader a better understanding of the population base necessary to offer certain educational programs and services. The listing is not presented as being complete, but it is hoped that it is representative of the types of programs that Iowa is not presently able to offer in many of its school districts but which could be offered as supplemental programs by an area education district.

Special Education

When considering a complete program of special education, it is necessary to explore the full range of exceptionalities found in pupils. This is true because evidence has shown that such pupils make more adequate school adjustment and progress when provided with programs or services tailored to their specific types of exceptionality. Too many times people are aware only of the mentally retarded child and assume in their thinking that this is the only child needing "special" attention. The following table gives the percentages of the occurrences of exceptionalities based on an average population of school-age children, as shown by surveys conducted by the Department's Division of Special Education, and the numbers in each classification likely to be found in a school population of 10,000:

Exceptionality	Per Cent	Number
Hard of Hearing	1.50	150
Emotionally Disturbed	3.00	300
Educable Mentally Retarded	2.00	200
Trainable Mentally Retarded	0.50	50
Physically Handicapped	1.00	100
Speech Handicapped	6.00	600
Blind	0.03	3
Partially Seeing	0.20	20
Gifted	2.00	200

These rates of occurrence have very little meaning unless they are related to instructional programs for the individual exceptional child. It is also very difficult to express such rates in terms of specific classes since many special education functions may be handled without a special class situation. The key to offering such services is the employment of specialists who are able to work with the individual child as well as with the instructional staff.

Thus, the most logical application of these rates is to use them to estimate the number of average school-age children necessary for the effective and efficient employment of specialist personnel. The following table gives such information:

Social Worker; 1 per 3,000 Pupils
Speech Therapist; 1 per 3,000 Pupils
Psychologist; 1 per 4,000 Pupils
Specialist, Educable Mentally Retarded; 1 per 600 Pupils
Specialist, Trainable Mentally Retarded; 1 per 2,500 Pupils

Specialist, Visual Handicapped; 1 for the Blind and 1 for Partial Seeing per 15,000 Pupils
Hearing Clinician; 1 per 7,000 Pupils
Physical Therapist; 1 per 30,000 Pupils
Specialist, Physically Handicapped; 1 per 12,000 Pupils
Specialist, Gifted; 1 per 1,000 Pupils
Director of Special Education; 1 per Organized Program

On a minimum basis, it can be seen that a school-age population of 600 is required for the employment of a teacher and specialist of the educable mentally retarded while one of 30,000 would justify the employment of a physical therapist. These figures become more significant when it is recalled that the school-age population includes those pupils in kindergarten through Grade 12. To obtain a large enough group of pupils within a range of one or two school grades to require the services of a special teacher—academically gifted children in Grades 7 and 8, for example—would call for a school-age population significantly greater than any of those estimated above.

Machine Data Processing

The area of machine data processing has been briefly mentioned as a potential service of an area education district in a previous section of this chapter. The use of such processing equipment has been a standard practice in many business and industrial firms for some time but only recently has there been other than limited application of these methods in elementary and secondary schools.

The feasibility of the use of such processes in school systems has been well established, but it is unsound to promote their use only on the basis of saving money. Their application, however, introduces speed, accuracy, and versatility to data processing procedures for basically the same cost. Of equal importance, it makes it possible to remove from the professional staff many of their present routine clerical responsibilities. The following areas have applicability to machine data processing:

- I. Administration and Finance
 - A. Payroll
 - B. Budget accounting
 1. Purchasing
 2. Paying
 3. Separate fund accounting (school lunch, activities, etc.)

- C. Property accounting
- D. Bus scheduling
- E. Library accounting
- II. Pupil Accounting
 - A. Registration
 - B. Class scheduling
 - C. School census
 - D. Attendance
 - E. Grade reporting
 - F. Records
 - 1. Cumulative
 - 2. Permanent
 - G. Test scoring and analysis
- III. Employed Personnel Accounting
- IV. Educational Programming
- V. Research as Applied to Areas I-IV

It has been estimated that to introduce a complete program in all of these areas would require a school enrollment of 30,000 pupils.

The cost of rental of equipment and the employment of personnel for the operation of this program would average approximately \$3,500 per month.

School systems with total enrollments of from one to two thousand can profit from the application of many machine processing procedures. The minimum enrollment of 30,000 pupils, however, is basic to a total operation.

Consultant Services

The field of specialized consultants has almost unlimited applicability as a service to be offered by area education districts. While such personnel have been employed by county school systems in Iowa in the past, they have been primarily personnel offering supplemental services to local schools because of the local schools' inability to efficiently employ such a person. They were supplemental personnel offering mainly direct educational services with little opportunity to function in a truly consultative capacity.

As schools have become larger and more able to employ personnel for specialized jobs, they have found that these people can also profit from having available to them highly trained consultant specialists. The classroom teacher in the typical Iowa school has many opportunities to seek counsel and assistance from the other teachers employed in similar positions in the school system. They are not required to face alone the many complex educational problems with which they are presented. On the other hand, for example, the person who is employed in the field of

audio-visual services in the average Iowa school district has no one to turn to for assistance.

No individual, administrator, principal, teacher, or "specialist" can solve unaided all the problems relating to the child, the community, and the materials of instruction. The availability of consultant personnel does not assure that all such problems will be solved. However, their employment can materially improve the potential education offered to the individual pupil.

The functions that such consultants could perform would vary significantly from area district to area district. The feasibility of their employment would also be directly dependent on the organizational structure of the local schools in the area education district.

Personnel working in these areas have a uniqueness in their employment not typical in other positions in education. They have no authority, except when locally granted, to work with local schools. Thus, it is their responsibility to offer a quality of service that is requested by local personnel. Their continued employment is dependent on this.

It is envisioned that the main functions of such consultants would be concerned with the in-service education of teachers and with educational research and its implementation.

No arbitrary standard to indicate the specialty areas to be serviced or for the numbers of local personnel needed before consultant personnel should be employed can be established. Their employment is entirely dependent on recognition by local school districts of their need for the contributions which such consultant personnel can make to pupils by working with local teachers. As in the majority of services offered by area education districts, such personnel are complements to, not substitutes for, local school district programs.

These three areas of potential services (special education, machine data processing, and consultant services) are typical of the scope of educational functions that could be supplementally supplied by an area education district to assist in improving the quality of the local districts' programs. Such services as educational television, libraries, and instructional materials centers which include books for pupils and teachers and teaching aids (audio-visual devices, machines, models, etc.) with professional staff to facilitate their use could also be expanded. The three areas mentioned, however, are sufficient to give basic support to the proposal that to offer the complete

spectrum of potential educational services requires total school enrollments of approximately 30,000. It is clear that school districts of this size in Iowa would be completely impracticable if not impossible to obtain except in a very few instances. Yet, the majority of educators and laymen will agree that the offering of such services is necessary for a complete educational program.

It is also apparent that our present county school system has outgrown its ability to serve efficiently and effectively as the intermediate unit to provide these needed supplemental services. This leaves the people of this state with only three options:

1. Discontinue the present county office and thereby require local districts to absorb as many of the present functions of this unit as possible but recognize that the state's quality of education will suffer as a result.
2. Continue the present county school system as an inefficient unit through which highly limited supplemental services could be provided.
3. Restructure the present county school system on an area basis with sufficient human and financial potential to provide the com-

plete range of potential supplemental educational programs and services.

Summary

The future economical and efficient expansion of the state's total educational system depends on the restructuring of the present county office into a strong intermediate unit of school administration which can meet the current as well as the future demands placed on it.

The complete elimination of an intermediate office in Iowa would only compound the error of our present situation and thus extend the financial and educational responsibilities of our local and state structure far beyond their capacity to respond effectively and efficiently. Furthermore, such a course of action would tend to increase direct state control of public education and decrease local authority.

The plan proposed in this report for the establishment of sixteen area education districts to replace Iowa's existing county school systems and to assume educational functions intermediate between the state and local districts can provide the intermediate structure that Iowa presently needs, and it possesses the flexibility and adaptability to continue to offer such functions in the foreseeable future.

CHAPTER IV

General Explanation of the Proposed Legislation for Area Education Districts

This chapter is designed to provide a summary explanation of proposed legislation necessary to implement the plan for area education districts. Due to the volume of such legislation, it is not presented in detail in this report. The specific bill will be introduced to the Sixtieth General Assembly.

The changing patterns and demands on public education in Iowa necessitate that major revisions be made in two areas of the existing educational structure. These are the legal provisions for community-college education and the intermediate level of school administration.

The present method for the initiation, support, and control of community or junior colleges severely limits their capacity to fulfill the unique educational function for which they are created—two-year or less post-high-school-age educational opportunities for all youth and adults. Because of this, community-college education in Iowa is unable to assume its role in assisting other institutions in meeting the mushrooming demands of people for higher education.

It has also been recognized that as local school districts have reorganized and the requests for administrative assistance from the state educational agency have increased, there is a need to rebuild the intermediate units for school administration in Iowa. It is necessary to make them adaptable to new and changing circumstances and give them functions appropriate to a modern educational program.

As an efficient and effective way of providing both these functions without the creation of an additional educational tax base, this bill proposes the establishment of sixteen area education districts empowered to provide educational leadership and service intermediate between the state and local school districts, and, when authorized by vote of the qualified electors of such districts, to establish and operate public area community colleges. These education districts would replace the present county school system and would serve as the legal framework within which a statewide system of public area community colleges could be developed.

This legislation proposes that the State Board of Public Instruction should be designated as the state agency for the orderly development, control, and supervision of all educational programs and services offered by area education districts.

The proposed area education districts would be composed of combinations of complete and/or partial county school systems as they now exist with the provision that modification or adjustment could be made by the State Board as local school district reorganization necessitates, upon the mutual consent of the districts concerned, or upon appeal of a boundary inadequacy to the State Board.

The combination of the sixteen districts would encompass all areas of the state with no local school district being in more than one area education district.

The bill for the creation of area education districts would be legally effective as of July 1, 1963. The State Board of Public Instruction would be responsible for any area adjustments that might occur July 1, 1963, due to normal school district reorganization. This would allow for the division of education districts into voting areas, the election of an area board, the distribution of records and property of the existing county school systems, and for the appointment of an area education district superintendent. All area education districts would become operational in assuming the present function of existing county school systems as of July 1, 1964.

The area education district board would consist of seven members who are qualified electors of the area education district, one member to be elected from each of five election areas by the electors of the respective areas, and two members to be elected at large from the area education district. The election areas of the area education district would be established by county board of education members having area included in the area education district within ninety days after the effective date of this bill.

All members of the first area education district board would be elected at a special school board election on the first Monday in November and

would take office fifteen days later. Their terms of office would be divided by lot at the first regular meeting, but subsequently elected members would hold office for six years.

The proposed legislation has been developed on the premise that one function of the area education district board and the area superintendent would be to provide professional leadership and furnish such services arrived at cooperatively by the area district board and local boards of education, which would provide the children and adults of the area district with adequate educational opportunities and which would be provided more economically or effectively than at the local district level. It provides for the establishment of an advisory committee composed of superintendents representing the local school district boards of the area education district to assist in the development of such programs.

The proposed legislation respects the autonomy of the local school districts. The program of educational services is flexible because the ability of local districts to provide services for themselves will vary both within and among individual area education districts. It also provides that an area education district may contract with any or all constituent school districts to furnish specified services mutually agreed upon and may enter into joint agreements with one or more contiguous area districts for the providing of specialized services that can best be done on a cooperative basis.

It further provides that local school districts may receive the services made available by the area education district, contract with the area district or other local districts for specialized services and pay for same, or receive funds in the payment for such services.

The following services could be provided as intermediate functions of an area education district:

1. Audio-Visual services including television
2. Centralized and cooperative purchasing
3. Curriculum laboratory and instructional materials center
4. Curriculum evaluation and revision leadership
5. Exceptional children (services) including regular and itinerant teachers as needed for the—
 gifted, retarded, crippled, partially sighted, speech defectives, hard of hearing, homebound

6. Financial services including—
 accounting, counseling, reporting, salary policy and schedule development
7. Information services
8. In-service education programs for the—
 administrators, teachers, bus drivers, clerical personnel, custodians, lunch personnel
9. Legal services
10. Library services—
 consultative, exhibits, professional materials
11. Professional personnel services including—
 teacher recruitment, substitute teacher pool
12. Pupil health services including—
 school nurse, school doctor, dental health, hygiene
13. Pupil personnel services including—
 attendance supervision, guidance and counseling, testing, psychological, psychiatric
14. Recreation and school camping programs
15. Research services

An additional function of the area education district board and area superintendent would be to provide public community-college education. The development of such colleges would be based on study of the educational needs of the people of the area education district and only initiated after approval of the State Board and favorable vote of the people of the district on the proposition to provide community-college programs and facilities.

The bill provides that such educational functions and services would be under the administration of a person designated as community-college dean who would be appointed by the area education district board upon recommendation of the area superintendent.

The community-college dean, under the provisions of this bill, has the responsibility for the development, organization, and administration of the community college to include: the educational program, the recruitment and employment of staff, the development of a community-college budget, and the maintenance of the educational standards applicable to the college. While the community-college dean is directly charged with these duties, he is administratively responsible to the area superintendent and the area education district board.

This bill provides that within the statewide

system (the sixteen area education districts) and as much as possible within each area community college, the following educational opportunities and services would be offered:

1. The first two years of regular college work including preprofessional education
2. Vocational and technical education
3. Programs for in-service training and re-training of workers
4. Programs of high-school completion for students of post-high-school age
5. Student personnel services
6. Community services

Provision is also made for students, who reside in area education districts not offering community-college education or in districts with such programs which do not meet their specific needs, to avail themselves of such educational opportunities by attending a community college in another area education district of the state. When this occurs, the "sending" district would reimburse the "receiving" district for the actual per-student costs in educating such a person.

The bill further repeals existing provisions of the Iowa Code relating to the establishment of community or junior colleges requiring that the continued development of new community colleges would be accomplished under the area education district plan for the development of a statewide system of such institutions. Approved community or junior colleges in operation on the effective date of the passage of this proposed legislation could continue their operation as long as the people of their local districts so desired under the existing sections of the Iowa Code governing their control, supervision, and support.

The financing of the intermediate functions of the area education district would be the same as applies to any local school district—a tax levy on the property of the area education district. Such a tax would replace the present county school

system tax. The area education district board is also given the authority to levy a tax for buildings and sites when authorized by the electors of the area district.

When a public area community college is operated by an area education district, the financing for capital outlay is to be borne by a tax on the property of the area education district. The operating expenses of the college should be shared by the area district and the state in proportions to be determined by the legislature. The area education district is given the option to assess tuition on the individual student as a means of sharing the costs of local operational expenses. The bill further proposes that the financing of community colleges be incorporated in a foundation program when one is adopted by the legislature.

This bill provides for the establishment of the office of the area education district which would act as an administrative, supervisory, consultative, and operational agency for providing intermediate, administrative, and service functions between the state and local school districts under the direction of the area superintendent and the area education district board of education. This same office, board, and superintendent collectively are designated as the administrative agency for providing public area community-college education under the direction of a community-college dean. It also provides for the appointment, promotion, demotion, and determination of duties of intermediate and community-college personnel and the procedure under which they may be discharged. It further provides that the appointed treasurer, the executive officer (acting as secretary), and the area education district board of education shall in the handling of funds be governed, insofar as applicable, by the provisions of the law pertaining to local boards, secretaries, and treasurers.

PART TWO

SUPPORTING EVIDENCE FOR RECOMMENDATIONS

PART TWO gives background information which should be useful to citizens and legislators alike in deciding what steps to take to provide needed educational opportunities throughout Iowa for persons who are beyond high-school age.

CHAPTER V summarizes the highlights of the Gibson Report which, in large measure, form the background for House Resolution 6.

CHAPTER VI shows how the community college can offer educational and cultural services to an ever increasing proportion of the citizens from youth onward who are residents of an area within which such a college is located.

CHAPTER VII describes the wide range of occupationally centered types of preparation which are already being offered in community colleges in the United States and which could be offered in Iowa too if there existed an adequate system of public area community colleges.

CHAPTER VIII discusses the very important service of the community college in offering the first two years of regular college work needed by persons desiring to graduate from four-year programs in standard colleges and universities.

CHAPTER V

Background and Summary of the Gibson Report Relating to Public Area Community Colleges

The concern of this state for meeting and solving the problems of higher education has been evident for much longer than the last seven-year period. For the purpose of this summary, however, no attempt is made to present information prior to 1955.

Iowa Study Committee on Higher Education

In the fall of 1955, the Iowa Study Committee on Higher Education was first organized. The committee was comprised of thirteen members representing the private colleges, the three state institutions of higher learning, the junior colleges, the State Board of Regents, and the State Board of Public Instruction. It was established in recognition of the problems which would be facing higher education in Iowa within the next ten to fifteen years. Its purpose was to provide a means for studying jointly some of the matters and problems of common interest to public and private colleges.

This committee made several studies relating to higher education in Iowa. Financing was by assessments on each college of ten cents per student. While this work was of significance to the state, the committee was never able to do a complete and comprehensive study on the resources and needs for higher education in Iowa.

Appropriations for Study of Higher Education

At the Fifty-eighth General Assembly, it became apparent that such a study was needed before intelligent action could be taken on legislation to supplement the present program of higher education being offered in this state. Efforts were made to appropriate money to the existing Iowa Study Committee on Higher Education to make such a comprehensive review. These efforts failed. However, the legislature did appropriate \$25,000 to the Iowa Legislative Research Bureau to make a comprehensive study of the needs of higher education in Iowa. The legislature intended that this study should apply to private colleges of the state as well as to the public institutions including the junior colleges. A Legislative Advisory Commit-

tee was appointed to assist the Legislative Research Bureau in making this study. The members of this committee were Representative Ray Cunningham, Chairman; Senator Gene Hoffman; Senator Robert Rigler; Senator W. C. Stuart; Representative Keith Dunton; Representative Marvin W. Smith; and Representative Robert Wilson. The purpose of this Advisory Committee was to advise Clayton L. Ringgenberg, Director of the Research Bureau, in planning the study, in employing a consultant to make the survey, and to follow the progress of the study. It was also suggested that the Advisory Committee work closely with the previously established Iowa Study Committee on Higher Education to take advantage of the knowledge and experience of the members of this group and to avoid any duplication of effort.

Preliminary Plans for Study

In reviewing similar studies that had been completed in other states, it was recognized that there was not enough money available to make a total, comprehensive survey as had been originally planned. It was, therefore, agreed that the Iowa survey would necessarily have to be limited to several basic topics relating to higher education policy. It was hoped that such information would provide some basic background information for the legislature, the Board of Regents, the boards of trustees of the private colleges, the public and private junior colleges, and the college presidents to use in making plans and decisions for the next decade. It was hoped that such research would provide a basis for future studies which would be needed in the state.

