A history of the first fifteen years of community colleges in Iowa 1965-1980

by

Paul J. Lowery

An Abstract of

A Dissertation Submitted to the

Graduate Faculty in Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF PHILOSOPHY

Approved:

Richard P Mahat

In Charge of Major Work

For the Major Department

For the Graduate College

Iowa State University
Ames, Iowa

1982

A history of the first fifteen years of community colleges in Iowa 1965-1980

Paul J. Lowery

Under the supervision of Richard P. Manatt
From the Department of Professional Studies in Education
Iowa State University

The purpose of this study was to trace the events of the transition from the locally-owned public junior colleges in Iowa to the state system of community colleges, and to analyze and record the first 15 years of operation of the new comprehensive community colleges. A review was also made of the two-year colleges on the national level and of earlier efforts to provide postsecondary education at the two-year level in Iowa.

The major sources of information were from national and state studies of two-year colleges, the Iowa General Assembly, the Iowa State Board of Education minutes, records from the colleges, annual reports from the Iowa Department of Public Instruction and from personal interviews.

Major factors influencing the transition were: (1) the limited access to the locally-owned junior colleges; (2) the movement in the state from a rural to an industrial economy; (3) the infusion of federal dollars into vocational education; and (4) the need to expand postsecondary educational opportunities in the state, especially in vocational education.

Institutional topics given major consideration during the 15-year period of operation were students and student services, faculty,

instructional programs, campus developments, finances, governance, and the status of the graduates.

The findings of the study revealed that over the 15-year period the number of full-time equivalent students attending two-year colleges in Iowa grew from 11,136 in 1966-67 to 48,050 during 1979-80. The headcount enrollment in 1979-80 grew to 498,061. The enrollment in college transfer courses remained rather constant while vocational enrollment showed tremendous growth. The number of vocational programs grew from 12 in 1945 to 145 in 1980. Education for adults of all ages grew tremendously with 48,689 individuals earning a high school diploma or the equivalent between 1966 and 1980. Follow-up studies of the graduates entering employment, showed 85.8 percent were employed in jobs related to their training. Of the graduates transferring to either of the three state universities, a slight drop in grade point average occurred during the first term, but in succeeding terms the grade point improved.

A history of the first fifteen years of community colleges in Iowa 1965-1980

by

Paul J. Lowery

A Dissertation Submitted to the

Graduate Faculty in Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF PHILOSOPHY

Department: Professional Studies in Education
Major: Education (Educational Administration)

Approved:

Richard P. Manatt

In Charge of Major Work

For the Major Department

For the Graduate College

Iowa State University
Ames, Iowa

1982

TABLE OF CONTENTS

	Page
CHAPTER I. NATURE AND SCOPE OF THE STUDY	1
Introduction	1
Statement of the Problem	3
Need for the Study	4
Scope and Delimitations of the Study	5
Definition of Selected Terms	6
Method and Procedure	7
CHAPTER II. HISTORICAL FOUNDATIONS	11
Introduction	11
A Review of the National Scene	11
Studies of Two-Year Colleges in Other States	17
A Review of Public Junior Colleges in Iowa through Fiscal Year 1965	24
Summary	33
CHAPTER III. TRANSITION FROM THE LOCAL SCHOOL DISTRICT OWNED JUNIOR COLLEGES TO A STATEWIDE SYSTEM OF PUBLIC COMMUNITY COLLEGES IN IOWA THROUGH FISCAL YEAR 1965	35
Introduction	35
Social, Political and Economic Influences	36
The Role of the Federal Government	43
The Status of Community Colleges in Other States	47
Factors within Iowa Influencing the Transition	52
Legislative Mandated Studies, Recommendations and Resulting Legislation	59