After having reviewed the current literature on such studies in other states, the Research Bureau submitted a listing of twenty-five possible subjects for study to the Advisory Committee. From these twenty-five, the following eight were chosen as representing those felt to be most important:

1. Facilities of public and private colleges and the use of these facilities.

2. Predictions of increased enrollments, the implication of these enrollments, and the needs of our higher educational system to take care of these enrollments.
3. What are the needs for education beyond high school in Iowa? Does our present educational system and training facilities, both public and private, take care of these needs? This would include vocational and technical schooling beyond high school.
4. How well are our high-school graduates prepared for college work or other post-high-school education or training?
5. The role of the junior colleges. What is this role now? What kind of a job are they doing? What should be the role in helping to meet future educational needs?
6. Inventory of the problems Iowa can expect from increasing enrollments. What research has been done and what steps have been taken to deal with these problems?
7. Study of the financing of education beyond high school in Iowa. This would be a comprehensive survey of revenues and costs, especially of public schools and would deal with such matters as methods of financing increasing enrollments.
8. Training, recruiting, keeping, and utilization of faculty.

These proposed possibilities for study were discussed with Robert Keller, Professor of Higher Education at the University of Minnesota, who, at that time, was in charge of a comprehensive survey of the entire educational system of Kansas and with Ernest Hollis, Director of College and University Administration, U. S. Office of Education. These two consultants estimated that it would cost \$40,000 to \$45,000 to secure a person or agency to study the three subjects in which the Research Bureau and the Advisory Committee were most interested. These were: facilities, enrollments, and the needs for education beyond high school in Iowa.

It was decided to go ahead with the three studies mentioned and to employ a consultant in higher education from outside the state to make a survey and also to attempt to get additional funds, so that the three studies could be completed. An attempt was made, unsuccessfully, to finance a part of the "needs" study from money allotted to Iowa under the National Defense Education Act. This attempt failed because the Act did not permit it.

The Gibson Study

Rather than to additionally delay the study, Raymond C. Gibson, Professor of Higher Education at Indiana University, was retained in November, 1959, to direct the Iowa survey. The contract with him required that he make:

1. A prediction of Iowa college enrollments to 1970.
2. An analysis of the educational program, facilities, and costs; a general analysis of manpower needs in Iowa in occupations requiring education beyond the high school, particularly terminal education and whether Iowa's present educational system met these needs; and an analysis of the Iowa junior colleges.

There were still some problems involved with financing the study and the Iowa Budget and Financial Control Committee of the legislature then allocated an additional \$5,000 so the survey could be completed as planned. Gibson agreed to carry on this study at a **policy-making level** so that the results would be particularly useful to the legislature and boards of trustees of our public and private colleges. A detailed analysis of the facilities and their use by the colleges was not made because of the shortage of money and because there was some doubt about the usefulness of the results of such a survey.

As a part of the research for the survey, Gibson visited the campuses of every private and public college in the state. In addition, he obtained statistical information on enrollments, faculties, and facilities from each school. A member of Gibson's survey team also visited each junior college in the state. In addition, Gibson met with the Iowa College Presidents Association and the Iowa Study Committee on Higher Education several times. From these personal contacts and the information sent to him, Gibson evaluated Iowa's public and private colleges and junior colleges.

On the Manpower Study, Gibson sought the advice and assistance of many individuals and groups in Iowa. He and members of his survey team prepared a questionnaire which was sent to about 4,000 Iowans who were in occupations which more than likely require some type of education beyond high school. In addition, 2,000 questionnaires were sent to leaders of the state in industry, business, agriculture, and education.

A good response to the questionnaire produced 3,652 returns. Through the questionnaire, Gibson was able to get the views of these Iowans about the needs of our system of higher educa-

tion and the needs of our youth and certain adults for various types of education beyond high school.

From the results of his questionnaire and from the information gained in his personal contact with individuals and organizations in Iowa, Gibson and his staff prepared the following detailed reports:

1. *Projection of Enrollments for Fifty-one Public and Private Junior and Senior Colleges and Universities in Iowa, 1960-1970*
2. *Manpower Problems and Higher Education in Iowa: A New Alliance*
3. *An Appraisal of Iowa Colleges: Faculties, Costs, Scholarships and Administration*
4. *The Junior Colleges of Iowa*

In addition, Gibson prepared a summary report entitled *Resources and Needs for Higher Education in Iowa, 1960-1970: A Summary Report*. It was this *Summary Report* that was widely distributed throughout the state.

In the final stages of his work, Gibson met with the Advisory Committee of Educators, the Iowa Study Committee on Higher Education, representatives of the boards of trustees of Iowa colleges, and with the Legislative Advisory Committee to sound them out on his findings and recommendations. The getting of the reactions of Iowans and several out-of-state leaders in education to the results of this study was considered a vital part of his research.

After the reports were printed, Gibson and Ringgenberg, at the request of the Legislative Advisory Committee, met with legislators at four regional meetings to bring the results of this survey to them firsthand before the legislative session began.

Most of the information contained in this chapter is taken directly from the material presented by Raymond C. Gibson to the Fifty-ninth General Assembly. Because of this, no attempt has been made to document it. While most of the text is directly quoted, Gibson cannot be held responsible for the context as it herein appears. A review of his complete report may be obtained from the following documents:

1. Bakrow, William. *Projection of Enrollments for Fifty-one Public and Private Junior and Senior Colleges and Universities in Iowa, 1960-1970*. Study No. 1 of *Resources and Needs for Higher Education in Iowa*. Directed by Raymond C. Gibson. 4

studies. State House, Des Moines: Iowa Legislative Research Bureau, 1960. Pp. 49.

2. Crane, Robert M. *Manpower Problems and Higher Education in Iowa: A New Alliance*. Study No. II of *Resources and Needs for Higher Education in Iowa*. Directed by Raymond C. Gibson. 4 studies. State House, Des Moines: Iowa Legislative Research Bureau, 1960. Pp. vi + 110.
3. Gibson, Raymond C. *An Appraisal of Iowa Colleges: Faculties, Costs, Scholarships and Administration*. Study No. III of *Resources and Needs for Higher Education in Iowa*. 4 studies. State House, Des Moines: Iowa Legislative Research Bureau, 1960. Pp. ii + 33.
4. Gibson, Raymond C. *The Junior Colleges of Iowa*. Study No. IV of *Resources and Needs for Higher Education in Iowa*. 4 studies. State House, Des Moines: Iowa Legislative Research Bureau, 1961. Pp. vi + 33.
5. Gibson, Raymond C. *Resources and Needs for Higher Education in Iowa, 1960-1970: A Summary Report*. State House, Des Moines: Iowa Legislative Research Bureau, undated. Pp. 68.

Gibson started his *Summary Report* by making a direct statement to those who had employed him to do the study. He stated that Iowa needs legislators and executives in government who support education as the principal means by which a state can advance social and economic progress. He indicated that the people of Iowa want a college education for their sons and daughters regardless of vocational choice. They agree that higher education should prepare people to work in all areas of the economy; that it should be responsive to the needs and interests of students and that it should be made available to all groups in the society.

He also felt that Iowa should reject the notion that one legislature cannot obligate a future legislature specifically in reference to financing higher education. The State Constitution and the statutes which established the three state institutions of higher learning obligated all future legislatures to provide the necessary financial support for building and operating these institutions at a level that would serve the needs of the state. He pointed out that operating budgets for Iowa colleges were approximately \$90,000,000 in 1959 and in 1960. The total operating cost for higher

education in Iowa, he felt, would almost certainly reach \$300,000,000 per year by 1970. This figure did not include capital outlay. The people of Iowa will support higher education if responsible officials make a solid case for support based upon values received by the people.

To correct the inequality of educational opportunity, the state must tax where the money is and spend it where the children are. The base for such educational support is the 7.3-billion dollar gross product of Iowa. That product increased by 2.7 billion dollars between 1950 and 1959. This means Iowa has a dynamic economy.

Expenditures and funds available for new buildings and for the remodeling of old buildings for the period July 1, 1955, to July 1, 1960, revealed that private colleges received about \$43,000,000 and the state institutions, approximately \$34,000,000. These figures include money for buildings of all types and from all sources, not just from appropriations in the case of the state schools. Experiences of the state and private colleges and universities since the end of the Second World War revealed that the most economical approach to physical plant expansion is to meet the needs as they arise. Millions of dollars in tax funds will be saved if the legislature accepts a long-range plan and each session of the legislature carries out its particular responsibilities for that plan.

Gibson felt that present programs of Iowa colleges and universities were mainly educating people for professional and technical occupations. These groups include only 16 per cent of the total workers in Iowa. Because of this, present college curricula are functionally inadequate for 84 per cent of Iowa's workers. Iowa must encourage its three state institutions to flourish. This is necessary in all aspects of the liberal arts and in the preparation of people for the professions. It is crucial in research and public service. Unless the three state institutions are permitted to develop to their greatest potential even to the point of wholesome competition, the state will be confronted with an educational catastrophe within ten years. The teacher's college should become a multipurpose state college with the major emphasis on the preparation of teachers and administrators for Iowa public schools. Its expansion into other areas should be based upon research regarding Iowa's needs that are not being met elsewhere. It will, of necessity, duplicate many curricula of the two universities and in the

twenty-five private colleges and universities. Duplication is not necessarily more costly where enrollments are as large as they will be in Iowa's three state institutions.

It has been estimated that Iowa will have a surplus labor force of 160,070 by 1965. Thousands of youth leave the state each year for employment in other parts of the nation. This is a great economic loss to Iowa. Education and training programs carefully designed for Iowa's needs can reduce unemployment. The availability of technicians and skilled workers enhances the state's case for more business and industrial development. Such development increases the economic base necessary for the support of education and other social services.

Training in industry will continue to play an important part. It should be supplemented by a vigorous program of in-service training made available to adult groups through school programs.

The fact that Iowa workers are moving from the farm to business and industry causes a change in the type of education required. But the demands for a particular occupation, even in the professions, are also changing constantly. Doctors, lawyers, teachers, clergymen, engineers, and farmers have experienced revolutionary changes in the nature of their work during the past fifty years. It is virtually impossible to educate an individual for a specific task. Therefore, one of the most important responsibilities of higher education is that of stimulating the individual to continue to learn all of his life.

It has been predicted that about one-third of the college-age group will be attending Iowa colleges by 1970; thus, two thirds of the youth will terminate their education prior to or at the completion of high school. Therefore, the elementary and secondary schools will provide whatever formal education is to be received by most of the citizens of Iowa. Consolidation of secondary schools into larger units will strengthen the state's resources in this area. It is the judgment of the survey team that vocational education should be offered by the larger comprehensive high schools. In this way, vocational and general education can be kept in balance.

More than 70 per cent of Iowa's youth go to work with a high-school education or less. This creates a great need for in-service training programs to assist workers in adjusting to changing conditions. In-service training opportunities

should be made available to adult citizens to help them in their work and to give them the opportunity for cultural improvement.

Higher education is closely related to success in life and is very important for our sons and daughters regardless of their vocational choice. The most critical problems confronting Iowa's colleges and universities are shortages of finance, lack of facilities, and shortage of highly qualified faculties. The lack of guidance and counseling at the secondary-school level creates a serious problem for higher education. There is a need to clarify the philosophy, goals, objectives, and curricula of higher education.

On the basis of all research involved in this study, Iowa needs a system of regional community colleges. **This is perhaps the most serious gap in the entire educational system of the state.**

It is possible that regional community colleges would greatly increase college enrollment beyond the present predictions, because they would make educational opportunities available to thousands of youth in Iowa who pass up the type of education offered at the college level.

To strengthen his position on establishing community colleges, Gibson wrote two recommendations relating specifically to such institutions among the thirty appearing in his *Summary Report*.

GIBSON RECOMMENDATION 18: The survey team recommends that the state legislature authorize the establishment of regional community colleges as the best means of relating education beyond high school to the manpower problem in Iowa.

Regional community colleges should be organized in terms of large local units comprising from one to four or more counties. There should be a local community college board with the power to tax the local community for support. Regional community colleges should have a minimum of 500 students. The state would start this program gradually, and each region interested in the program should be assisted by the staff of the State Department of Public Instruction in carrying out the necessary research in formulating a plan. A limited number of present junior colleges could be developed into regional community colleges.

GIBSON RECOMMENDATION 19: The state legislature should authorize the establishment of regional community colleges where there will be 500 students and the state should pay at least

one-half the cost for building and operating such colleges.

Proposed Community-College Program for Iowa

The proposed community-college program for Iowa is based upon certain obvious facts gleaned from a study of education and work in Iowa and in the nation. Over 70 per cent of the youth of Iowa go to work with a high-school education or less. Over 92 per cent go to work with less than a four-year college degree. There are no isolated agricultural communities in Iowa, and more than 12,000 Iowa workers leave the farm each year to seek employment in business and industry. Over 10,000 of them leave Iowa each year. There can be no more difficult social, economic, and personal adjustment for a young person from an Iowa farm than to move to an urban center to work and live with inadequate educational preparation.

Nature of the Educational Task

All education is either vocational or cultural. Its central task is to develop the potentials of each individual for effective living and productive work. This view is based upon the right to equality of educational opportunity and the equality and dignity of all useful work.

There is general agreement on the educational emphasis for personal development and effective citizenship, but Americans are divided on the issue of preparing young people at the college level for work.

If one goes back one hundred years in the history of higher education, in the United States, he discovers that law, medicine, agriculture, and engineering were not regarded as appropriate concerns of higher education. These highly specialized vocations are no longer questioned as college courses. The coming of the land-grant colleges opened wide the doors of educational opportunity to thousands of American citizens and workers for whom the doors had been closed for twenty-four centuries of higher learning.

As Iowa begins a second century under the influence of the land-grant college philosophy, accelerated changes toward a further extension of higher educational opportunity are certain to take place. The people will demand that the doors be opened wider. And if traditional institutions do not adjust to the new demands, the people in Iowa and in other states will create

new types of institutions (as they did one hundred years ago) to fill the gap.

The nature of the society in which we live demands new approaches to the development of effective citizens and workers. In a sense, the society is so complex and dynamic that the most practical preparation, even for technical areas such as *engineering*, is the theoretical foundation for constant changes now going on in technical fields. But this tendency makes it even more necessary to develop the craftsman and the technician.

In all cases, competent workers at all levels, in the technical and professional fields, will have to continue to learn all of their lives. In-service education and training programs will become increasingly necessary as industry and business respond to new challenges, new products, and new procedures.

The Role of the Senior Colleges

Iowa's senior colleges and universities will continue to be challenged by the increasing demand for liberal and professional education. The demand for professional and technical workers will increase at a more rapid pace than any other groups during the decade of the sixties. Moreover, every indication points to a greater usefulness for the liberally educated citizen in American society. A liberal education, drawing upon the social sciences, the sciences, and the humanities for the development of an integrated person, will become even more functional in American society. This should be the distinguishing consequence of a society that provides increasing freedom from the drudgery of manual work.

The liberal arts, conceived originally for free men, meaning men of leisure, have served well a nation where all men were progressing toward freedom and where all men worked. The challenge of those who will guide the destiny of higher education during the next century will be to make the liberal arts function for free men everywhere.

The Need for Community Colleges

Certain specific functions can be performed by community colleges. Most of these functions are not performed by the senior colleges of Iowa.

Among such functions are the following:

1. General education studies either for terminal programs or for transfer to four-year colleges. This function is a necessary part of

all junior college programs, but it is not unique to the junior college. General or liberal education in the social sciences, sciences, and humanities is the foundation of all higher education. Therefore, the junior colleges cannot make any unique contribution in this area. This means that the function can be performed as well or better by the senior colleges and universities of Iowa.

2. The second function for community colleges is a guidance and counseling one to assist students in planning their careers. This function is necessary where there is a junior college; but it is not unique to the junior college, because secondary schools and all colleges have responsibility in this area.
3. The third function is the in-service training of workers in local industries, business, and agriculture. This is a unique function for community colleges, because no other educational groups are performing this task. The changing nature of work requires a more systematic approach to this problem. Dynamic community college programs in the industrial sections of the state will probably enroll twice as many evening, Saturday, and part-time day students from among adult workers as full-time day students.
4. The fourth function for the community college is the terminal education program. This could take the form of regional, vocational, or trade and industrial education even for students who have not graduated from high school. Many adult workers who have not graduated from high school would enroll in terminal courses related to their work. The vocational education function can and should be performed by the larger high schools; but if the state decides to develop regional vocation education programs, they should be a part of the community colleges.

Another significant part of the terminal program is the training of technicians. If regional technical institutes are to be organized in Iowa, they should generally be a part of the community college.

All terminal and general education programs should lead to an associate in science or associate in arts degree, granted upon the completion of approximately two full years of study beyond high school.

General education for effective citizenship and specialized training for productive work are the

two major goals of the community college. There are many specialized curricula that contribute to the second objective. Accounting, business administration, legal and medical secretarial, merchandising, general secretarial, and other semiprofessional occupations in health, business, education, agriculture, and industry are appropriate areas for community-college curricula and courses.

Each community or region must be studied before the community college moves toward these technical fields. There is no single pattern that will apply to all regions of Iowa. These studies should be conducted under the general direction of an authority on community-college development working out of the State Department of Public Instruction, and with generous participation on the part of local citizens and leaders in education.

Organizing the Community Colleges

The most casual observation and limited insight concerning organization and administration of educational institutions are sufficient to convince anyone that the present local school districts of Iowa are inadequate administrative and fiscal units for community colleges.

Local school districts are being consolidated into larger districts for secondary-school purposes. It is the judgment of the survey team that 500 students should be the minimum enrollment for the efficient and economical operation of a community college. A part of this enrollment could be made up of part-time students, but the full-time equivalency should be 500 students.

Community colleges should be located in regions that can provide 500 students, and all students should be able to live at home and commute daily.

To build student housing facilities and to provide the other facilities necessary for students to live on campus would be more expensive than to send the students to any one of the three state institutions.

Some of the present junior colleges can meet the criterion of enrollment and should be encouraged to move ahead in studying the needs of their communities and in developing comprehensive community-college programs.

Several of the existing junior colleges should be supported as they are on an interim basis, but some of them should be closed either now or as soon as the comprehensive community-college program can replace them.

It is possible that Iowa State University, State College of Iowa, and the State University of Iowa should develop community-college programs in their respective regions to serve local needs; to serve as laboratories for the preparation of community college faculties; and to serve boarding students from sparsely populated areas of Iowa where community colleges within commuting distance may be impossible.

The regions served by each community college should elect a community-college board whose functions would include the development of local policies for the community college in harmony with state policies, and the employment of the community-college president and of all other personnel upon the recommendation of the president.

The local region should be required to levy a special community-college tax both for building programs and for operating costs. These funds should be supplemented by state funds and by tuition which should approximate the tuition charged at the three state institutions.

Gibson's Summary Statement About Two-Year Colleges

Trends in college enrollments and in the demands for higher standards of education for increasing numbers and percentages of workers point to the need for greatly expanded educational opportunities beyond the high school. Most of Iowa's workers will need something less than a bachelor's degree. Only 8 per cent of college-age youth finish the bachelor's degree.

The educational demand is for a balance between general education for cultural development and effective citizenship and for technical education to prepare individuals for work.

Iowa's senior colleges are concerned primarily with liberal arts and professional education. The secondary schools and the existing junior colleges are concerned primarily with college preparatory courses and curricula.

There is a serious gap in this system that needs to be bridged by the comprehensive community college. Since the existing junior colleges are not meeting this demand, the state legislature and school authorities have a grave responsibility for launching a unique program suited to conditions in Iowa.

Specific Recommendations

1. The state legislature should authorize the establishment of Regional Community Colleges wherever studies indicate a potential enrollment of 500 students within commuting distance of the college.
2. The three major objectives of the community college should be: (a) general education for effective citizenship and for transfer to senior colleges; (b) in-service general and technical education for adult workers in the region; and (c) terminal general and technical education leading to an associate in arts or an associate in science degree upon the completion of two years of study beyond the high school.
3. Local authority for the community college should reside in a community-college board composed of seven members elected by the voters of the region. Board members should be elected for seven-year terms, one member to be elected each year.
4. The community-college board should have the authority and responsibility for determining local policy, for levying a community-college tax within the limitations prescribed by the legislature, and for employing personnel to operate the college.
5. The tuition rate should be the same as in the three state institutions; and the local region and state legislature should share the remainder of the costs, both for operations and building construction, with the state's contribution varying in terms of the local region's ability to pay.
6. Statewide policy, planning, organization, and coordination for the community colleges should be the responsibility of the State Board of Public Instruction and the State Department of Public Instruction.
7. There should be an advisory Community College Commission composed of the State Superintendent of Public Instruction as chairman, the presidents of the three state institutions of higher learning, and three private college presidents elected by the Association of Iowa's College Presidents. The purpose of the commission should be to maintain close liaison between all segments of higher education in Iowa.
8. There should be a director of a Community College Division in the State Department of Public Instruction, and he should serve as executive secretary to the Community College Commission. He would have the responsibility for assisting local regions in planning, organizing, and improving community college programs.
9. The development of the statewide community-college program should take place over a ten-year period, but the statewide plan should be made by the time the legislature meets in 1963.
10. By 1963, the legislature should know which of the existing junior colleges qualify as centers for community colleges, and these centers should be adequately supported and developed.

CHAPTER VI

The Democratization of Educational and Cultural Opportunities Through the Community College

Democracy has been cited as the name of one of the 102 great ideas which have undergone ". . . continuous discussion that runs through the thirty centuries of western civilization."¹ Democracy, as a political concept, has carried varied meanings through the ages. Yet, there has been a common thread woven into its fabric. This thread has been the notion that political power should be in the hands of the many rather than the few or the one. However, we find that it was not until John Stuart Mill gave us the benefit of his wisdom that we began to accept the idea that "liberty and equality for all men" meant such things as these: ". . . the abolition of slavery; the emancipation of women from political subjection; or the eradication of all constitutional discriminations based on wealth, race, or previous condition of servitude."² Gradually, from that point in time until the present, modern democracy with its emphasis on equal rights and opportunities for all—because each of us has been born human—has evolved.

The great conflict between communist and democratic ideologies which has existed in our world for some time illustrates that every effort must be made to strengthen our democratic way of life. Each person in our country will need to learn to function as effectively as possible, politically and otherwise, if the conflict is to be favorably resolved. But belief in democracy is not enough; every person in this nation must learn to work diligently toward making a contribution to our political, social, and economic structure.

We are reminded that, in order to function effectively as a citizen in a democracy, the individual must enjoy one highly important condition—". . . equality of educational opportunity."³ According to this viewpoint:

. . . All men may not be endowed with the same native abilities or talents, but all born with enough intelligence to become citizens deserve the sort of education which fits them

for the life of political freedom. Quantitatively, this means a system of education as universal as the franchise; and as much for every individual as he can take, both in youth and adult life.⁴

The People's College

Iowa's present educational structure is improving its ability to provide an adequate education for elementary-school pupils. The same thing can be said about the improving situation for youth enrolled in our secondary schools. But we do our best job for youth and adults who have leanings toward higher education which leads to academic and professional degrees and careers based on them. There are several groups whose needs are not being met by appropriate post-high-school education. Furthermore, the needs of these groups cannot be met by existing Iowa institutions of higher education unless their functions are drastically revised. Continuing technological and other developments in our society will create almost insurmountable problems so long as we fail to educate all individuals to adapt to the changes involved. This means there must be opportunity for the many to benefit from education beyond high school just as the uniquely fitted few presently do from the higher education now provided by our present colleges and universities. There is need for a people's college. This report refers to this needed institution as the community college.

The junior college, which is now more and more being called the community college, is in many respects a unique development in American education. This institution, in its early development, was primarily a private school specializing in the "transfer" or college-parallel function. The academic orientation of this institution continued as it increasingly became a responsibility of public education. Though this function still tends to prevail in a few sections of the nation, there is a definite and widespread broadening of scope of junior college responsibilities.

¹*The Great Ideas: I—A Synopticon of Great Books of the Western World*, Volume I. Mortimer J. Adler, editor of chief (Chicago: Encyclopaedia Britannica, Inc., 1962), p. xii.

²*Ibid.*, p. 805.

³*Ibid.*, p. 308.

⁴*Ibid.*, p. 806.

In recent years there has been a nationwide trend toward the establishment of publicly controlled two-year colleges oriented to community needs, services, and aspirations. This movement indicates the public's desire for a school which is within the financial reach and commuting distance of potential students, and for a program that meets the interests and needs of the entire population. It represents a growing realization that the "good old days" extend to the point in time when automation and space exploration first became unprepared for realities. It represents acknowledgment of the need for a great deal of "catching up" in the labor force.

The proposed community college is designed to provide educational and cultural opportunities for all of the people. The legal structure proposed in this report places responsibility for the establishment and operation of this institution in the hands of the people. Such an arrangement obviously can exert a tremendously positive effect on the social and economic growth of our state and country and thus strike a significant blow to those political beliefs which find no place for individual freedom.

Who are the people? What are their needs? What evidence indicates their needs are not currently met? How might Iowa best meet their needs? These are questions with which Gibson, in his study, and this committee, in its study, have been concerned. The Gibson Report informs the reader about the many educational needs that are real and urgent in Iowa. The present report presents a plan for a community college which would be an effective way to meet these needs. The next section of this chapter supplements the evidence given by Gibson.

Evidence of Need for Expanded and Broadened Opportunities for Higher Education

Six Generalizations About Education

The statements which follow are widely accepted as being supported by facts. Nevertheless, references are supplied for the reader who may wish to explore the statements in greater depth.

1. The American public is placing a higher value on education.

Between 1900 and 1958, the percentage of 14- to 17-year-old youth attending high school in the United States increased by approximately 65 per cent. During the same period the portion of col-

lege-age youth actually enrolling in college increased by more than 30 per cent.⁵

2. The citizens of this nation desire and are prepared to take advantage of higher educational standards.

Over one half of the high schools of the nation upgraded graduation requirements in some fashion between 1954 and 1959.⁶

3. The people desire and need education beyond high school.

The dramatic increases now being indicated in the proportion of the college-age population which seeks some type of post-secondary education leaves no room for even reasonable doubt that the American people do desire education beyond high school. Truly, here is one aspect of the "American Dream." That this desire is based on expectations that are sound, is attested to by many leaders in the field of higher education. For example, President Carroll V. Newsom of New York University says,

It would be unfortunate, indeed, if anyone should obtain the impression from previous discussions that only those with pronounced abilities should be encouraged to seek a post-secondary education. Perhaps as many as three-fourths of all high school graduates possess significant patterns of ability that will undergo considerable development if the students are placed in the proper educational environments; the potential contribution of all these students to our society must not be minimized.⁷

4. The need for more revenue does not cause competition between the various levels of education.

Allen M. West, Secretary-Treasurer of the Utah Education Association, made the following statement during a 1960 National Conference on School Finance Problems:

Within the next few years the impact of increased birth rates of the early 1940's will be felt on the college and university campuses. Obviously, increased enrollments are going to require sharp increases in both capital outlay and operating budgets for higher

⁵"Growth in School Enrollments," *NEA Research Bulletin*, XXXVI (December, 1958), 124-125. Information graphically illustrated. A recent communication from the National Education Association gives revised data showing that these percentage increases, respectively, were 75.9 and 81.6.

⁶"High-School Graduation Requirements," *NEA Research Bulletin*, XXXVII (December, 1959), 126.

⁷Carroll V. Newsom, *A University President Speaks Out: On Current Education* (New York: Harper and Brothers, Publishers, 1961), p. 22. Publishers' name now Harper and Row, Publishers.

education. I do not see this need for more revenue as competition, any more than the need for junior high schools and high schools in the present period is competition with elementary education. It is not a question of how we shall slice the state revenue pie. The question is how to find enough revenue to bake a large enough pie to meet the total needs of the educational program.⁵

5. Education has a pervasive influence on the economic productivity of the individual and the welfare of society.

The influence of education on the economic productivity of the individual and the welfare of society may be inferred from the following facts: In 1958 an individual who graduated from high school could receive \$75,862 more lifetime income than the one who had only elementary-school education and an expected lifetime earning of a college graduate was \$435,242 as compared with \$257,557 for a high-school graduate.⁹ Furthermore, unemployment of workers is closely related to a low amount of education. "In March 1959, 8.5 percent of the workers in the labor force with less than high-school graduation were unemployed, compared with 4.8 percent of the high-school graduates and 2.4 percent of workers with some college experience."¹⁰

6. Educational demands increase and broaden as the nature of the labor force changes.

At the 1961 National Conference on School Finance, Seymour L. Wolfbein, the U. S. Deputy Assistant Secretary of Labor, presented evidence to show that, as a result of technological change, we are becoming a country with more workers in the service industries than in the industries which produce goods. Opportunities for farm workers and for unskilled workers are on the decrease. The service-type jobs call for competencies which require preparation, much—and in many cases, all—of which can be made available in a statewide system of community colleges. Wolfbein stressed the need for a new view of education when he said,

... This argues for viewing education and training as a development process which con-

tinues throughout the lifetime of an individual. . . .¹¹

The labor force of 1970 and beyond will need a different kind of education from that offered even so recently as 1959. The direction of this trend is reinforced by the statement,

... In 1900, college enrollments equalled only 4 in 100 of the group 18-21 years of age, while by 1959 the ratio was 4 in 10.¹²

A major national follow-up study of high-school graduates, made by the Bureau of Labor Statistics of the U. S. Department of Labor, concerned the October, 1960, status of the nation's June, 1960, high-school graduates. It is interesting to note that:

Clerical, operative and kindred workers accounted for 56.3 percent of the 599,000 June 1960 graduates employed, and sales workers, farmers, and laborers accounted for a little more than 8 percent each.

In the labor force as a whole, 6.3 percent were unemployed in October 1960. Of the June 1960 high-school graduates in the labor market, 15.2 percent were unemployed in October 1960.¹³

Educational Opportunities Which Should Exist in Community Colleges

1. All persons who are high-school graduates and who desire a college education should have an opportunity to enroll in such a program.

The proposed two-year general or college transfer function in a statewide system of community colleges is needed to make this opportunity more widely available to an increasing number of persons. (See page 75 for a chart which summarizes the types of persons to be served by the statewide system of community colleges proposed in this report.)

Existing Iowa colleges (public and private, and senior and junior) find it increasingly necessary to give serious consideration to the application of selective admissions policies due to the increased demand for a college education and the limited space and staff for meeting this need. Thus, unless the institutional base—at least at

⁵"Paying for Schools Is Everybody's Business," *NEA Research Bulletin*, XXXVIII (December, 1960), 199. Quoted by *NEA Research Bulletin* from *New Directions in Financing Public Schools*, Proceedings of the Third National School Finance Conference, 1960 (Washington 6, D. C.: National Education Association, 1960), p. 72.

⁹"Education and Lifetime Earnings," *NEA Research Bulletin*, XXXIX (May, 1961), 60.

¹⁰"It Pays to Go to School," *NEA Research Bulletin*, XXXVIII (December, 1960), 115.

¹¹"Our Changing Population Demands Re-Thinking of Education for Employment," *NEA Research Bulletin*, XXXIX (October, 1961), 78. Quoted by *NEA Research Bulletin* from *Financing Education for Our Changing Population*, Proceedings of the Fourth National School Finance Conference, 1961 (Washington 6, D. C.: National Education Association, 1961), p. 23.

¹²"Schools and Scholarship in Demand," *NEA Research Bulletin*, XXXVII (October, 1959), 78.

¹³"Studies of High-School Graduates," *NEA Research Bulletin*, XL (May, 1962), 42.

the two-year college level—can be expanded, many qualified individuals will not be permitted to secure the type of education which is necessary for them to make the optimum contributions both to themselves and our state and nation.

While momentarily overlooking those individuals who are capable of succeeding at the college level but who, for various reasons, are not motivated to attend, it is significant that by 1970, according to one of the documents of the Gibson Report, 33.6 percent or 76,414 of the total 18- to 21-year-old Iowa population will be enrolling at the undergraduate level.¹¹ To deal with this population, reports Gibson, Iowa colleges and universities, as a group, must plan for an increase of nearly 80 percent in undergraduate enrollments and 122 percent in graduate enrollments between 1959 and 1970.¹² Elsewhere in his study he states,

Interviews with the college presidents and other administrative officers of all colleges in Iowa indicate that plans have been well formulated for an enrollment increase of approximately 50%.¹³

Although Gibson's statement is not intended as a commitment on behalf of present college personnel and even though he indicated they are making realistic plans for a minimum increase of 50 per cent in enrollments, there is a strong possibility that present institutions will become more and more selective in their admissions policies unless present plans are significantly changed and thus leave no outlet for many reasonably competent college students who wish to secure a higher education.

It is a well known fact that many who are capable of succeeding in college do not attend. It has been found that, ". . . less than half of those capable of completing college enter college. . . ."¹⁴ Among the reasons for such a waste of human resources which may be identified are: ". . . lack of interest in college education on the part of the youth himself, his family, and his friends; lack of a college within commuting distance of home; lack of money; or a combination of these rea-

sons."¹⁵ The economic factor, however, is cited most frequently as the predominant reason.¹⁶

Needless to point out, the presence of a college in relatively close proximity to such persons would stimulate interest in attendance, counteract the distance argument, and make it possible—in the majority of cases—for the student to live at home thus possibly placing it within his and the parents' financial ability.

Those who enroll in conventional colleges and drop out have an opportunity to transfer to a program of preparation in keeping with goals which are matched to their capabilities. A significant number of students who enroll in college do not stay. In Iowa, the college drop-out rate is highest during the first two years. According to the average advancement ratio, it is found that 29.7 per cent of the freshman drop out and 29.4 per cent of the sophomores do not continue their college education. The predictions indicate that 8,358 of the 1963 freshmen will not become juniors and 14,251 of the 1970 freshmen will not attain this status.²⁰ Though these individuals were accepted into college and have more education than high-school dropouts, they are not thereby necessarily better fitted for entry into the labor force. Thus, if not served by some educational agency, they represent a great waste of human resources. It is possible that this group includes many who are qualified to become highly trained technicians—given the opportunity.

The varied types of educational opportunities to be available in the proposed community college will allow the individual to "put his eggs in more than one basket" as it were. If he finds a barricade along one path of endeavor, he may take another.

The senior colleges may also find benefits in the proposed plan. They cannot afford to overlook the strong possibility that the community college as envisioned will serve as a filter which will reduce the number of dropouts in four-year institutions. College expenditures currently made for this population might then be diverted into the more productive aspects of the endeavors of these institutions.

2. All persons of post-high-school age who desire technical education should have an opportunity to enroll for such education.

The term technical education is applied to a wide range of occupational courses most of which

¹¹William Bakrow, *Projection of Enrollments for Fifty-one Public and Private Junior and Senior Colleges and Universities in Iowa, 1960-1970* (Study No. 1 of Resources and Needs for Higher Education in Iowa, directed by Raymond C. Gibson, 4 studies; State House, Des Moines; Iowa Legislative Research Bureau, 1960), pp. 37-38, 40.

¹²Raymond C. Gibson, *An Appraisal of Iowa Colleges: Faculties, Costs, Scholarships and Administration* (Study No. III of Resources and Needs for Higher Education in Iowa, 4 studies; State House, Des Moines; Iowa Legislative Research Bureau, 1960), p. 82.

¹³*Ibid.*, p. 10.
¹⁴"Financing a College Education," *NEA Research Bulletin*, XXXIX (October, 1961), 86.