	Page
Governance of the Community Colleges	80
Summary	83
CHAPTER IV. THE FIRST FIFTEEN YEARS OF THE STATEWIDE SYSTEM OF COMMUNITY COLLEGES IN IOWA, 1965-1966 THROUGH 1979-1980	88
Introduction	88
Formation and Approval of the Community College Districts	88
Students and Student Services	94
Instructional Programs	114
Campus Developments	124
Faculty	129
Finances	132
Status of the Graduates	155
External and Internal Organizations	156
Individuals Who Made It Happen	160
The Public Community-Junior College in the United States, 1965-1980	165
Summary	166
CHAPTER V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	172
Conclusions	179
Limitations	180
Discussion	181
Recommendations for Practice	184
Recommendations for Research	186
BIBLIOGRAPHY	187
ACKNOWLEDGMENTS	193

		Page
APPENDIX A:	SENATE FILE 550	194
APPENDIX B:	IMPORTANT FACTUAL DATA ABOUT EACH OF THE FIFTEEN COMMUNITY COLLEGE DISTRICTS AS OF JULY 1, 1971	218
APPENDIX C:	PERSONAL INTERVIEWS AND LETTERS	234

LIST OF TABLES

Page

Table 1. Number of junior colleges and enrollments - 1900-1965. 18

Table 2. Growth of public junior colleges in Iowa 1918-1953 . . 26

Table 3. Enrollments in Iowa public junior colleges: 1956-1966. 29

Table 4. Major provisions for financial support of current operations: 1962-1963 50

Table 5. Total Iowa employment in 1960 and projected needs for 1970 and 1975 for selected occupations 54

Table 6. Status of the community college districts July 1, 1967 91

Table 7. Full-time equivalent enrollment projections made in 1967 for the community colleges by curriculum classification 98

Table 8. Actual full-time equivalent enrollment by curriculum classification 98

Table 9. High school equivalency diplomas awarded 1966-1980 99

Table 10. Full-time equivalent enrollment (FTEE) in career education by community college district during selected years between 1967 and 1980 101

Table 11. Full-time equivalent enrollment (FTEE) in the arts and science curriculum by community college district for selected fiscal years between 1967 and 1980 102

Table 12. Full-time equivalent enrollment (FTEE) in adult education by community college district during selected fiscal years between 1967 and 1980. 103

Table 13. Total full-time equivalent enrollment (FTEE) by community college district during selected fiscal years between 1967 and 1980. 105

Page

Table 14. Distribution of full-time equivalent enrollments (FTEE) by curriculum classification in all community college districts during selected fiscal years, 1967 through 1980 106

Table 15. Headcount enrollment by college district and program area for fiscal 1980. 107

Table 16. Postsecondary undergraduate full-time equivalent enrollment in Iowa by type of institution from fall of 1975 to 1980 108

Table 17. Iowa student characteristics as of fall, 1975. 109

Table 18. Participation of the community colleges in intercollegiate athletics during fiscal year 1980 113

Table 19. Tuition charges for residents of Iowa for a thirty-six-week school year of three quarters or two semesters. 115

Table 20. Student financial aid received by college district and source during fiscal year 1980 116

Table 21. Books and periodicals in the libraries in each community college district at the end of fiscal years 1970, 1975, and 1980 123

Table 22. Distribution of state and federal funds for site acquisition and new construction 125

Table 23. Status of college district sites, plans and construction as of February, 1968 127

Table 24. Summary of physical assets by college district, fiscal year 1980 128

Table 25. State general aid by community college district during selected fiscal years between 1967 and 1980 . . 139

Table 26. Proportion of general fund revenue derived from major sources for fiscal years 1967-1980 141

Table 27. State general aid for full-time equivalent enrollment (FTEE) by college district for fiscal year 1980 . 142

Page

Table 28. College district property tax support per full-time equivalent enrollment (FTEE) by institution for fiscal year 1980 143

Table 29. Revenue from district property tax levy by community college district for selected years between 1970 and 1980. 145

Table 30. Tuition and fees by community college district during selected fiscal years between 1970 and 1980 . . 146

Table 31. State and federal vocational aid by community college district for selected years between 1970 and 1980 147

Table 32. General fund revenue by category for all fifteen community colleges, fiscal years 1967-1980 148