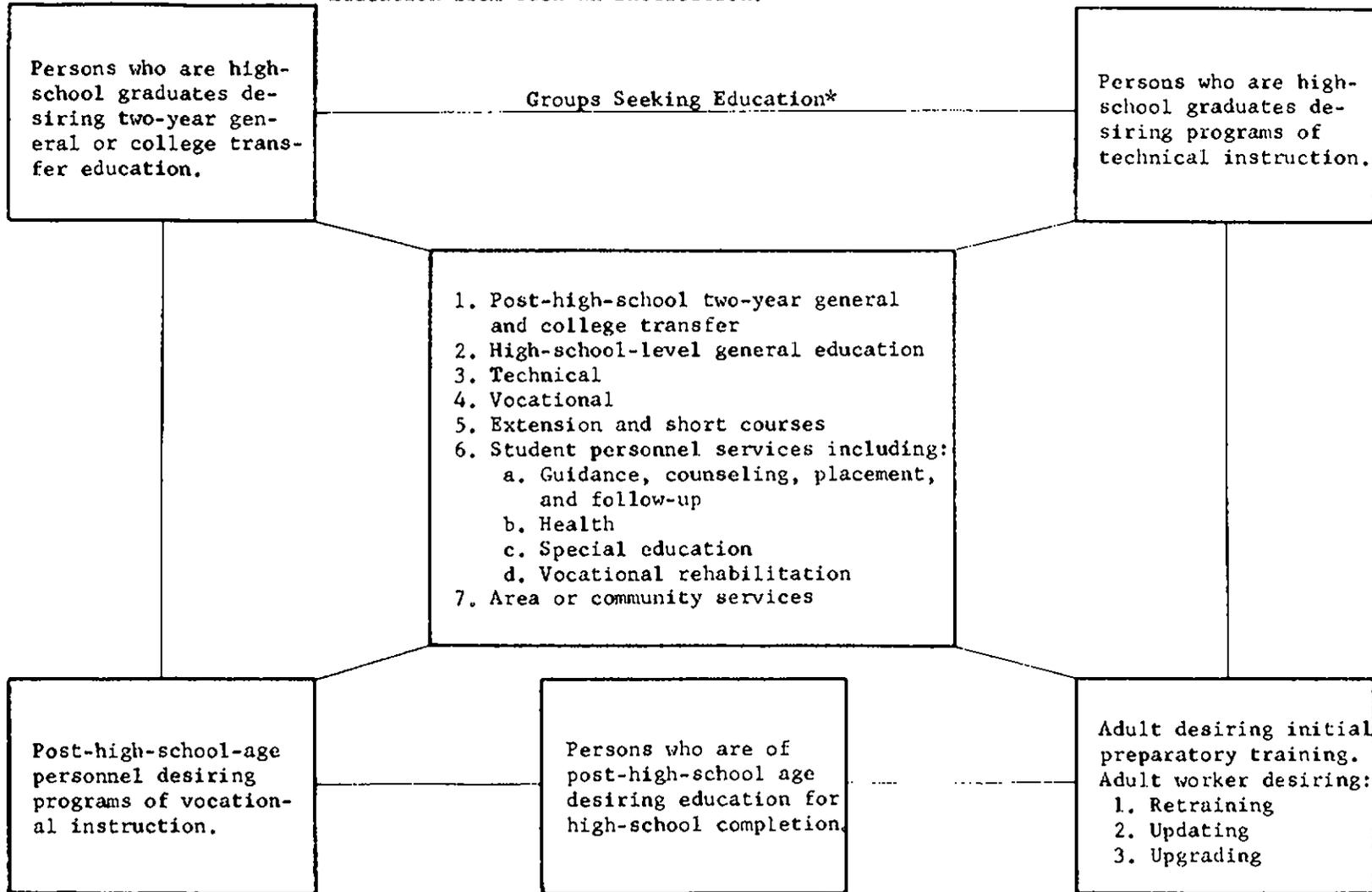
¹⁵*Ibid.*, p. 86.

¹⁶*Ibid.*, pp. 86-87.

²⁰Bakrow, *op. cit.*, pp. 31-32, 40.

PUBLIC AREA COMMUNITY COLLEGE

The Center Rectangle Represents Programs and Services that Could be Performed by a Community College. The Small Outside Rectangles Represent the People that Could Receive Education from such an Institution.



*Special programs could be arranged for selected high-school students with specific abilities and aptitudes.

require two years of full-time study beyond high school. Certain aspects of these types of education may also be successfully conducted on a three-year basis in high schools. Reference is made to the series of "families" or "clusters" of technologies listed in CHAPTER VII.

The word "technician" is often used to designate the person who works at a type of endeavor requiring technical skills acquired either through formal education or experience.

The terms "technical education" and "technical information" have been used for many years. Principally, the term "technical information" throughout the years has referred to the special mathematical and scientific information needed by the worker.

Between the extremes of the unskilled worker who needs practically no knowledge of the application of mathematics and science and the scientist who needs practically no mechanical skill in his work, there are many workers with varying degrees of need for these applications. In progressive order some of these are the skilled machine operator, skilled craftsman, technical specialist, engineering technician, and the engineer. The skilled machine operator makes use of principally muscular effort while the engineer uses principally mental effort in the realm of applying mathematical and scientific principles.

The worker in a technical occupation has need for varying degrees of the application of mathematics and science ranging from more than that used by the skilled craftsman to less than that used by the engineer. Likewise, the technical worker will use less muscular skill than the craftsman and his use of muscular skill will range progressively lower until the need for it is nearly as small as that needed by the engineer.

The introduction of new materials, new processes, automation, and improved techniques of measurement and control have combined to increase the need for additional numbers of technical workers. The need for workers with technical capabilities is now beyond the capacity of our traditional educational services and beyond the ability of industry to provide this type of education to its employees. Furthermore, it appears that modern industry is to require an increasing number of persons with broad-range abilities in technical skills. Such workers are liaison persons, engineering assistants, and people who plan, coordinate, develop, test, and perform many other functions that require the application of abilities

and understandings that heretofore have been taught principally in engineering colleges and a few technical institutes.

It should be further pointed out that industry usage of the word "technician" is far from uniform and varies from identifying those giving direct support to scientists and engineers to highly specialized workers in limited fields of operation. Moreover, a specific job may be termed "technician" by one employer and assigned a different title or classification by another. It is thus best to use scope of training and work capability, rather than employment classification to define "technician" or "technical worker."

In February, 1962, an unpublished report from the Area Vocational Education Branch, Division of Vocational Education, U. S. Office of Education, entitled *Progress in Title VIII Programs: National Defense Education Act—1958, Fiscal Year 1961* pointed out that for the United States, the enrollment in the secondary-school preparatory program grew from 4,347 in 1959 to 11,778 in 1961. The post-secondary preparatory program ranged from 14,896 to 27,446 during the same period of time. Extension course enrollments in all types of schools for the period ranged from 29,321 to 83,748.

Iowa enrollment in both preparatory and extension courses, conducted by the public schools of Iowa including junior colleges, ranged from 222 to 1,134 during the same period. By 1962 this enrollment had reached 1,291.

To provide Iowa residents with the same technical education advantages as those in other states, there is need for considerable expansion in the program. How this need may be met is now being demonstrated in the junior colleges at Burlington, Centerville, Clarinda, Clinton, and Mason City. Other schools involved in the technical education program of Iowa are Iowa State University and schools operating under the boards of education at Cedar Rapids, Davenport, Des Moines, Maquoketa Valley, Ottumwa, Sioux City, and Waterloo.

3. All persons of post-high-school age who desire vocational instruction should have an opportunity to enroll for such education.

Vocational education is presently restricted to a relatively few of the total number of individuals in need of and capable of benefiting from such instruction. The increasing demands for trained manpower, economic and social developments, changes in the various occupational fields, ad-

vancements in science and technology, and other developments make it necessary to extend vocational education programs and to modify present programs.

High-school graduates with or without vocational education in the secondary school should have an opportunity to enter or continue in this important field. In addition, there are some more or less minority groups who have a great need for this type of education whether or not they are high-school graduates. These include the handicapped, the aging, the migrant from rural areas to cities, migrant farm workers, displaced and unemployed workers, and individuals who drop out of school. Not only do such individuals require this opportunity, but business and industry require that they receive this training if our nation is to be strong and healthy. Thus, there exists a close relationship between the needs of individuals and the economy's need for workers.

The purpose of vocational education is to develop the skills, understandings, abilities, and attitudes of those who have entered upon or who are preparing to enter upon the work of an occupation. For reasons of classification, it may be stated that technical education as discussed earlier in this chapter trains for the more specialized aspects of vocational areas of endeavor just as concentration in corporation law is specialized education in the general area of law. It might be added that all occupations whether they be vocational, technical, or professional are deserving of equal respect even though they respectively require increased cognitive skill.

Those individuals interested in high-school completion, initial preparatory training, retraining, updating, and upgrading will be discussed in the next two sections of this chapter. The present section deals essentially with general considerations.

Special attention must be directed to meeting the educational needs of new young workers, middle-aged and older workers, part-time workers, minority-group workers, and farm workers. According to the U. S. Department of Labor:

Workers under 25 account for nearly half of the labor force growth during the 1960's, even though they will stay in school longer.²¹

During the 1960's 2 out of 5 workers will be 45 years or older.²²

²¹*Manpower: Challenge of the 1960's*, United States Department of Labor (Washington: U. S. Government Printing Office, 1960), p. 6.

²²*Ibid.*, p. 18.

There will be a very large increase in the number of persons able and willing to work only part time. This will occur because most of the labor force growth will be among *young people*, many of whom will still be in school, and among *adult women*, many of whom will have home responsibilities.²³

Negro workers represent an important man-power resource. One out of every ten workers is a Negro. For a variety of reasons—lack of education and experience, discrimination—many Negro workers are not being used to their fullest capabilities.²⁴

Many of our manpower resources will come from the farm population. The number of persons living on farms has decreased substantially over the years. The movement of farm people to urban areas has been one of the major trends of this century, reflecting in part the continuing reduction in farm manpower requirements.

Young people, especially, are leaving the farms in greater proportion than any other age group. They will need the kind of education and guidance that will help them adjust to work and to compete for the better jobs in nonfarm settings.

Persons who remain on the farms will also need better education and training. Farming as a business requires more knowledge and skill to operate effectively. Many more farm jobs require special skill and training. More and more of our farm population depend partly on nonfarm jobs to supplement their incomes. Almost one-third of all income of farm residents comes from nonagricultural sources.²⁵

One of the studies in the Gibson Report states, "It is evident that the situations in Iowa will follow the changes in the national labor force."²⁶

"Many changes are taking place in particular occupations that will have significant influences on vocational education."²⁷ Not all individuals will remain in their present location, so it is imperative that educational opportunities be oriented to the needs of the individual as well as to

²³*Ibid.*, p. 19.

²⁴*Ibid.*, p. 20.

²⁵*Ibid.*, p. 21.

²⁶Robert M. Crane, *Manpower Problems and Higher Education in Iowa: A New Alliance* (Study No. 11 of *Resources and Needs for Higher Education in Iowa*, directed by Raymond C. Gibson, 4 studies; State House, Des Moines: Iowa Legislative Research Bureau, 1960), p. 17.

²⁷*Vocational Education in the Next Decade: Proposals for Discussion*, United States Department of Health, Education, and Welfare: Office of Education (Washington: U. S. Government Printing Office, 1961), p. 27.

the needs of the community. The U. S. Office of Education lists the following occupational trends, which will influence vocational training:

Clerical and sales work will continue to provide the major employment opportunities for women. . . .

It is expected that the skilled trades will grow at a faster rate than the work force as a whole during the 1960's. . . .

Favorable employment opportunities will be available for dry cleaners, beauticians, barbers, and other service workers.

The entry of America into the space age is creating thousands of new jobs. . . .

Atomic energy is a rapidly developing field that offers good employment prospects.

The air transportation industry will continue to attract many young people. . . .

The growing field of automation will provide many types of employment opportunities for engineers, technicians and skilled craftsmen. . . .

Many industries will continue to grow at about the same rate as the population. Among them will be those that sell their products or services directly to the consumer,²⁸

Unless most of the above individuals are offered the implied educational opportunities, their only recourse will be to enter the working force as common laborers; and mechanization and technological advances make it unlikely that all such persons will be employable. The unavailability of such educational opportunities in Iowa is discussed in CHAPTER IX of this report. For reasons dealt with there, and in this section of the present chapter, it is obvious there is great and demanding need for vocational instruction beyond high school in a community college.

4. All persons who are of post-high-school age who desire education for high-school completion should have this opportunity.

Individuals in need of and desiring high-school completion will be found in the elementary- and secondary-school "drop-out" population. Some understanding of the needs of this group may emanate from a brief consideration of why they left school in the first place.

Two University of Iowa professors, in cooperation with the Iowa State Department of Public Instruction, conducted a study of the drop-out problem in Iowa high schools. Their study in-

²⁸*Ibid.*, p. 28.

involved youth who entered high school (ninth grade) in September of 1950, 1951, or 1952.²⁹ Their findings show that the drop-out rate (15.8 per cent) is high enough to cause concern.³⁰ Among the cases studied it was found that low scores on intelligence tests were positively related to the drop-out rate. Even so, however, a significant proportion of these dropouts (17.6 per cent) had high I.Q.'s—120 or above.³¹ "The average I.Q. for all drop-outs was 96.6 and for all persisters, 106.4."³²

Van Dyke and Hoyt identified factors which were associated with the process which resulted in Iowa students dropping out of high school: ". . . (1) School too Difficult, (2) Lack of Acceptance, (3) Disruptive Home Situation, (4) Financial Need, (5) School Program Inadequate, and (6) 'Engagement' and/or Marriage."³³

Job opportunities in the nation and in Iowa, for those with less than high-school education, are in the minority and promise to decline even further. As a part of the Gibson Study, Crane reported that twenty-eight of 1,816 employers in Iowa employed persons with less than high-school education.³⁴ Furthermore, he found 1,004 of 1,546 employers required training beyond high school.³⁵

These and other statistics too numerous to mention indicate that the individual without a high-school diploma is and will be in the unemployment ranks or engaged in the most menial low-paying aspects of our labor force. Such pressure will undoubtedly serve to motivate many of these persons to seek a high-school diploma.

Many, if not most, of Iowa youngsters leaving high school are intellectually capable of completing the course work required. Data already cited in this report show that Iowa dropouts from high school have an average I.Q. of 96.6 with 17.6 per cent whose I.Q. scores are superior. A pupil with an I.Q. of 97 has sufficient ability to complete high school. Also many in the drop-out group with substantially lower scores could also complete a high-school program which was geared to their needs. Thus, a relatively large portion of dropouts could profit by an opportunity for high-school completion at a later date.

²⁹L. A. Van Dyke and K. B. Hoyt, *The Drop-Out Problem in Iowa High Schools*, report of research performed pursuant to a contract with the United States Office of Education of the Department of Health, Education, and Welfare, under sponsorship of the Iowa State Department of Public Instruction and in cooperation with the State University of Iowa (Des Moines: Iowa State Department of Public Instruction, 1958), pp. 81-88.

³⁰*Ibid.*, p. 9.

³¹*Ibid.*, p. 84.

³²*Ibid.*, p. 82.

³³*Ibid.*, p. 88.

³⁴Crane, *op. cit.*, p. 54.

³⁵*Ibid.*, p. 55.

While promising steps—such as the employment of school counselors who organize and conduct counseling and guidance services—are being taken, the fact remains that the drop-out rate of persons who can profit both themselves and society by further education is high enough to represent a significant waste of human resources. The community college can help to meet this need for high-school completion.

“The accepted view is that among these youth the potential for delinquency, crime, reform school and prolonged unemployment during adulthood is great.”³⁶ There can be no question that such conditions are tremendously costly to our society.

Individuals of post-high-school age do not, for the most part, return to high school even though they may desire to secure a diploma. There probably are essentially two reasons for this. They are either employed or are seeking employment; thus they could attend only part time. They dislike being grouped with younger people for learning purposes.

Educational authorities should maintain contact with pupils who leave before graduation. Rosecrance and Hayden make the point that “. . . school attendance, *per se*, is not necessarily a desirable thing if the school cannot provide something which a boy or girl can and will do and something which is worth while, from which he or she can profit.”³⁷ Stated otherwise, some youngsters perhaps should leave school depending on existing conditions.

Conditions change, though, and as they become more favorable for the “dropout,” he should have an opportunity to further his education. The proposed plan for community colleges envisions the need for “keeping in touch” with these individuals and offers them a “second chance.”

5. All persons of post-high-school age who have need for retraining, updating, or upgrading relative to employment should have an opportunity to enroll for such education.

Public interest should be to provide the best educational opportunity possible to youth and adults. As discussed elsewhere in this chapter, Iowa does a fairly adequate job for the average youth in elementary and secondary schools and

for the average adult who has leanings toward higher education in an academic sense.

To better develop our human resources there is a need for a competent work force in keeping with current and future manpower requirements. In the process of providing education for those who have not entered employment, attention must also be given to opportunities for retraining, updating, and upgrading our present work force. These needs are sometimes more critical than preparatory education.

Because the majority of preparatory programs require two years of intensive training to prepare employable persons, the time element itself is too short in our changing business world to depend upon an entirely new supply of workers to fill employment needs. Many workers who are now unemployed or about to become unemployed possess basic education and experience which will permit them to be rapidly retrained for work of either similar or dissimilar nature to their past or disappearing types of occupations. These people are not only available for training, but because of their economic needs it is mandatory that these people be kept a part of our employed population. The Manpower Development and Training Act of 1962, which is yet in its beginning, is based upon these premises.

Other workers find themselves in occupations which have been modernized due to technological developments. In many instances only short training periods are needed to train such personnel to handle the more advanced types of jobs. Thus, opportunities are needed more than ever nowadays for **updating** employed workers in order that they not be required to join the ranks of the unemployed.

Another classification of worker has entered employment without adequate formal occupational education and has not been provided the opportunity to gain additional skill or knowledge after beginning work. Thus, this person is working below capacity or on a job which does not require his full ability due to his inadequate background of training and experience. Full productivity on the part of such a worker may be accomplished through providing opportunities for **upgrading**.

To a considerable extent retraining, updating, and upgrading programs may be conducted as parts of the adult education programs conducted by the community colleges. Only insofar as institutions are available that are willing to provide

³⁶Guidelines for Consideration of the Dropout and Unemployment Problems of Youth, prepared for: Conference on Unemployed Out of School Youth in Urban Areas (Washington 6, D. C.: National Committee for Children and Youth, 1961), p. 8.

³⁷Francis C. Rosecrance and Velma D. Hayden, *School Guidance and Personnel Services* (Boston: Allyn and Bacon, Inc., 1960), p. 35.

the needed types of programs can the above needs be met.

Summary Comment

The change in the offerings of this "new" community or junior college reflects the broadest concept of its function. Technological advances along with socioeconomic changes have created demands for refresher courses, training for increased job competence, and initial vocational education for those who seek opportunities for working full time.

The community-college function today calls for programs providing preparation for the four-year college or university and professional school, semiprofessional or technical education, occupational training for terminal students, general education for those not planning to continue in a university or like institution, and appropriate training programs for adult workers and citizens.

The community college must be accepted as a new type of institution between the high school and university functioning in a relationship with high schools of its area to facilitate programs of study and lines of development for each student that will meet him where he is educationally.

This institution can be an instrument of tremendous potential for adequate educational opportunity to many where lack of availability and neglect have been present too long.

The crowding in our four-year colleges and universities is less regrettable than the confusion in our values. The great prestige that college education in one of these institutions has achieved is a source of many false notions, and one of the worst is that it is the only form of continued learning after high school. The notion that the young person has the choice of going into a college-degree program to further his learning or go to work and stop learning must be dispelled.

CHAPTER VII

Community College Occupation-Centered Education

Many attempts have been made to classify the types of occupations which make up the "world of work." "From the standpoint of an individual," says Roy W. Roberts, "work consists of exerting physical or mental energy or labor for the accomplishment of a specific purpose or object."¹ In order to exert such energy successfully and efficiently, the individual needs to learn to work. To an increasing degree and in the case of an increasing number of workers, specific, formal education is now required to enter the various occupations. We tend to use the term profession broadly to classify any vocation which requires from four to seven years of college and university preparation on the part of its workers before they are regarded as eligible to enter it. Thus, since the community college has already been described in this report as an institution whose educational programs are primarily for post-high-school-age persons and are usually two years or less in length, community-college, occupation-centered education is directed toward a relatively more immediate objective than is professional education. Its purpose is to serve the person who expects to seek employment usually within not more than two years from the date on which he originally enrolls. Such persons may be full- or part-time students—many of them may well be mature adults already employed and be seeking to upgrade their abilities on their jobs or to prepare for new ones.

Role of the Community College

As conceived in this report the community college should properly be concerned with offering any and all types of occupational preparation which can be completed within a two-year period of formal study and which is needed by a sufficient number of persons to warrant the offering of a program. But this report suggests also that there is one type of occupation-centered education for which this institution has a unique responsibility. This unique responsibility exists in connection with the type of formal education which lies between that of the skilled craftsman and the

professional worker. It is commonly referred to as semiprofessional or technical education. Furthermore, the need for this type of education is now largely unmet in Iowa. Such education is clearly "higher education," since it requires a substantial background in subject matter which goes beyond the level of high-school education.

One widely experienced leader in the field of community-college technical education Norman C. Harris, says,

The unique responsibility of the community college is to educate that 80% of the labor force which, in the 60's will be in the groups which we call *semi-professional*, *technical*, and *highly skilled*. No other educational institution is ready or willing to devote itself to this task.²

The Gibson Report strongly supports the point of view expressed by Harris when it concludes,

Trends in college enrollments and in the demands for higher standards of education for increasing numbers and percentages of workers point to the need for greatly expanded educational opportunities beyond the high school. Most of Iowa's workers will need something less than a bachelor's degree. Only eight per cent of college-age youth finish the bachelor's degree.

The educational demand is for a balance between general education for cultural development and effective citizenship and for technical education to prepare individuals for work.

There is a serious gap in this system that needs to be bridged by the comprehensive community college. Since the existing junior colleges are not meeting this demand, the state legislature and school authorities have a grave responsibility for launching a unique program suited to conditions in Iowa.³ Harris does not overlook the fact that schools and programs for technical education exist apart from community colleges. He lists and discusses four additional sources for this type of education: technical institutes, extension centers of universi-

¹Roy W. Roberts, *Vocational and Practical Arts Education: History, Development, and Principles* (New York: Harper and Brothers, Publishers, 1957), p. 5. Publishers' name now Harper and Row, Publishers.

²Norman C. Harris, "Community College Technical Education," *North Central Association Quarterly*, XXXVI (Spring, 1962), 333.

³Gibson, *The Junior Colleges of Iowa*, op. cit., pp. 31-32.

ties, technical high schools, and industry training programs.⁴ He feels that the technical high school can serve best by "providing the educational background for entry into rigorous technical education curriculums at the community college level."⁵ He recognizes that the other three types of technical education programs have a legitimate although limited place, but he is convinced that by far the largest role is to be played by the community college. He concludes that,

. . . there is an immediate and pressing need to expand technical education. The community junior college is a force in being, not a dream of the future. There are over 390 such institutions in operation, with a total enrollment this year of 712,000 students. Junior college campuses are already built and facilities though admittedly inadequate in some instances, are on hand. Organizational and fiscal channels are already established, and legislation (enabling and funding) for community junior colleges exists in most states. Community junior colleges can, if they will, make an immediate impact in the field of technical education.⁶

Technical Occupations

Just what does technical education include? Although the vast and increasing need for workers with new capabilities makes it impossible to classify all types of technical occupations, there are certain "clusters" of occupations which, when taken together, give a reasonably clear picture of this aspect of the world of work. Harris⁷ has suggested the following "families" or "clusters" of technical occupations:

Civil Technologies

- Architectural Drafting
- Building Construction Technology
- Concrete Technology
- Map Drafting
- Materials Testing
- Sanitation Technology
- Structural Technology
- Surveying

Mechanical Technologies

- Air Conditioning/Refrigeration
- Aviation/Missile Technology

- Automotive Technology
- Diesel Technology
- Foundry Technology
- Hydraulics Technology
- Machine Drafting
- Operating Engineering
- Tool and Die Technology

Electrical Technologies

- Communications Electronics
- Computer Electronics
- Electrical Power Technology
- Electronic Assembly
- Electronic Drafting
- Industrial Electronics
- Missile Electronics

Industrial Technologies

- Ceramics Technology
- Chemical Technology
- Forest Products Technology
- Metallurgical Technology
- Optical Technology
- Paint Manufacturing Technology
- Petroleum Technology

Miscellaneous Technologies

- Engineering Laboratory Technology
- Instrumentation Technology
- Nuclear Power Technology
- Radiation Technology
- Sales Engineering
- Technical Illustration
- Technical Writing

Non-Engineering Related Technologies

- Business Data Processing
- Dental Hygiene
- Dental Laboratory Technology
- Fire Service Technology
- Foods Laboratory Technology
- Law Enforcement
- Medical Laboratory Technology
- Nursing—R. N.
- Nursing—L. V. N.
- X-Ray Technology

Additional Occupations

Many additional occupations which are not closely associated with the engineering profession have need for workers who could be prepared in two-year programs in community colleges.

⁴Harris, *op. cit.*, pp. 325-336.

⁵*Ibid.*, p. 326.

⁶*Ibid.*, p. 336.

⁷*Ibid.*, pp. 324-325.

Three important groups of occupations appear below.

Agriculture, Horticulture, and Forestry

Occupations which involve the direct production of agricultural commodities or deal with any area closely related to agriculture would be of interest to Iowans. Preparation for entry into them or upgrading on the part of persons already employed in such occupations could well be included both for youth and adults in some if not all Iowa community colleges. While many of these occupations call for the securing of college-degree preparation such as is offered by our land-grant universities, many employment opportunities (working for one's self or for others) exist for persons who may have completed one or two years of specialized preparation in a community college. Of course, this college can also serve the agriculturally oriented student who wants to transfer after two years to a land-grant university.

It is a well known fact that the increasing efficiency of modern, scientific agriculture is causing a decrease in the number of persons who engage directly and only in the production phase of this broad occupational endeavor. At the same time, specialization with its corresponding demand for more persons with specialized preparation is increasing. The *Occupational Outlook Handbook* says, "Because of the rapid advances in technology, farming probably will become more competitive in the years ahead."⁸ It appears to be certain, therefore, that the person who wishes to meet this competition must have an appropriate educational background.

In addition to the familiar types of farming involving dairying, livestock production, poultry raising, and crop growing, the *Occupational Outlook Handbook* cites the rapidly growing list of specialized agricultural occupations. In this connection—and with special relevance to community college education, be it terminal or college transfer in nature—it says,

As agriculture becomes more technical and commercial, the number of people directly engaged in farming decreases but the number who engage in services related to agriculture multiplies rapidly. Power machinery, for example, saves many man-hours of labor on the farm but calls for a staff of workers

to design, produce, and distribute the machines used by the farmers.

A large number of the vocations that are growing up around agriculture are of a professional or technical nature and call for college training or its equivalent.⁹

The list of specialized agricultural occupations given is as follows:

- Agricultural Extension Service Workers
- Vocational Agriculture Teachers
- Agricultural Research Workers
- Agricultural Economists
- Agricultural Finance Workers
- Agricultural Engineers
- Soil Scientists
- Soil Conservationists
- Management Positions in Farmer Cooperatives
- Other Professional Workers
- Farm Service Jobs¹⁰

Business, Distributive, and Office Occupations

Representatives of college and public school educators in Iowa who work in the teaching of persons interested in business, distributive, and office occupations have assisted the Committee on Public Area Community Colleges in defining the role of the community college in this area. Representative of the offerings which they regard as appropriate for persons of post-high-school age are the following:

- Accounting
- Business Machines
- Certified Professional Secretary
- Data Processing
- Executive Secretary
- Legal and Medical Secretary
- Petro-Retailing
- Supervisory and Mid-management Training

While the emphasis on these programs would be the development of competencies for immediate employment, many students enrolled in them would transfer to institutions offering four-year and higher degree programs in these areas.

Skilled Trades

Another responsibility of the area community college will necessarily be to provide basic educational programs for individuals of post-high-school age who desire to enter the skilled occupations through apprenticeship or otherwise.

⁸*Occupational Outlook Handbook*, Employment Information on Major Occupations for Use in Guidance, United States Department of Labor: Bureau of Labor Statistics, Bulletin No. 1255 (Washington: U. S. Government Printing Office, 1959), p. 716.

⁹*Ibid.*, p. 725.
¹⁰*Ibid.*, p. 725-740.

Nationally, in a recent year, less than 55 per cent of high-school graduates were expected to go on to full- or part-time college to say nothing of the significant number who did not even finish high school.¹¹ The Iowa figure for college attendance will not be a great amount more than 40 per cent of post-high-school-age youth. The balance will enter the next phase of their economic life with either high-school education or less. The area community college will need to serve a segment of this group by providing basic occupational preparation for the skilled trades. Those who have already entered such employment will also seek to upgrade their abilities and by necessity will look to the community college.

This phase of occupational education is also a responsibility of the high school; but until more Iowa high-school districts become considerably larger in size, the vocational education will be limited. Therefore, if vocational education opportunities are to be available, it will fall to the community college to provide such opportunities to our youth.

The skilled trades and other industrial occupations provide most of the employment opportunities for young persons with mechanical or manual interests and abilities. Within this job area is a wide range of occupations, varying in skill and earnings from those of the unskilled laborer to those of the highly skilled tool and die maker.

Although the jobs in the trades and industrial occupational groups can be classified into three categories—skilled, semiskilled, or unskilled—no clear-cut dividing line separates these skill levels. This is so because the nature of the work performed in these jobs often changes as new machines or methods are introduced. Therefore, the classification of jobs in terms of skill must always be somewhat arbitrary.

Skilled workers make the patterns, models, tools, dies, machines, and equipment without which industrial processes could not be carried out by semiskilled and unskilled workers. Skilled craftsmen repair the equipment used in industry as well as the mechanical equipment and appliances used by consumers. They also construct homes, commercial and industrial buildings, and highways.

Skilled workers must have a thorough and comprehensive knowledge of the processes involved in their work. They exercise considerable independent judgment and often have a high degree of manual dexterity. In some instances, they are responsible for valuable equipment or products. Workers in skilled occupations usually undergo an extensive period of training.

Many young persons, in moving from one semiskilled job to another among different employers, acquire knowledge and skill which eventually enable them to become skilled workers. Others learn the rudiments of a skilled trade by attending vocational, trade, or technical schools. A small proportion of these graduates are able to move directly into jobs in their trade and after acquiring experience on the job, are able to qualify as skilled workers.

In the years ahead, applicants for skilled jobs will have to meet increasingly higher standards. Industry will need craftsmen with higher levels of skill to do the complex work involved in rapidly advancing fields such as electronics and guided missiles. . . .

The need for employment of skilled workers is expected to become greater as a result of factors such as the prospective growth in industry and its increasing need for skilled workers resulting from technological advances. However, differences will continue in the rate of employment growth for workers in many skilled occupation groups. For example, as mechanical equipment becomes even more widely used, the need for the very large occupational group of mechanics and repairmen should continue to grow at a faster rate than that for the skilled work force as a whole.¹²

It is quite possible that some industries employing large numbers of persons will be able to give all skill training necessary except the very basic; yet Iowa, with 60 per cent of the businesses employing less than ten people, will for many years to come lean heavily upon the local and area educational institutions for the development of most of its manpower.

¹¹John W. Gardner, "From High School to Job," 1960 Annual Report, Carnegie Corporation of New York (New York: Carnegie Corporation of New York, 1960), p. 2. (Reprint.)

¹²Material given here is quoted from *A Directory of Occupation-Centered Curricula in California Junior Colleges and Schools for Adults*, Joseph M. Jacobsen, compiler (Sacramento: California State Department of Education, 1962), pp. 237-240, which in turn was adapted from *Occupational Outlook Handbook*, op. cit.

Concluding Statement

Occupation-centered curriculums, as the term is used in this report, are not organized for the purpose of fitting into four-year programs which are completed after a student transfers to another institution for more advanced work. The fact that certain courses taken in an occupation-centered curriculum often do have "transfer value" is beside the point. The intent is to prepare the student to enter directly upon employment after the program offered by the community college has been completed. It should be emphasized also that many occupation-centered curriculums will carry no actual college credit and will take only a few months to complete. Probably most such curriculums will enroll as many adults as youth—possibly more.

The community college should not limit its curriculums to levels which require mathematical and scientific preparation which is beyond that needed by the skilled worker. This institution should stand ready to offer any occupation-centered curriculum for which there is a demand sufficient to warrant an offering. Preparation in a given area might not be offered in every community college, but selected colleges could serve the needs of the whole state for certain occupations.

The above should apply to the needs of both the youth who needs preparation to provide him the opportunity to enter employment and the older person who requires additional education either to enable him to advance in his present job or change to an entirely new type of work.

CHAPTER VIII

Role of the Community College in Serving Persons Desiring to Secure Baccalaureate Degrees

The community or junior colleges in Iowa now enroll most of their students in programs which are designed to equip them to transfer after one or two years of attendance to colleges and universities offering four-year degrees. This function will continue to occupy an important position in the educational program of the community colleges in Iowa. An increasing number of students having a baccalaureate degree as their educational objective will enroll in these colleges. Furthermore, many students who originally enrolled in a community college for a period of two years or less for the purpose of completing an occupationally oriented course will find that they wish to change to a four-year college curriculum.

Nationally, college enrollments are predicted to increase by 70 per cent during the 1960's.¹ College enrollments in Iowa are predicted to increase by over 70 per cent between 1960 and 1970.²

"The number of young people reaching 18 each year, ready to enter the labor force or go on to college, will increase from 2.6 million in 1960 to 3.8 million in the single year 1965, a rise of nearly 50 per cent."³

"Workers under 25 will account for nearly half of the labor force growth during the 1960's, even though they will stay in school longer."⁴

The implications for higher educational requirements as a result of this large increase in the labor force are such as to startle even the most staid educator when he thinks in terms of the educational facilities and personnel needed to educate these "eighteen-year olds" so society and the individual will profit to the best advantage.

The building requests by the State Board of Regents for the Iowa State University, the State College of Iowa, and the State University of Iowa have been only partially met by the various legislatures. Building additions and replacements have not kept pace with obsolescence and increased needs. The present public junior colleges have

had an inadequate financial base to adequately assume their place in the educational picture. Available information indicates that private college and university facilities are also limited and cannot be expanded rapidly and sufficiently enough to meet the increasing demands of persons seeking regular college work. The estimated increase in students and the lack of needed construction produce a situation which is inadequate at best for the students enrolling in the college degree programs, not to mention the increase of attendance in other areas of need; for example, vocational-technical and adult education.

Aside from the lack of college facilities, many persons desiring to obtain a baccalaureate degree are particularly susceptible to being eliminated on two counts: finances and selective admissions practices. The length of the degree program and the relatively high tuition necessarily charged, especially by private institutions, coupled with the expenses of living away from home tend to eliminate individuals in the low-income and/or large-family bracket. Very few parents have a realistic savings program for financing post-high-school education. These factors alone point to the need for the community college to be as tuition free as possible and within commuting distance of the majority of students in the area served.

The state supported institutions are gradually being forced into selective admissions practices. These practices range from "flunking out" large numbers of freshmen to a combination of selection from the upper 50 per cent of the high-school graduates and continuing to fail a large percentage of the freshmen.

McConnell emphasizes that the social pressures oriented to a college education are such ". . . that students and parents will tolerate enrollment restrictions in public higher institutions only for a short time. Eventually," he continues, "they will demand either that existing institutions reopen their doors or that new institutions be established that will admit those barred from selective colleges and universities. . . ."⁵

¹Manpower. *Challenge of the 1960's*, op. cit., p. 16.

²Gibson. *A Summary Report*, op. cit., p. 1.

³Manpower. *Challenge of the 1960's*, op. cit., p. 4.

⁴*Ibid.*, p. 6.

⁵McConnell, op. cit., pp. 17-18.

He states further that,

... Educators might as well face the fundamental fact that it will not be up to them alone to determine how many young people will go to college in the future. In the long run, society will make that decision. In the United States the decision will be to educate the many rather than the few, to send a greater percentage rather than a smaller one to some kind of higher institution. Mass education is here to stay. American higher education will become more rather than less inclusive. This means that the educational system will have to serve an enormously diverse population, a student body certainly no less heterogeneous than the one we have now.⁶

Many private colleges and universities frankly state that they limit their enrollment and choose the best students available to make up their student body. This is their privilege and right; however, it doesn't make a college education available to many students who are capable of succeeding in college. These are simple "facts of life" which must be faced when there are too many students for the available college seats.

Close proximity of a community college ready to serve all students who wish to enroll will help solve the students' problems arising from lack of finances and from selective admissions practices. An open-door community college with little or no tuition has repeatedly illustrated the fact that the economy of attending a community junior college is the primary factor influencing students in their choice of college.

The *Encyclopedia of Educational Research* states that:

Several studies have shown that two to three times as many students of junior-college age go to college in communities where a public junior college is available as in those which do not afford such educational facilities. . . . Analyses of judgments both of students and of their parents have shown that the economy of attendance at the local junior college is the most important single reason given for attending it. . . .⁷

One of the most recent studies which illustrates the effect a community junior college has on college attendance is contained in a report from Florida which states,

... Already the impact of a local junior college upon college attendance can be documented. In those 33 counties in Florida where junior colleges are within commuting distance, the ratio between freshmen enrolled in Fall, 1961, and the high school graduates of June, 1961, is 55.5 per cent, while this same ratio for the 34 counties where junior colleges are not available is 36.3 per cent. . . .⁸

The democratic concept of equality of opportunity carries the connotation that all Americans have their "democratic right to pass or fail." In many cases almost as many college students fail as pass. The tragedy is that too frequently we have no alternative educational programs of an appropriate nature for these students who have had the motivation to seek education beyond high school.

The comprehensive community junior college offers a simple concept regarding post-high-school education problems. The community college is a people's college offering many things to all men. With its location within commuting distance of the majority of its students and its open-door admissions policy, it can enroll all students who wish to pursue a college education. Because of its comprehensive educational program and guidance and counseling point of view, it can offer challenging programs for those individuals whose original objective was to get a college degree, but whose academic performance in college courses has not been adequate for this purpose.

Edmund Gleazer, Jr., Executive Director of the American Association of Junior Colleges, calls it "democracy's college" and in trying to convey the many services this college offers to all people has stated that:

This institution is an American social invention. It is an instrument of tremendous potential. It can motivate youth who have had little hope for learning beyond the high school. It can lift the sights and strengthen the efforts of the generation wanting to go beyond their fathers' achievements. It can stimulate the creativity and slumbering interests of adults. It can provide the means for training that lead to a higher level of employment. It can train for the new skills demanded by a changing technology. It can serve as a focal point for community identifi-

⁶*Ibid.*, p. 18.

⁷*Encyclopedia of Educational Research*, a project of The American Educational Research Association, Walter S. Monroe, editor (revised edition; New York: The Macmillan Company, 1952), p. 831.