Table 33. Summary of total revenue by community college district during selected fiscal years between 1970 and 1980 150

Table 34. Increase in community college enrollments and expenditures for fiscal years 1967-1980. 151

Table 35. Expenditures by function for all fifteen community college districts, fiscal years 1970-1980, and as a percentage of budget for 1980. 152

Table 36. Expenditures by college district during selected fiscal years between 1970 and 1980 153

Table 37. Employment follow-up study of 1978 graduates of career education and paraprofessional programs in the 15 community colleges one year after graduation. . 157

Table 38. Presidents of the community colleges in Iowa, 1966 through 1980 162

Table 39. Enrollments in public community, junior, and technical colleges in the United States, 1966 through 1980 167

LIST OF FIGURES

Page

Figure 1. Proposed sixteen area education districts combined community colleges and intermediate units. 70

Figure 2. Area community colleges (ACC) and area vocational schools (AVS) showing administrative centers 92

Figure 3. Status of community college districts as of July 1, 1971 95

Figure 4. Leaders in the community college movement. 177

CHAPTER I. NATURE AND SCOPE OF THE STUDY

Introduction

One of the most remarkable and exciting developments in American higher education during the twentieth century has been the emergence and rapid growth of the two-year, posthigh school institution. The movement has included both private and public vocational schools, technical institutes, junior colleges, off-campus centers of four-year colleges and universities, public area vocational-technical schools, and community colleges. Bogue (9) listed a total of eight junior colleges nationwide in 1900. These were all private, with a total enrollment of 100.

Thornton (73) characterized the evolution of the two-year college in three stages of development: (1) during 1850-1920 the first two years of American liberal arts colleges were not collegiate at all, but belonged more appropriately to the secondary level; (2) 1920-1945 was a period in which attempts were made to strengthen freshman and sophomore college credit courses and to include a minimum curriculum of vocational education designed to meet the needs of the community in which the college was located; (3) 1945-1965 saw the addition of some adult and community services especially in the larger cities, in an attempt to expand the scope of the curriculum to serve the needs of all posthigh school persons and earn the title of comprehensive community colleges. It was not until the middle 1960s that the majority of the states adopted appropriate legislation with adequate funding plans to permit the two-year

college to break its ties with the local school district or the four-year college and become a unique segment of higher education, offering a truly comprehensive curriculum.

Iowa Department of Public Instruction (DPI) (38) records relate the first public junior college in Iowa was established in Mason City in 1918, with 35 more to follow by 1953. The depression, World War II, and the Korean conflict caused an erosion of the number of colleges and enrollment as well. The 16 publicly owned junior colleges surviving in 1953 continued to operate until the transition to the state system of community colleges in 1966. Most of these junior colleges were underfunded, with little or no state assistance, offered narrow college-transfer curriculums, lacked adequate facilities, equipment, and staff. Their enrollments were small and they basically operated as underdeveloped adjuncts of the local high school by sharing facilities, faculty, and administrative services.

Urged by the need to provide skilled craftsmen and technicians demanded by advancing technology, watching the World War II baby boom complete high school, and driven by the desire to provide postsecondary education to all who might profit from it, state leaders in government and education initiated studies of higher education in Iowa in 1959 and early 1960s which led to positive legislation in 1965. Funds provided by the National Defense Education Act of 1959 for the training of technicians, combined with the fact that many other states had already done so, influenced the legislature to enact legislation in 1965 authorizing not more than 17 community colleges or vocational-technical

schools in the state. During the 1966-1967 school year, 15 merged area posthigh school education districts were approved and formed. Eleven of the districts were approved and organized as comprehensive community colleges and four were approved as vocational schools without authority to offer the first two years of university-parallel courses.

The formative years were slow in growth due to lack of facilities, staff and funds, but by the end of the 1979-80 school year enrollments in the community colleges had reached an FTE of 48,050 with a headcount 498,061 as compared to an FTE of 8,549 and a headcount of 9,110 during the 1965-1966 school year, the last year of existence of the junior colleges operated by the local school districts.

This study was primarily concerned with the transition of the locally owned public junior colleges in Iowa, to the development and the 15-year growth of the state system of public community colleges, 1965-1980.

Statement of the Problem

The problem of this study is to review the early efforts to provide postsecondary education at the two-year level in Iowa and to trace the events of the transition from the local junior colleges through the development stages and the first 15 years of the state comprehensive community college system. The problem was not only to record the events surrounding the transition, but it was also to explore and analyze the data to show the impact of the new development upon the individuals involved, upon postsecondary education in Iowa, and upon the state. It

was believed that a critical review and analysis of the events surrounding the transition and early years would identify trends which could be used to develop recommendations for the future of community college education in Iowa.

The transition from the almost totally academic junior colleges to comprehensive community colleges followed by very rapid enrollment growth was a dramatic change. Accordingly, this study was directed toward addressing the following questions. What forces in the world, nation, and state were interacting to bring about a change in postsecondary education? What economic and technological events in the world, nation, state, and local community led to the change in the type of education needed and the change in the delivery system? What were the factors influencing the education system that led to the development of more comprehensive educational offerings at the two-year level to include college parallel, vocational-technical, adult and community services? Who were some of the individuals and agencies instrumental in bringing about the change in Iowa and nurturing the movement through the first years? What was the success of the community college system during the first 15 years? What were some of the inhibiting forces mitigating against the democratization of opportunity and access to postsecondary education?

Need for the Study

Histories of the two-year postsecondary college movement in the state prior to 1965 were primarily concerned with the locally owned and operated junior colleges as they existed prior to the advent of the

community colleges. A number of the studies dealt with qualifications of faculty, facilities, enrollments, funding, retention, and the record of the student who transferred to a four-year institution. Research studies since 1965 have been primarily concerned with evaluations or appraisals of certain aspects of various institutional programs and services of the community college.

A very comprehensive historical study of the junior college movement in the state beginning with the first junior college in Mason City in 1918 and ending in 1965 with the advent of the community college system was completed by Johnson (45) in 1967. This study will continue the history of the two-year college movement in Iowa by compiling, appraising, and recording in one document the events surrounding the transition and the first 15 years of operation of the new community colleges through the 1979-1980 school year.

Scope and Delimitations of the Study

The study concentrated upon the events and activities in Iowa surrounding the transition from the public junior colleges and the development of the state system of public community colleges during the late 1950s and the early 1960s. Also covered by the study, were the 15 years of operation of the community colleges, 1965 through the 1979-1980 school year. However, a brief review of the two-year postsecondary institutions throughout the nation and state was made and recorded.

Governance, enrollment, state statutes, finances, facilities, staff, and placement were the primary areas of concern of the study. Except for

brief comparative purposes, no attempt was made to include the other institutions offering postsecondary education such as the Iowa State University Technical Institute, the area vocational-technical schools, the proprietary vocational-technical school or the private junior college.

Definition of Selected Terms

For purposes of this study, definitions of certain terms were defined as follows:

AACJC--The American Association of Community Junior Colleges.

Area Vocational-Technical School--A public posthigh school institution which offers vocational-technical education programs and courses. The school may offer adult education and community services, but does not offer courses for college transfer credit.

Community College--A two-year postsecondary institution offering a comprehensive program of educational services and activities designed to meet the needs and interests of the community which it serves. The educational program normally includes college transferable freshman and sophomore courses, vocational-technical and adult education. In Iowa, the term is used synonymously with "merged area schools."

FTEE--(Full-time Equivalent Enrollment). The quotient of the total number of lecture-equated contact hours carried, divided by 540, which represents 15 equated hours per week for a period of 36 weeks.

Junior College--A public or private educational institution offering two years of college courses at the freshman and sophomore level.

Merged Area Schools--The term used by the Iowa legislature in

providing that counties and secondary school districts merge for the purpose of forming districts or areas in which community colleges or area vocational-technical schools might be located. The term is used synonymously with community college when referring to the Iowa statewide system of community colleges.