⁸*Annual Report of Services, 1961-62* (Tallahassee: Division of Community Junior Colleges, Florida State Department of Education, 1962), p. 1. (Mimeographed.)

cation. Oriented to the community, controlled by the community, it can be the catalyst for the processes by which the values of a free world's culture can be refined and advanced.⁹

The American people look toward the college degree as the ultimate in education. The children of all the people have the same opportunity to be President of the United States and to obtain a college education; at least this is the image—the American dream. This dream is reflected in the social pressures from home and the community which cause many students to enroll in college and, as pointed out by McConnell, they often go “. . . because it is the thing to do and often enter particular curricula with little understanding of what they entail, where they lead, or what abilities they require.”¹⁰

As a result of this image of the college degree, considerable reorientation must take place after students exercise their “democratic right to fail.” The community college must have an extensive guidance and student personnel program operating within the framework of a comprehensive post-high-school program to give direction to the “college transfer failures” and guide them to programs indicated by their abilities and interests. Herein lies the uniqueness of the community college—the marshalling of programs and

⁹Edmund J. Gleazer, Jr., *A New Social Invention: The Community College—What It Is* (Washington, D. C.: American Association of Junior Colleges, undated).

¹⁰McConnell, *op. cit.*, p. 60

personnel to give the student the needed direction at the proper time and place.

This college will offer many opportunities to the students and will insist on recognizing the following essentials to a quality program:

1. Quality instruction in all areas at all levels.
2. Quality performance in all areas at all levels. The bricklayer, plumber, and college transfer students must meet standards of achievement set by the trade or profession.
3. There will be some failures—some students will not be willing to pay the price for success and will drop out of school—at a later date when they have the maturity and motivation the college will have a program available to give them “another chance.”

The relationship of the general education program to the post-high-school program will be that of developing a good citizen with a broad program of cultural and recreational offerings available consistent with his level of achievement.

The heavy emphasis on four-year college and university studies is, of course, very satisfying for those whose abilities and motivations will lead them to complete the work leading to a bachelor's degree and beyond. For other young people, the emphasis on this type of higher education is apt to be a source of considerable strain. All too many are led to believe that in failing to go on to this type of college program they have missed the high road of American life.

PART THREE
**STUDY OF THE AVAILABILITY OF VOCATIONAL
AND TECHNICAL EDUCATION IN IOWA PUBLIC
EDUCATIONAL INSTITUTIONS**

PART THREE is presented in response to that part of House Resolution 6 which called for a study of and recommendations relating to vocational and technical education at the high-school and adult levels including also education in the field of business.

CHAPTER IX summarizes the facts relating to the availability of vocational and technical education in Iowa for youth and adults.

CHAPTER X discusses alternative proposals and practices for providing high-school level vocational education for youth and adults and concludes by presenting recommendations for Iowa.

CHAPTER IX

Status of Publicly Supported Vocational and Technical Education in Iowa

The American Vocational Association has defined vocational education as "education designed to develop skills, abilities, understandings, attitudes, work habits and appreciations, encompassing knowledge and information needed by workers to enter and make progress in employment on a useful and productive basis. It is an integral part of the total education program and contributes toward the development of good citizens by developing their physical, social, civic, cultural, and economic competencies."¹ Vocational education is of two kinds: (1) that which is provided prior to entering a vocation and (2) that which is provided after the person has entered a vocation. It is not restricted to boys and girls in our secondary schools but can be provided for any youth or adult who needs and can profit by it. From one point of view, this definition is broad enough to encompass all occupations including those commonly referred to as the professions. However, the word "workers" rather than "practitioners" tends to make it apply to occupations which do not require education beyond the high school, or, in certain areas, the community-college level. This chapter refers chiefly to high-school-level vocational or occupational education.

The availability of vocational education to an interested student depends upon many factors, some of which are:

1. Facilities
2. Equipment
3. Breadth of offering
4. Distance to travel
5. Cost to the individual
6. Training and competence of faculty
7. Reputation of the institution
8. Entrance requirements

It will be impossible in this report to evaluate all factors mentioned above. As a result, this chapter will limit itself to the types and numbers of programs and the numbers enrolled in vocational education in Iowa at the present time. It

will not deal, except in a general way, with the quality or breadth of the program. Each service will be studied individually, with particular emphasis on trade and industrial, and business education as directed by House Resolution 6. The areas studied will consist of the following:

1. Agricultural Education
2. Business Education
3. Distributive Education
4. Homemaking Education
5. Industrial Education
 - a. Industrial Arts
 - b. Trade and Industrial Education
 - (1) Day-Trade Programs
 - (2) Cooperative
 - (3) Practical Nurse Education
 - c. Technical Education
 - d. Adult Vocational Education

Agriculture

Vocational agriculture is an educational program in agriculture operating through public school channels on local, state, and national bases. It is designed to educate present and prospective farmers for proficiency in farming. It serves high-school students, out-of-school young farmers and adult farmers in educational programs operated by local communities. Its major objectives are to develop effective ability to: (1) make a beginning and advance in farming, (2) produce farm commodities efficiently, (3) market farm products advantageously, (4) conserve soil and other natural resources, (5) manage a farm business, and (6) maintain a favorable environment.

Each instructor, with the counsel of an advisory committee of leading farmers, develops an annual Program of Work. This is based on the needs, interests, and problems of farm youth and farmers in the community.

During the school year 1961-1962, every county in Iowa, except Dubuque County, had at least one vocational agriculture department. A new department has been established for the 1962-1963 school year in the newly reorganized school district of eastern Dubuque County. (See map

¹Definitions of Terms in Vocational and Practical Arts Education, Prepared by the Committee on Research and Publications (Washington, D. C.: American Vocational Association, 1954), p. 27.

on page 92.) These departments are found in 275 out of a possible 510 approved school districts operating in 1961-1962. The departments range from a part-time instructor, with 20 day students and adult classes, to a two-teacher department of 117 day students, with adult and young farmers in evening classes. Even with this wide spread across the state, almost 50 per cent of Iowa youth and adults do not have a program available to them. A study of TABLE I—AVAILABILITY OF VOCATIONAL AGRICULTURE IN 510 APPROVED IOWA HIGH-SCHOOL DISTRICTS DURING SCHOOL YEAR 1961-1962—GRADES 9 THROUGH 12—will show that the greatest availability is found in high schools with enrollments of 200 to 1,000 students. Using the percentages for students enrolled in vocational agriculture in the different sizes of schools and applying them to schools not offering vocational

agriculture, it is found that 7,866 students might take vocational agriculture if it were offered in their school or if it were possible for them to attend another school.

Young farmer and adult farmer programs are considered part of a total vocational agriculture program. During 1961-1962, sixty-six communities had programs for young farmers enrolling 1,159 students. Two hundred fifty school districts offered 301 adult farmer classes serving 13,793 farmers.

In addition to the 275 high-school districts offering approved programs in vocational agriculture, some thirty-three schools offer one semester, or a one-year course in general agriculture. Many of the programs in general agriculture tend to become a textbook course and do not include practical experience and application to farming as a vocation.

TABLE I
AVAILABILITY OF VOCATIONAL AGRICULTURE IN 510 APPROVED IOWA HIGH-SCHOOL DISTRICTS DURING SCHOOL YEAR 1961-1962, GRADES 9 THROUGH 12

Classification by High-School Enrollment	Schools Offering Vocational Agriculture					Schools Not Offering Vocational Agriculture				Total Number of Schools by Classification	Total Enrollment by Classification
	Number Schools Offering	Per Cent Schools	Total Enrollment	Total Enrolled in Voc. Ag.	Per Cent Enrolled in Voc. Ag.	Number Schools	Per Cent	Total Enrollment	Potential Additional Voc. Ag. Stud.		
Less than 100	23	21.9	1,818	585	32.2	82	78.1	6,253	2,013	105	8,071
100-199	102	51.0	14,898	3,195	21.4	98	49.0	14,054	3,008	200	28,952
200-299	70	73.7	16,795	2,900	17.3	25	26.3	5,651	978	95	22,446
300-399	29	82.9	9,929	1,318	13.3	6	17.1	2,072	276	35	12,001
400-499	19	79.2	8,523	856	10.0	5	20.8	2,226	223	24	10,749
500-599	13	92.8	7,102	626	8.8	1	7.2	512	45	14	7,614
600-1000	14	73.7	9,598	742	7.7	5	26.3	3,402	262	19	13,000
Above 1000	5	27.8	8,965	251	2.8	13	72.2	37,894	1,061	18	46,859
Totals	275	54.0	77,628	10,473	13.5	235	46.0	72,061	7,866	510	149,692

Column No. 2—Per cent of schools in that group

Column No. 3—Includes boys and girls

Column No. 5—Per cent enrolled was found by dividing total enrollment in the group into number taking vocational agriculture

Column No. 9—Potential number of additional vocational agriculture students were found by multiplying column number 8 by column number 5

Column No. 10—The sum of columns 1 and 6

Column No. 11—The sum of columns 3 and 8

Business Education

Business education is one of the most popular of the vocational programs offered in Iowa high schools. These programs do not receive specific state or federal aid but are supported from local funds. During the 1961-1962 school year, 506 of the 510 approved high-school districts offered some work in business education. The program offerings varied from one subject, generally one year of typewriting, to broad programs that prepared the graduates to enter an occupation and make successful progress. Evidence is not available to show how many students are actually vocationally competent after completing courses in business education.

To offer a broad curriculum with a balance of vocational and academic courses, schools must have the facilities, equipment, qualified teachers, and also sufficient students to take the work. It would not be difficult to determine the size of the high school necessary to offer a broad program in business education, but, to offer a vocational program consisting of agriculture, industrial arts, business, distributive education, and homemaking, plus the necessary academic subjects, the high-school enrollment should be over 500 students. During the school year 1961-1962, Iowa had only fifty-one school districts with over 500 students. This does not mean that high schools with less than 500 students cannot offer a broad business education program. It means that the district would have difficulty offering adequate vocational and academic programs in an efficient and economical manner.

Many high schools are preparing young people for clerical, stenographic, and bookkeeping positions. Some high schools have students working part-time in business positions, putting their classroom instruction into actual practice. To offer a basic program in business, distributive, and office occupations, a group of leading Iowa educators in the field of business and distributive education, consulted by the study committee, suggested the following curricular offering that a high school of 750 students might offer along with an academic program and other areas of vocational education.

Minimum High-School-Level Program of Business, Distributive, and Office Occupations

The business- and distributive-education leaders who consulted with the committee suggested

the following minimum high-school-level program of preparation for business, distributive, and office occupations:

- I. General Areas of Business, Distributive, and Office Management
 - A. Clerical
 - B. Secretarial
 - C. Distribution
 - D. Business Management
- II. Basic Subject Offerings Applicable to All Curricula Which Are Part of General Education
 - A. Typewriting; $\frac{1}{2}$ to 1 unit
 - B. General Business; $\frac{1}{2}$ unit
 - C. Bookkeeping; $\frac{1}{2}$ unit
 - D. Economic Education; $\frac{1}{2}$ unit
- III. Clerical
 - A. Basic Offerings; 2 to $2\frac{1}{2}$ units (See II)
 - B. Clerical Practice; 1 unit
 1. Clerical typewriting; $\frac{1}{2}$ unit
 2. Office techniques; $\frac{1}{2}$ unit
 - C. Electives
 1. Business or commercial arithmetic; $\frac{1}{4}$ to $\frac{1}{2}$ units
 2. Filing; $\frac{1}{4}$ unit
 3. Business communications; $\frac{1}{2}$ unit
 4. Job experiences; units to be determined by nature of planned program
- IV. Secretarial
 - A. Basic Offerings; 2 to $2\frac{1}{2}$ units (See II)
 - B. Shorthand; 1 unit
 - C. Secretarial Practice
 1. Transcription including voice writing; $\frac{1}{2}$ unit
 2. Office techniques; $\frac{1}{2}$ unit
 - D. Electives
 1. Advanced shorthand; 1 unit
 2. Filing; $\frac{1}{4}$ unit
 3. Job experiences; units to be determined by nature of planned program
- V. Distribution
 - A. Basic Offerings; $1\frac{1}{2}$ units
 - B. Salesmanship; $\frac{1}{2}$ unit
 - C. Distributive Practices
 1. Merchandising; $\frac{1}{2}$ unit
 2. Distributive functions
 - a. Advertising
 - b. Credits and collections
 - c. Display and promotion

- d. Physical distribution
 - (1) Transportation
 - (2) Inventorying
 - (3) Stock control
 - (4) Warehousing
 - e. Financing
 - D. Economics; ½ unit
 - E. Electives
 - 1. Business management
 - 2. Job experiences; units to be determined by nature of planned program
- VI. Business Management
- A. Basic Offerings; 2 units
 - B. Business Organization; ½ unit
 - C. Business Law; ½ unit
 - D. Electives
 - 1. Bookkeeping; ½ unit
 - 2. Job experiences; units to be determined by nature of planned program

Enrollments in Business Education

During 1961-1962 the following numbers of Iowa junior and senior high-school pupils were enrolled by grades in business education and in the various subject-matter areas:

Enrollment by Grade

Seventh Grade	517
Eighth Grade	3,383
Ninth Grade	5,150
Tenth Grade	14,518
Eleventh Grade	26,674
Twelfth Grade	26,207

Total.....76,449

Enrollment by Subject

Bookkeeping I	14,299
Bookkeeping II	718
Business Law	3,536
General Business	4,535
Office Practice	3,289
Office Machines	679
Secretarial Practice	1,364
Business Arithmetic	2,591
Shorthand I	7,035
Shorthand II	1,266
Personal Typewriting	6,944
Typewriting I	22,556
Typewriting II	4,445
Other Business Education	3,192

Total.....76,449

It would be misleading to take only the enrollments in the various subject-matter areas and

assume that vocationally competent people are being prepared; yet, some assumptions might be drawn from these figures that would have merit:

1. Omitting the enrollments in the seventh and eighth grades, we find 72,549 high-school students were enrolled in the various subjects. Some students might be enrolled in more than one, e.g., typewriting and shorthand.
2. In checking the number enrolled in typewriting, bookkeeping, and general business, we might assume that many students take all three subjects; and a large number might qualify as competent clerical workers.
3. In the preparation of stenographic workers requiring a second year of typewriting and shorthand, and/or secretarial practice, it would seem that the number would be very small. By adding the numbers taking Shorthand II (1,266) and the number in office practice (3,289), it would show that 4,555 students have taken work in this area. If these same students were enrolled for Typewriting II (4,445), it would seem that potentially there were not more than some 4,500 students prepared as stenographic workers.
4. It should be noted that only 718 students took more than one year of bookkeeping. Apparently, very few schools were able to offer the second year.

Distributive Education

Distributive education is a program of education offering training in distribution, marketing, and management of goods and services for the purpose of improving distribution and upgrading distributive workers, including employees, managers, and owners engaged in distributive occupations.

During the school year 1961-1962, thirty-one high schools in twenty-five Iowa school districts offered distributive education. For 1962-1963, two additional school districts, Perry Community and Cedar Falls Community Schools, will add classes. The distributive education program in the high school is called a cooperative program in that the student works for three hours per day in a business establishment learning salesmanship, merchandising, and management under the joint direction of the school coordinator and the manager of the business. The other half of the school day is spent in the classroom.

In addition to the program for the high-school students, eighteen Iowa communities had classes for adults. A total of eighty-five classes were organized, reaching 2,286 adults. The type of in-

struction varies from year to year depending upon the needs of the adult worker. See TABLE II for location of schools.

TABLE II
AVAILABILITY OF DISTRIBUTIVE EDUCATION
IN IOWA HIGH SCHOOLS
1961-1962

School	Size of High School	No. Class Day Coop.*	Enrollment Coop.	No. Adult Classes	Enrollment Adult Classes
1. Algona	377	1	9	—	—
2. Ames	1,185	1	19	—	—
3. Burlington	1,676	1	15	—	—
4. Cedar Rapids	4,379	2	39	4	52
5. Charles City	779	1	14	—	—
6. Council Bluffs	3,181	1	17	—	—
7. Davenport	4,222	2	41	11	198
8. Des Moines	10,226	4	74	34	†670
9. Fort Dodge	1,679	1	15	5	120
10. Hampton	437	1	10	2	36
11. Iowa City	1,127	1	23	—	—
12. Iowa Falls	499	1	20	—	—
13. Marshalltown	1,252	1	26	3	41
14. Mason City	1,636	1	5	6	136
15. Newton	1,216	1	17	1	9
16. Oskaloosa	899	1	11	—	—
17. Ottumwa	1,972	1	15	2	57
18. Saydel	499	1	18	—	—
19. Sioux City	3,647	1	21	1	22
20. Storm Lake	435	1	3	—	—
21. Washington	555	1	16	1	24
22. Waterloo	3,783	2	28	1	9
23. Webster City	778	1	15	—	—
24. West Des Moines	786	1	17	—	—
25. Winterset	472	1	15	—	—
Totals	47,747	31	503	71	1,374
Cities Offering Adult Programs Only					
1. Carroll				1	57
2. Cedar Falls				4	212
3. Cherokee				2	76
4. Estherville				1	11
5. Grinnell				1	25
6. Perry				4	101
Totals				13	482
* Cooperative Part-Time Instruction					
† Des Moines Television Small Business Association Class				1	430
Grand Total Adult D. E. Classes				85	2,286

Distributive education has had a steady growth, but its potential in Iowa is limited by two factors:

1. Having sufficient high-school students available. TABLE II will show that the smallest high school with a program had an enrollment of 377.
2. Having a city with enough business establishments to furnish stations for on-the-job training. The smallest school district in TABLE II had a 1960 population of 7,500.

During the school year 1961-1962, 503 high-school students were enrolled in distributive education. This represents only 1.3 per cent of all high-school seniors while it has been estimated

that 25 to 30 per cent of the labor force in the United States makes its living in the field of distribution of goods and services.

Homemaking Education

Homemaking is a program of study available in every Iowa high school. Nearly all schools offer two or more years of work in this field; in fact, only fifty-nine out of 510 approved high-school districts offered only one year of work. Homemaking, as offered in secondary schools, consists of two kinds; general homemaking and vocational homemaking. Vocational homemaking differs from general homemaking in that a portion of the schools' costs for the program is reimbursed

from federal and state funds. In order to be reimbursed, they must meet certain standards and policies set up in the Iowa State Plan and in the Division of Vocational Education. Some of the standards are:

1. The school must offer two or more years of work.
2. The instructor must meet educational requirements which are broader than for teachers of general homemaking.
3. The period of employment must be for ten months.
4. Facilities and equipment must meet certain standards.
5. The programs are to be visited each year by the supervisory staff of the Division of Vocational Education, Department of Public Instruction.
6. Instructors must be trained to develop and teach adult classes for women in various phases of problems taking place in the home.
7. Instructors are urged to attend in-service conferences at the state and local levels.
8. Courses of study are developed. These courses include units in foods, family living, sewing, clothing selection, grooming, housing, budgets, etc.
9. Instructors visit in the homes of all girls taking homemaking.