Public Junior College--A junior college receiving its basic support from public funds at the local or state level. Control is vested in the general public through a board of regents, board of trustees, board of education, or school board.

Technical Education--Education, normally two years in length, designed to prepare individuals to perform on the job at a level closer to the professionally-trained person. Educational preparation would normally include the study of math, science, and other supporting courses in greater depth than in the case of the student in vocational education.

Vocational Education--Education, of not more than two years in length, designed to prepare individuals for employment as operators, skilled workers, or craftsmen in a broad range of occupational classifications. The courses are not normally designed for transferability, but may be accepted in specialized curricula by four-year colleges or universities.

Method and Procedure

Initially, the procedure of the study involved a rather thorough review of the literature concerning the junior college movement in the nation and in Iowa. Having determined the chronology of the topic,

attention was given to the historical approach to be utilized. Because this researcher was involved in one of the community colleges from 1966 through 1980, the research methodology was aided by many of the methods and techniques employed in participant observation, namely, direct observation, informant interviewing, document analysis, respondent interviewing, and direct participation. Due to the fact that many of the observers, informants, and participants in the events were alive and available for interview, it was easy to obtain eyewitness accounts and also to subject the data to review for internal and external consistency. The thorough use of multiple indicants of any particular fact and an insistence on a very high degree of agreement among the indicants did much to ensure control of data quality. The data for the study were collected and presented with at least four phases in mind as follows: (1) a review of the period of the academic two-year colleges in the United States, and in Iowa, 1902-1965; (2) a transition to the comprehensive community college, with consideration of the factors influencing the change; (3) the first 15 years of the comprehensive community college, 1965-1980; and (4) in conclusion some judgments were made concerning the impact of the community colleges upon higher education, the state, the community, and upon the participating students.

Among the methods and sources of data utilized in the study: A number of histories of community college and junior college systems in other states were reviewed and analyzed for format, structure, and method. Notable among these were studies of Illinois,

Kansas, North Carolina, Kentucky, Virginia, Alabama, California, Arkansas, Washington, and Georgia.

A historical survey of the junior college movement in the nation and state was made by reviewing and analyzing significant books, articles in periodicals, studies and statements by the noted authors, organizations, and agencies in the field. Of primary significance as sources of data were Koos, Lange, Bogue, Medsker, McConnell, Starrack and Hughes, Thornton, Eells, Gleazer, Fields, Johnson, Blocker, Conant, Wattengorger, Love, Casey, Lagomarcino, the United States Office of Education, the American Junior College Association, the Junior College Directory, the Iowa Department of Public Instruction's annual reports, the Iowa State Board of Public Instruction's minutes, the Code of Iowa, newspaper articles, and personal interviews.

Sources of data used in recording and analyzing the transition period were a proposal made by the Iowa Association of Junior College Deans in 1950 concerning a state system of junior colleges, federal legislation, studies of higher education in Iowa ordered by the legislature in 1958, the Gibson Reports, the Iowa Department of Public Instruction's recommendations in 1962, minutes of the Committee on Higher Education, studies of community college developments in other states, the American Association of Junior Colleges showing trends, newspapers, numerous journal articles and personal interviews.

The major sources of data for the phase of the study dealing with the intiation and 15-year growth of the state system of community colleges came from legislative acts, reports from the various community colleges and the Department of Public Instruction, minutes from the State Board of Public Instruction, projections and other studies made by the Higher Education Facilities Commission, and personal interviews.

The study concluded with a concise response to the questions raised in defining the problem, and a review of the events and people involved in the transition to, and the 15-year growth of the state system of community colleges in Iowa. Conclusions based on the findings of the study were reviewed. Recommendations were also made concerning the future of the community colleges in Iowa, and research needed to enhance the further development of the system.

CHAPTER II. HISTORICAL FOUNDATIONS

Introduction

Perhaps history does not have measurable use, but it adds new dimensions to life itself by enormously extending our perspective and enlarging our experience. It permits us to enter vicariously into the past, to project our vision back over the years and make meaningful comparisons.