General homemaking consists of a nine-months' program, and its development depends upon the leadership of the instructor and the school administration. The work may be equal to the work offered in many vocational homemaking programs. During 1961-1962, 310 Iowa high schools enrolled 14,700 in general homemaking. The enrollments were divided as follows:

General Homemaking I	9,177
General Homemaking II	3,070
General Homemaking III	1,071
General Homemaking IV	432
Other General Homemaking	950
Total	14,700

Vocational homemaking was available to 200 schools, enrolling 16,107 students. In addition, 138 cities had 324 classes for adults. A total of 8,041 adults were enrolled. Included in the plan is a club program. One hundred fifty-five schools participated, with an enrollment of 8,328 girls.

Generally, vocational homemaking departments are located in schools with a high-school enrollment of 150 students or more. Only part of the

cost of meeting the standards for vocational homemaking schools is met by federal and state funds.

The above figures indicate that 30,807 Iowa high-school girls were enrolled in homemaking during 1961-1962. An additional 8,041 adults were enrolled during this same period.

TABLE III
AVAILABILITY OF VOCATIONAL AND GENERAL
HOMEMAKING IN THE 510 APPROVED IOWA
HIGH-SCHOOL DISTRICTS, 1961-1962,
GRADES 9 THROUGH 12

Size of School	Number of General Homemaking Departments	Number of Vocational Homemaking Departments	Total
0-99	104	2	106
100-199	138	63	201
200-299	41	51	95
300-399	9	25	34
400-499	1	19	23
500-599	2	12	14
Over 600	9	28	37
Totals.....	310	200	510

Industrial Education

In order to review the availability of industrial education in Iowa, it would seem wise to define the various areas of industrial education. The American Vocational Association defines the areas in this manner:

Industrial education—a generic term applying to all types of education related to industry, including general industrial education (trade and industrial education), and technical education.²

Industrial arts education—instructional shopwork of a non-vocational type which provides general educational experiences centered around the industrial and technical aspects of life today and offers orientation in the areas of appreciation, production, consumption, and recreation through actual experiences with materials and goods. It also serves as exploratory experiences which are helpful in the choice of a vocation.³

Trade and industrial education—instruction which is planned for the purpose of developing basic manipulative skills, safety judgment, technical knowledge, and related occupational information for the purpose of fitting young persons for initial employment in industrial occupations and to upgrade or retrain workers employed in industry.⁴

²Ibid., p. 16.
³Ibid., p. 15.
⁴Ibid., p. 26.

Trade preparatory programs—education to prepare for entrance into useful employment in an industrial occupation and provide an opportunity to continue a general education. It is that type of vocational education given in full-time day trade or technical institute classes.⁵

Cooperative education (cooperative part-time instruction)—a training program that provides for alternation of study in a school with a job in industry or business, the two experiences being so planned and supervised by school and employer that each contributes definitely to the student's development in his chosen occupation. Work periods and school attendance may be on alternate days, weeks, or other periods of time, but the hours of work equal or exceed the hours spent in school during the regular school year. This plan of training is used extensively in business, distributive, and trade and industrial courses.⁶

Apprentice training—an organized system for providing young people with the manipulative skills and technical or theoretical knowledge needed for competent performance in skilled occupations. The program usually involves cooperation among school, labor, and management, since apprentices learn the skills of the craftsman through on-the-job work experiences and the related information in the classroom. The minimum terms and conditions of apprenticeship are regulated by state and local statutes or agreements.⁷

Technical education—education to earn a living in an occupation in which success is dependent largely upon technical information and understanding of the laws of science and technology as applied to modern design, production, distribution and service.⁸

Adult vocational education—instruction offered to adults or out-of-school youth over 16 years of age who are already engaged in or preparing to enter an occupation. Voca-

tional education for adults is chiefly of an up-grading nature, offered on a part-time basis.⁹

Each of the above areas will be discussed as to their availability during the school year 1962-1963. When enrollment figures are discussed, they will be for the latest year available—1961-1962. The reason for this is to give the best current picture of availability.

Industrial Arts

Four hundred fifty-six high-school districts in Iowa offer some work in this area. The programs may appear under such titles as manual arts, practical arts, or industrial arts. Since most of the programs use the title of industrial arts, in this report this title is being used to include all such programs. The courses of study offered vary from one year of woodworking or industrial arts (on an exploratory basis) in the junior high school to a three-year program in the senior high school. The senior high-school program may include from one to three years of work in the following areas: (1) woodworking; (2) metalworking, including welding; (3) electricity and electronics; (4) drafting; (5) auto mechanics; and (6) printing. The breadth of the work offered is very closely related to the size of the high school.

Trade and Industrial Education

Industrial arts differs from trade and industrial education mainly in philosophy and time spent. In industrial arts the objective is to give the student an awareness of the industrial world in which he lives. He is given a knowledge of this world as well as an introductory knowledge of tools and their use. The typical industrial arts program is one period of fifty-five minutes per day. In trade and industrial education the objective is to prepare the student to enter an occupation and make successful progress. The time allotted per day is a minimum of three hours in shopwork, including related study dealing with the science and mathematics of the occupation. In the larger schools, the related study is provided as a fourth hour.

⁵*Ibid.*, p. 26.
⁶*Ibid.*, p. 9.
⁷*Ibid.*, pp. 6-7.
⁸*Ibid.*, p. 25.

⁹*Ibid.*, p. 5.

TABLE IV
 AVAILABILITY OF TRADE AND INDUSTRIAL EDUCATION,
 PRACTICAL NURSE, AND TECHNICAL EDUCATION
 IN IOWA FOR 1961-1962

Town	High-School Enrollment	High-School Programs				Adult Evening Programs				Area Programs			
		Day Trade		Cooperative*		T&I, P.N.& Technical		Apprentice		Practical Nurse Education		Technical	
		No. Curricula	Enrollment	No. Classes	Enrollment	No. Classes	Enrollment	No. Classes	Enrollment	No. Classes	Enrollment	No. Curricula	Enrollment
1. Algona	377			1	9	6	52	1	10				
2. Ames	1,185			1	39	3	22						
3. Boone	813	2	39			11	137	5	45			1	†
4. Burlington	1,676	3	98			17	371	6	90				
5. Cedar Rapids	4,379											1	†
6. Centerville	662					8	28						
7. Charles City	779	2	61	1	14	5	70			1	12	1	10
8. Clarinda	430					8	64	1	13	1	†	1	†
9. Clinton	1,564	2	45			13	169	14	167	1	23	1	25
10. Council Bluffs	3,181	1	13	1	42	1	18						
11. Davenport	4,222	3	71	1	10	1	7						
12. Decorah	528					50	486	13	213	1	30	4	242
13. Delhi	264	15	657	1	16	8	157	4	29				
14. Des Moines	10,226	4	99			1	10						
15. Dubuque	1,762					22	248	1	7	1	†	2	38
16. Fairfield	843	1	24			1	20	1	4				
17. Fort Dodge	1,679	1	7	1	22	2	30						
18. Fort Madison	710	2	34			1	16	3	27	1	†	1	†
19. Iowa State Univ.						13	194	9	80			2	12†
20. Keokuk	969					6	317			2	34		
21. LeMars	569	1	57			34	457	6	57	1	29	1	‡
22. Marshalltown	1,252												
23. Mason City	1,686												
24. Muscatine	1,203												
25. Newton	1,216												
26. Oskaloosa	899												
27. Ottumwa	1,972	3	30										
28. Saydel	499												
29. Sioux City	3,647	3	61										
30. State Univ. of Iowa													
31. Waterloo	3,783	3	80	2	49								
32. Webster City	778	1	22										
Totals	\$53,753	47	1,398	16	323	400	10,283	65	751	9	128	18	465

*Cooperative part-time instruction.

†Program opens in fall of 1962.

‡Program opens in fall of 1963.

§Does not include enrollment of Iowa State University and the State University of Iowa.

TABLE IV shows that sixteen of the larger cities offer classes in day-trade curriculums. The smallest high school, offering such instruction, had an enrollment of 569 high-school students. The largest school system, with 10,226 students, offers work in fifteen occupations. The offering varies from one occupation to fifteen, depending somewhat on the size of the school system. The Des Moines Technical High School provides work in the following occupations:

1. Aircraft mechanics
2. Aviation engine mechanics
3. Auto body and fender mechanics
4. Auto mechanics
5. Diesel mechanics

6. Cabinet and millwork
7. Commercial art and photography
8. Architectural drafting
9. Machine shop
10. Painting and decorating
11. Printing
12. Printing, off-set
13. Sheet metalworking
14. Tailoring
15. Welding

In addition, the high-school student in Des Moines has five technologies available:

1. Air conditioning and refrigeration
2. Drafting design (mechanical)
3. Electronic data programming

4. Electronics, communication

5. Electronics, industrial

This high school accounts for 657 of the 1,398 students enrolled in day-trade occupations in schools offering such courses in Iowa. This would seem to indicate that a broad program makes the work available to more young people.

Trade and industrial education on a day basis is only available in sixteen high-school districts or 3 per cent of the 510 approved Iowa high-school districts. The sixteen high schools offering the program enroll 38,184 pupils. Since there were 150,224 pupils enrolled in Iowa high schools, this would indicate that the program was only available to roughly 25 per cent of Iowa's young people.

Cooperative Education

Cooperative education differs from the day-trade programs in that the student works in a manufacturing plant or a business establishment for three hours per day instead of in the school shop for three hours. Many schools use this program since they may use business places for classroom work and do not have to provide shops with expensive equipment. TABLE IV shows fourteen schools offering this type of trade training. They range in size from 377 to 10,226 students in high school. These fourteen schools enrolled 323 students.

Apprentice Training

TABLE IV indicates that thirteen Iowa cities have sixty-five classes reaching 751 young men taking classroom work required of the apprentices. Usually, the classroom work consists of 144 hours per year in addition to on-the-job work. Due to the need to have a minimum number of students to offer classroom work economically, apprentice classes are usually found in the larger cities. However, small classes may be conducted wherever local people desire.

Practical Nurse Education

During 1962-1963, four public schools, three junior colleges, and the State University of Iowa will have programs of practical nurse education. See TABLE IV for the location of cities offering training during the 1962-1963 school year. This is a one-year program preparing women from eighteen to fifty-five years of age to take the tests of the Iowa Board of Nurse Examiners to

qualify as licensed practical nurses. Before schools can qualify for practical nurse education, they must meet the standards of the Iowa Board of Nurse Examiners and the Division of Vocational Education of the Department of Public Instruction. This area of trade and industrial education is reasonably new, and the first program in Iowa under federal legislation started in 1955.

Technical Education

Ten schools including public high schools, junior colleges, and Iowa State University will be offering work in technical education in 1962-1963. Generally, technical education programs have developed in two-, or, at the most, three-year courses at the post-high-school level, although they are found also in the high schools and universities. Locations in Iowa offering work and the specific program(s) provided are as follows (also see TABLE IV):

1. High Schools

Des Moines

Air conditioning and refrigeration

Drafting design (mechanical)

Electronic data programming

Electronics, communication

Electronics, industrial

2. Post High Schools

Ottumwa

Electronics

Sioux City

Electronics

Mechanical design

Davenport

Electronics

3. Community or Junior Colleges

Clarinda

Mechanical

Centerville

Electronics

Burlington

Electronics

Clinton

Electronics

Mason City

Electronics

Drafting design

4. Universities and Colleges (Ames)

Iowa State University

Electronics

Mechanical

Civil

Adult Vocational Education

Twenty-three public schools, Iowa State University, and the State University of Iowa offer courses in trade and industrial education for adults. A study of TABLE IV will show that the twenty-three public schools offered 229 classes enrolling 2,882 adults, and, in addition, held sixty-five classes for apprentices enrolling 751 students. A partial list of offerings indicates the needs of the adult worker.

1. Auto mechanics
2. Automatic transmissions
3. Basic hydraulics and pumps
4. Blueprint reading
5. Body and fender
6. Diesel engines
7. Electric motors
8. Electronics
9. Human relations for supervisors
10. Machine drawing
11. Mathematics for machinists and tool-makers
12. Machine shop
13. Metallurgy and heat treating
14. Radio servicing
15. Refrigeration
16. Shop mathematics review
17. Slide rule
18. Television servicing
19. Welding (Acetylene)
20. Welding (Arc)
21. Welding (Heliarc)
22. Cabinetmaking
23. Metalworking, bench, sheet metal, and machine
24. Cast iron welding
25. Drafting
26. Tool and die design
27. Waitress training
28. Tool and die making
29. Nursing (Practical)

The programs offered by the two universities, in cooperation with the Division of Vocational Education, are generally held in the local communities. The universities offered 171 classes enrolling 7,401 adults, of which 4,080 were in firemanship. A partial list of offerings includes:

1. Foremanship Training
 - a. Industrial safety training
 - b. Oral communications
 - c. Employee evaluation
 - d. Time study
 - e. Employee development methods

- f. Supervisory relationships and problems
2. Custodian Training
 - a. Boiler design
 - b. Controls—heating
 - c. Electricity
 - d. Fuels and combustion
3. Campus Programs
 - a. Asphalt paving principles
 - b. Concrete improvement
 - c. Home building principles
 - d. Job shop welding
 - e. Secondary road design
4. Firemanship Training
 - a. Basic rescue
 - b. Fire tests and burnings
 - c. Hospital patient evacuation
 - d. Radiological instrument operation
 - e. Industrial firemanship

Summary

The facts relating to the status of publicly supported vocational and technical education in Iowa presented in this chapter may be summarized by the following six statements:

1. Vocational agriculture has at least one department in every county in the state; yet, the program is available only to a little more than 50 per cent of the boys. Availability is most prevalent in schools with enrollments of 200 to 1,000 students.
2. Some courses in business education are available in every high school in Iowa. Complete curriculums to prepare for careers in clerical, bookkeeping, stenographic, office machines, and management are available only in the high schools with sufficient students and financial resources.
3. Distributive education is available only in school districts having enrollments of 400 or more students and with business establishments representing a population of 7,500 or more people.
4. Homemaking education is available in every Iowa high school. Vocational homemaking is available in 200 communities serving 16,000 girls and 8,000 adults. Vocational homemaking programs must meet certain standards in facilities, equipment, enrollment, and teacher qualifications. General homemaking was taken by 14,700 girls in 310 Iowa high schools during the 1961-1962 school year.
5. Industrial education covers several areas:

- a. Some industrial arts is offered in 94 per cent of Iowa high schools. Programs vary from a one-year program in woodworking to broad programs offering exploratory work in the junior high schools, and several years' work in such areas as: (1) wood, (2) printing, (3) electricity, (4) metals, (5) motors, and (6) drawing.
- b. Trade and industrial education courses are offered in sixteen of the largest school systems. The breadth of the offering is closely correlated to the size of the school system.
- c. Cooperative programs are operating in fourteen of the medium to large school systems of Iowa. Size, again, is a factor in determining whether a course can be offered. In the cooperative programs, schools do not need to equip expensive shops. The students work in manufacturing plants, garages, and various establishments dealing with manufacturing or servicing of products.
- d. Apprentice training is available in fourteen Iowa cities. Again, the size and breadth of the program depends upon concentration of population.
- e. Practical nurse education. During 1962-1963, eight communities will offer programs leading to the licensed practical nurse certification.
- f. Technical education. Ten communities will offer work at the high-school and post-high-school levels.
- g. Adult vocational education programs are offered in some thirty to thirty-five communities to train and retrain adults. Over 10,000 persons will be attending these offerings in 1962-1963 to initially train or upgrade themselves in their work.
- 6. Broad programs in vocational education are generally found in Iowa high schools with enrollments above 500. Smaller schools, with enrollments of less than 200 high-school students, find it necessary to restrict their offering to one or two of the following areas: agriculture, business, homemaking, and industrial arts. These offerings, in many cases, are further limited in the number of years of work that is provided in each area.

CHAPTER X

Recommendations Regarding Ways and Means to Provide Vocational and Technical Education at the High-School Level of Education for Iowa Youth and Adults

During the past four or five years the question of availability of vocational education for high-school-age youth and adults has been receiving more and more attention by professional and lay people in Iowa. A great many studies have been made by local school districts and by multiple county groups. Seminars, conferences, and study groups have discussed the problem. Newspapers and magazine articles have been written. Radio and television programs have tried to alert the public to the need. The Iowa Fifty-eighth and Fifty-ninth General Assemblies have considered the problem and have passed some legislation to meet it. This does not mean that the concept is new, but it does indicate the concern of the citizens of Iowa about the problem. Nearly every state is trying to meet the problem, and many states have developed a state system of making vocational education available to all youth and adults. The process is largely one of administration—the bringing of students, instructors, and facilities together.

Robert M. Isenberg states that the various methods used by the several states to achieve the goal of making vocational education available to all can be classified under seven headings.¹ No method is found to be best. Many states use more than one method to achieve their goal. Isenberg's list consists of:

1. Expanding the vocational program through local district reorganization.
2. Purchasing vocational education from other school districts.
3. Developing a regional or area vocational school at the local level.
4. Developing a regional or area program at the intermediate level.
5. Developing regional or area vocational programs at the state level.
6. Developing regional programs through colleges and junior colleges.

¹Vocational Education for Rural America. Yearbook 1968-69 of Department of Rural Education, National Education Association of the United States. Gordon I. Swanson, editor (Washington, D. C.: National Education Association, 1969). p. 128.

7. Developing regional programs by establishing a special agency or separate agency.²

Each of these plans is discussed in this chapter. Then there follows a section entitled **Issues Considered by the Study Committee in Making Its Recommendations**. Finally, recommendations are made by the committee on: **How Iowa Can Meet the Problem**.

Reorganization of School Districts

Iowa has been going through reorganization of school districts since the formation of the state in 1846. Two periods stand out as providing the greatest activity: (1) The consolidation of school districts from about 1900 until 1946 with the crest of the movement during the early 20's, and (2) The reorganization of school districts from 1946 until the present time with the greatest impetus during the last five years. The progress made can quickly be illustrated by figures compiled by John Schultz.³ Reorganization Consultant, Department of Public Instruction:

Number of High-School Districts

July 1, 1954.....	819
July 1, 1955.....	808
July 1, 1956.....	788
July 1, 1957.....	745
July 1, 1958.....	694
July 1, 1959.....	614
July 1, 1960.....	562
July 1, 1961.....	510
July 1, 1962.....	469

These statistics show a reduction in the number of high-school districts of from 819 to 469, or a percentage of 42.7. Even with this reduction, the number of schools by size for 1961-1962, the latest year for which figures are available, was:

Less than 100.....	106
100-200	201

²Ibid., p. 128.