The function of this chapter is to briefly trace the evolution of the American system of education to establish the place of the two-year postsecondary institution within that system, and to review developments in the nation and selected states with greater emphasis upon Iowa, beginning with 1918 and ending with school year 1965-1966.

A Review of the National Scene

Following the American Revolution, there was a surge in national pride and a desire to foster an "American" way of life along democratic principles and individual freedoms. With this new feeling came the pulling away from the European model of education. Weller (78) cites the works of Butts and Cernon, Brubacker, Good, Thayer and others as he traces the evolution of the ladder system of education in America through the common or elementary school, the Latin grammar school, the academies, the high school, and the university. It was not until the late 1800s that serious consideration was given to the need for another step or layer in the public educational system.

Historians relate a "tug of war" of opposing views concerning the purposes of higher education, lasting well into the middle of the twentieth century. On the one hand were those who believed that the major objective of higher education was to transmit an established culture to those innately qualified to receive it. On the other hand were those who believed that the curriculum of higher education should be designed to mesh with the needs, aptitudes, and interests of the individual and of society. The initiation on the part of the federal government in making provisions for the Land Grant Colleges in 1862, designed to offer curricula in the industrial and mechanical arts, was an indication that the liberal viewpoint was being heard. Thornton (73) cites Horn as suggesting that it is time to end the battle of the books, of liberal and vocational education, general and specialized knowledge, culture and training. It must be recognized that the individual and society need both types of education and that the only problem is the right relationship or mixture between the two. This relationship must be given careful consideration by the nation as the aptitudes and interests of individuals are matched against the requirements of the thousands of specialized tasks which must be carried on in our technological society.

Thornton (73), in writing about the historical development of community junior colleges, relates that prior to 1900 there were 8 private junior colleges in the United States enrolling approximately 100 students in total. He notes that between 1869 and 1902, Michigan University President Tappan, University of Minnesota President Folwell, and University of

Chicago President Harper conceived of the junior college as a continuation of the high school. Thornton (73) cited Michigan President Tappan in an address as saying:

> How immense the gain . . . if a youth could remain at the high school academy, residing in his home until he had reached a point, say, somewhere near the end of the sophomore year, there to go over all those studies which as a boy he ought to study under tutors and governors! Then let the boy, grown up to be a man, emigrate to the University, there to enter upon the work of a man.

In 1894, University of Chicago President William Rainey Harper divided the university into the "junior college" and "senior college". Harper is credited with obtaining the addition of two years to the high school program in Joliet, Illinois, in 1902. The Joliet Junior College, the first in the nation and now a community college, is the oldest public two-year college in existence. Harper Community College, Palatine, Illinois, was named for William Rainey Harper due to his early influence on the movement.

Eells (20) reported an enrollment in 1921 of 16,000 students in 207 junior colleges. For the first time, enrollment in the public colleges surpassed that of the private institutions. Of the 16,000 students, 52 percent (8,349) were in public and 48 percent (7,682) were in private colleges. Also, in 1921, the American Association of Junior Colleges was formed and adapted its first definition of the junior college as being an institution offering two years of instruction of strictly collegiate grade. The "Junior College Journal" of the American Association of Junior Colleges was first published in 1930.

In 1922, at the very early stage of development of the two-year

college, Koos (46) identified what are now widely recognized and accepted as major purposes of the junior colleges: (a) providing the first two years of four-year baccalaureate degree programs; (b) providing programs of occupational preparation which are completed in two years of college; (c) offering programs of continuing education for adults; and (d) offering a two-year general college program for those who will not continue on to a senior college. Koos further found that for communities with a junior college, attendance was two and one-half times higher than for communities without a junior college. For the higher socioeconomic group, attendance was one and one-half times greater; for the lower socioeconomic group, three and one-half times greater. He also found that 44 percent of high school graduates entered a local public junior college in the home community, while attendance by those living some distance away dropped to as low as six percent.