³John Schultz, "A Review of School District Reorganization in Iowa, July 1, 1961 through June 30, 1962," *Education Bulletin*, XXXIV (September, 1962), p. 6.

200-300	95
300-400	34
400-500	23
500-600	14
Above 600	37
—	
Total	510

The above figures indicate that Iowa is still a state of small high schools. Only fifty-one school districts have high-school enrollments of over 500.

In CHAPTER IX it was pointed out that it is difficult for a high school of 500 to offer a broad educational program offering both academic and vocational education.

Conant in his book, *The American High School Today*, states that to be a comprehensive high school there should be one hundred students in the graduating class.⁴ Pennsylvania, in a recent study, recommended school districts of 5,000 students.⁵ This would yield high-school enrollments of approximately 1,500. A study of CHAPTER IX will show that certain areas of vocational education can be carried on in small high schools, but that, if good programs in several fields are to be conducted, the high school must have an enrollment of over 500 pupils. Even then, there will still be several fields of vocational education as trade and industrial and technical education that require enrollments of several thousand pupils to offer work in four or five occupations.

Therefore, the conclusion might be drawn that, to offer a reasonably broad program of vocational education consisting of agriculture, business, homemaking, and industrial arts, the high school enrollment should be over 500 pupils. It would be necessary to have an even larger concentration of pupils to offer a broad program in trade and industrial and technical education.

Purchasing Vocational Education from Other Districts

Iowa has long had one example of purchasing educational opportunities from other districts through its legal provisions requiring the local non-high-school district to pay tuition for its high-school pupils who attend a high school in another district. More recently, the Fifty-ninth General Assembly enacted into law a plan to allow districts to purchase vocational education from

⁴James Bryant Conant, *The American High School Today* (New York: McGraw-Hill Book Company, 1959), pp. 37-38.
⁵*The Final Report of the Committee on Education* (Harrisburg: Commonwealth of Pennsylvania, April, 1961), p. 98.

districts offering approved programs. It also allowed the State Board of Public Instruction to designate certain local districts as area schools. The legislation was good in concept but breaks down for several reasons:

1. While local sending districts were to be reimbursed to the extent of \$1.30 per day for each pupil for 180 days, the local sending district still must pay the difference between the average cost of instruction and state aid. Using the maximum allowable tuition rate for 1962-1963 of \$673.20, this would mean that the sending district could pay the receiving district \$673.20 and receive state aid of only \$234.00. The local district is not required to send pupils. Since many school districts are reluctant to assume this added financial burden, few pupils are participating in the opportunities provided by this legislation.
2. The sending district is dependent upon the receiving district to have a program available to meet the needs of the pupils.
3. The receiving district determines whether a student will be accepted. Acceptance will depend upon availability of room in a class, facilities, and equipment. They also determine standards for enrollment, such as background of students, etc.
4. Vocational programs to meet the student's needs may be too far away for the student to attend.
5. The receiving school cannot qualify for state aid for its own students.

Developing a Regional or Area Vocational School at the Local Level

This type is generally found in the larger cities. An excellent example is the Des Moines Technical High School which serves four other high schools in the City of Des Moines. Several of the other larger Iowa cities have the vocational departments attached to one high school, and students from other high schools in the district attend this center. Where the city has only one high school, the program is usually located in the high-school building, although some cities have an annex or a separate building.

The problem, again, arises in having a large enough student body to offer a broad program. In CHAPTER IX, TABLE IV, it will be noted that Des Moines Community Schools, with 10,000 high-school students, offer fifteen trade programs

and five technical programs. The offerings in the other cities vary according to their size.

Developing a Regional Vocational Program at the Intermediate Level

This plan would develop vocational schools at the county level. Several states use this plan. New Jersey in the Essex County Vocational School, because of population, actually consists of five vocational, technical, and adult centers. New York, through Board of Cooperative Educational Services, has developed several as the Oneida County program.

Developing a Regional or Area Vocational Program at the State Level

A number of states have used the plan: North Dakota, Oklahoma, Nebraska, Arkansas, Alabama, and Louisiana. Georgia started its plan with two state controlled area vocational schools and has now moved to the plan of local control but with state aid for buildings and state supervision. Kentucky, on the other hand, started with some state schools, and others in local schools supported with state aid. It is now moving to all state supported and controlled schools.

If Iowa were to decide on state owned and operated schools, it would seem wise to adopt the plans of Georgia and Kentucky of trying several pilot schools and then determining on the basis of experience, which way to go in establishing more schools.

Developing Regional Vocational Programs Through Colleges and Junior Colleges

Colleges and Universities

Since the problem of vocational education is to bring the student and the facilities together, some states in their development, having facilities available on a college campus, are using them. The State College at Pittsburg, Kansas, maintains a non-college vocational education division. Students from over the state may attend. Iowa has initiated such a program in technical education at Iowa State University whereby the State Board of Public Instruction, through the Division of Vocational Education, has declared this institution to be an area school under the National Defense Education Act. Three technologies have been developed: electronics, mechanical, and construction. This plan allows students from any place in Iowa to take advan-

tage of all Iowa State University's facilities—dormitories, health programs, etc.

Other states have variations of this type of school. Indiana has extension centers doing work in trade and technical education. Minnesota has several agriculture extension centers.

Community or Junior Colleges

It is a common practice for the community colleges to offer vocational and technical education at the post-high-school level. California and Florida have very comprehensive programs, but few community colleges offer work at the high-school level. Oregon has made some progress in this area for students of proven ability to handle the work. As a general rule, these states have a very strong program for adults. This would be true for California, New York, Florida, Texas, and Oregon.

The Iowa community or junior colleges have not considered vocational education at the high-school level as one of their functions; and, as a result, no high-school-level programs are available in these institutions. With the passage of the National Defense Education Act, Title VIII, some of the Iowa community or junior colleges are offering technical programs (see CHAPTER IX, TABLE IV). The present Iowa community or junior colleges would need to achieve the following results in order to be in a position to offer a broad program of vocational-technical education:

1. A change in the community or junior college philosophy to include vocational trade and industrial education at the high-school and adult levels.
2. A broader tax base than the local school district, or additional state aid.
3. An improved geographic distribution over the state. The present public two-year colleges are not well distributed geographically over the state. Many areas do not have such colleges within an hour's driving distance of the majority of potential students.
4. An increase in enrollments sufficient to offer a broad program. For the school year 1961-1962, eight of the sixteen community or junior colleges had enrollments of less than 150 full-time students.

Developing Regional Programs by a Special or Separate Agency

Each of the above methods of approach to making vocational education available still does

not show all the variations used in some states. Missouri is trying a cooperative type of program whereby, as in the Lead Belt Vocational School of Bonne Terre, eleven independent schools, unable to furnish a broad program alone, have established a cooperative venture. Each independent district helps to finance the vocational school at Bonne Terre and is represented on the controlling board. Several other groups in Missouri are trying this plan or are in the process of doing so.

New York and Wisconsin are two other states that operate in cooperation with local boards and develop broader programs in vocational education than they can offer themselves.

Minnesota has developed a plan, which has been in operation since 1945, whereby a local district, upon approval by the state, can become an area school. The local school district furnishes the facilities, and high-school students may attend the area school by securing permission from their local boards of education. The state reimburses the local sending district. Under this plan, post-high-school students may attend the area school without securing permission of a local board, and the receiving district receives the state aid.

North Carolina has developed eighteen area vocational schools in much the same manner as Minnesota. The area schools in each case furnish vocational and technical education. In Minnesota the area school may or may not be part of a community college. North Carolina did not include the college transfer programs and is now reviewing its state plans to determine if this area of work should be included.

From this discussion it is clear that there is no set pattern that is suitable for every state. Each state has developed its own pattern which is dictated by its historical growth, economic, and sociological demands. Many states use a combination of methods to make vocational education available.

After studying CHAPTER IX, STATUS OF PUBLICLY SUPPORTED VOCATIONAL AND TECHNICAL EDUCATION IN IOWA, it would seem clear that, to offer a broad program of vocational education, the high-school enrollment needs to be over 500 pupils. It also should be clear that a high school with an enrollment of over 500 pupils still will not be able to serve all the special needs of all pupils, and it is necessary

to make a larger number of pupils available to offer certain courses on an economical basis. In a study by the Board of Education in Detroit, it is stated:

The comprehensive high school is designed to provide general and specialized education for all students in its service area. . . .

While each comprehensive high school should offer programs to meet the needs of most of the students living within its area, some programs will not be numerically or economically justified at all high schools. Those programs which have such limited interest, or involve the use of such specialized facilities and equipment, that they cannot be offered at every high school should be offered in locations convenient for students from several schools.

A student who desires and needs greater specialization than is offered in his comprehensive high school should be encouraged to attend the area or special district high school with world-of-work-oriented specialties. . . .⁶

Since a comprehensive high school should meet the needs of most of the pupils and should offer work in general and special areas, it would, according to most authorities, need to have a minimum enrollment of 500 pupils. A school of this size should be able to offer a broad program for those students whose vocational goal will require training beyond the high school. It should also be able to offer courses of an exploratory nature in specialized vocational programs and to offer some vocational programs where enough finances and pupils are available. Such a school of 500 pupils could offer a vocational program in agriculture, business, homemaking, and a fairly broad exploratory program in industrial arts. A broad program in industrial arts could allow exploratory experiences in: (1) woodworking, (2) metalworking, (3) electricity and electronics, (4) drafting, (5) auto mechanics, and (6) printing. The number of years in each program would be determined by the size of the high school and the breadth of the over-all curricular offering. Students with special abilities, interests, and needs could attend the area school where far greater skill development could be made.

⁶Preparing Pupils for the World of Work. Report and Recommendations of a Special Staff Committee Appointed by the Superintendent of Schools (Detroit: The Board of Education of the City of Detroit, 1962), pp. 24-25.

Issues Considered by the Study Committee in Making Its Recommendations

In the preparation of this report, the study committee met with many lay and professional groups and individuals. From these meetings several issues that needed to be resolved by the committee in the development of its recommendations stood out above others. Several of these issues are discussed herein, and reasons for the position taken by the committee on each of them are given.

Issue Number One

The area vocational-technical schools should be established as separate institutions and not made part of the area community college.

Those who support this issue give the following reasons:

1. The size of the area community college will place the institution so far away that many students of high-school age cannot attend.
2. The fact that the institution is called a college will keep many people from attending.
3. The administrator, because of his academic background, will be more interested in the success of his college transfer program than in developing strong vocational-technical programs.
4. High-school-age pupils should not be mixed with college-age students.

The study committee felt that the above arguments had merit but rejected them for the following reasons:

1. That to offer a broad program of education, both academic and vocational, it was imperative that sufficient human and financial resources be available. If this were true, then a separate institution for vocational and technical education would have the same objection as being too far away for some students. The committee also felt that by forming one institution to serve all areas of education, there would be better utilization of faculty and facilities.
2. It is true that the word "college" might have certain meanings to keep people from attending; but, on the other hand, the committee felt that it might attract others. The name applied to the institution was not as important as the scope and caliber of the school's program offering.
3. The possibility that the institution might tend to become an academic institution is serious, but certainly the likelihood of such

a result is not any greater than that which is often experienced at the present time in high schools offering vocational education under the supervision of a high-school principal and a school superintendent. The program offered in the area community college will be determined by the people living in the area. Another safeguard will be that the Department of Public Instruction, Division of Vocational Education, will require the institution to have a director of vocational education.

4. The problem of high-school-age students attending an institution with college-age students may be valid. This problem would exist in a separate institution offering vocational and technical education. It already exists in many of our present community or junior colleges located in high-school buildings, and it has been solved. The committee realized the problem but felt that it could be resolved. The benefits of a total program for all youth and adults would outweigh the disadvantages.

Issue Number Two

All vocational education should be offered at the post-high-school level, with exploratory work in the various fields offered in the comprehensive high school.

The study committee realizes that there is a group of people who feel very strongly about this. The committee also realizes that, with the great increase in knowledge, the high-school student will need more and more general education in the future. Also business and industry are reluctant to hire seventeen- to eighteen-year-old youth. Granting all this, it is known that in Iowa 15.8 per cent of those entering the ninth grade do not graduate from high school (see page 78) and that 50 to 60 per cent of all high-school graduates enter the world of work, get married, or join the armed forces upon graduation. Many of these young people must acquire their skills for the world of work while in high school. For those young people (1) who dropped out of high school, or (2) for the high-school graduate who did not acquire a skill while in high school, and for various reasons cannot enroll for a day program at the post-high-school level, there should be evening as well as day classes, so they can complete high school or acquire a skill or both. The program in the area community college would be broad enough to serve many kinds

of needs found in demand by the people, industry, agriculture, and business.

Issue Number Three

Training in the fields of trade and industrial and technical education should be purchased by school districts from already existing schools.

This can be done and is being done on a small scale at the present time. The chief difficulty arises from the fact that existing programs are not evenly distributed over the state. In many areas of the state, no program is available. In other areas the programs that do exist are very narrow in scope (see CHAPTER IX, TABLE IV). The existing programs are in the larger cities. To develop programs in some of the smaller cities would require a capital outlay far beyond the ability of the district to finance. The receiving district might build facilities but would then be dependent upon other districts to use them. The committee felt this would be a very haphazard method of making vocational and technical education available to all high-school-age youth and adults.

Issue Number Four

Iowa cannot afford to finance a statewide system of vocational and technical education for youth and adults.

The study committee felt that the state couldn't afford not to. Our present educational system is set up primarily to meet the needs of our college-bound youth. This function is being taken care of relatively well, but only about 30 per cent of an age group attend college and from 40 to 50 per cent drop out of college before reaching their vocational goal.⁷ It would seem that the state should have educational opportunities available for the groups that drop out of high school, high-school students that enter the world of work upon high-school graduation, and for the college dropout.

Also, Iowa does very little in the area of adult vocational education. It has been stated that every adult employed in an occupation associated with industry will need to be retrained from three to six times in his productive years, due to the rapid changes taking place in automation and mechanization. The economy of Iowa is changing from an agricultural economy to a balanced economy of industry and agriculture. In

order to bring additional industry into the state, we must have a trained labor force and the educational facilities to train and retrain our workers. Industry can do part of the training, but it would seem that society must step in and do most of this task. It would be much better to have happy, productive citizens paying taxes to support our way of life than people on relief and welfare rolls as a burden to our economy.

How Iowa Can Meet the Problem: Three Recommendations

1. Iowa should move forward with school district reorganization with all possible speed in order to allow all pupils to attend a comprehensive high school. The comprehensive high school should offer programs to meet the needs of most of the pupils living in the districts. However, some programs will not be economically or numerically justified even in all comprehensive high schools. For example, certain important programs will enroll relatively few individuals, and thus, if operated on the local level, would prove to be prohibitively expensive. These programs should be offered in an area school.
2. Those programs in vocational education that cannot be provided in the comprehensive high school because of a lack of human and financial resources, should be placed in the proposed sixteen area community colleges. This would mean that high-school-level work in agriculture, business, distributive, home-making, and industrial arts would—in most cases—be offered in the local comprehensive high school. Since trade and industrial education requires a much larger population and greater financial resources, these courses would be offered in the area community college, unless the local high school had sufficient pupils and financial resources to offer the work. Adult vocational education courses would also be offered in the area community college, unless local school districts had the human and financial resources to offer them locally.
3. During the interim while comprehensive high schools and public area community colleges are being developed, the establishment and operation of area schools as now provided by the National Defense Education Act, Title VIII, and Senate File 470, Fifty-ninth General Assembly, should be continued.

⁷For a summary of the college drop-out rates, see John Summer-skill, "Dropouts from College," Chapter VIII in *The American College: a Psychological and Social Interpretation of the Higher Learning*, Nevitt Sanford, editor (New York: John Wiley and Sons, Inc., 1962), pp. 629-631.

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APPENDIX A

HOUSE RESOLUTION 6

By Committee on Institutions of Higher Learning

House Resolution directing the department of public instruction to prepare a state-wide plan for the development of public area community colleges and to study and make recommendations concerning high-school vocational and technical education programs.

Whereas, the Gibson report on the resources and needs for higher education in Iowa pointed out that public policy governing higher education in Iowa must recognize the educational and vocational aspirations of all persons who will need education beyond the high school; and

Whereas, such report states that less than one-tenth of college-age youth receive the bachelor's degree; and

Whereas, such report recommends that public area community colleges be authorized by the legislature and that the planning of such colleges be the responsibility of the state board and department of public instruction; and

Whereas, more than seventy percent of Iowa youth go to work with a high-school education or less, and there is need to examine the vocational and technical education programs at the high school level to determine whether they are adequate to meet the educational needs of workers who have to adjust to changing opportunities; now, therefore,

Be It Resolved by the House of Representatives, that the department of public instruction be directed to study and prepare a plan for a statewide system of public area community colleges, such plan to include all areas of the state and to take into consideration the program now offered by the existing junior colleges of the state.

Be It Further Resolved, that from the results of its findings from this study the department submit, by December 1, 1962, to the members of the General Assembly its recommendations, with proposed legislation to implement such recommendations and plan, such recommendations and plan to relate to, but not limited to, the following matters:

1. Criteria for establishment of such colleges;
2. Organization, legal control, supervision and financial support of such colleges;
3. Regional location of such colleges;
4. Functions to be performed by such colleges in offering:
 - a. the first two years of regular college work including preprofessional education,
 - b. vocational and technical education,
 - c. programs for in-service training and retraining of workers,
 - d. guidance and counseling services to assist local students in planning their education and occupational careers, and
 - e. community services;
5. Relationships of such community colleges with other parts of the educational system in this state.

Be It Further Resolved, that as part of such study the department of public instruction shall study the availability of vocational and technical education in Iowa high schools, and from this study recommend to the General Assembly and local school authorities ways and means to provide the necessary vocational and technical training for Iowa youth and adults at this level of education, such study to be concerned primarily with the availability of and plans for vocational and technical education in the fields of trades and industry and business, both at the high-school level and the adult education level.

Laid over under Rule 25.

EXPLANATION

The Gibson Report, authorized by the study committee last session, was not received in full until the middle of this session. It points out the problems but does not specifically give us the answers that we can use and the bills to implement them at this session. This resolution directs the Department of Public Instruction to research this problem relating to vocational and terminal education and have the bills ready to be considered in the next session of the legislature. It also directs the department to examine the problem of vocational education in the high schools.

1248

JOURNAL OF THE HOUSE
ADOPTION OF HOUSE RESOLUTION 6

[April 25, 1961]

Lisle of Page called up for consideration House Resolution 6, found on pages 1206 and 1207 of the House Journal, and moved its adoption.

The motion prevailed and the resolution was adopted.

LOCATION OF IOWA'S SIXTEEN PUBLIC COMMUNITY OR JUNIOR COLLEGES