In reporting the results of a national survey, Eells (20) found that prior to 1928, many junior colleges confined their work almost exclusively to preparation of students for upper division work in the universities. A few, however, were definitely organized as terminal institutions, aiming to prepare students by means of a two-year course for positions of usefulness to society in the so-called semiprofessions. He goes on to list 450 junior colleges in 1930, located in all but five of the states. Enrollment in the 428 colleges reporting was 69,497, or 162 per institution. The average age of the 428 colleges was 7.8 years.

Thornton (73) cites the Committee on the Public Junior College of the National Society for the Study of Education as agreeing on the

following purposes of junior colleges in 1949:

(1) Transfer or preprofessional education

(2) General education for all categories of students

(3) Occupational education of posthigh school level

(4) Community services

(5) Part-time education

(6) Counseling and guidance of students

In a 1949 study, Bogue (9) reported a junior college enrollment of 500,000 in 650 institutions. Of the 650 colleges, 228 were public and 322 were private, with 180 of these church related. He cites California as being the leader among the states, not only in the number of students enrolled, but in introducing greater comprehensiveness into the curriculum. Also, the basic functions of the California two-year colleges were identical to those cited by Thornton for the nation.

In the foreward to Medsker's, The Junior College, T. R. McConnell (55) intimated that in the 1950s the widespread interest in the community college was often based less on a philosophy of education, less on a consideration of characteristics of students and their educational needs than on the search for a means of accommodating, at low cost, the expected stampede of students toward college in the 1960s. Some felt that the role of the two-year college was to put all students through a conventional lower-division curriculum, failing a large proportion of them and offering no curricular alternatives to those who fell by the wayside. Others believed that it was the responsibility of higher education to adapt the educational process to students whose abilities, interests,

and goals required different kinds and levels of education and training. It was within this comprehensive education plan that the two-year college was to play a major role.

Medsker (55) cited a 1952 study made by the American Council on Education which showed the mean ACE score of entering freshmen in two-year colleges to be 94 while that of entering four-year college freshmen was 107. The 75 two-year colleges responding to the study reported the ratio of males to females was 3 to 1. Reasons for attending junior colleges were listed as: (1) persuasion by parents, counselors and friends; (2) location of college (proximity); and (3) lower costs. Writing in 1960, he stated that no unit of American higher education was expected to serve such a diversity of purposes, to provide such a variety of educational instruments, or to distribute students among so many types of educational programs as was the junior college. He reported three principal types of two-year colleges: (1) the locally controlled and supported community college with or without state aid; (2) the junior college or technical-institute fully controlled and supported by the state; and (3) the two-year extension of a four-year college or university. In 1958, some form of two-year institution existed in 41 states. Only one state provided full financial support. In eight states, four-year college extension centers constituted the only type of two-year unit. Seventeen states had different combinations of the three types.

During the 1950s, the name "community college" came to be used in a few states generically to describe a college which, in addition to

offering conventional courses leading to a baccalaureate degree, also played a major role in the educational, cultural, and civic activities in the community. T. R. McConnell, writing in the foreward to Clark in 1960 (13), stated, "the junior college has an ambiguous status in the American education system." Technically, it was defined as a part of higher education, but organizationally it was a part of a unified school district that also operated one or more elementary and high schools.

The American Association of Junior Colleges (4) reported a rapid, steady growth in the number of colleges and in enrollments. Between 1955 and the early 1960s, institutions were established at the rate of 25 to 30 each year. During 1965 and 1966, fifty colleges opened each year. By the fall of 1966, the number of colleges had reached 648 and the enrollment had surpassed one and one-half million. Except for the slow growth or loss during the depression years, World War II, and the Korean war, the pace of increase in the number of colleges and enrollments was dramatic. The American Association of Junior Colleges Directory (4) recorded the growth as shown in Table 1. The number of independent junior colleges reached a peak of 278 in 1962, with an enrollment of 105,535. During 1965, 140,666 students were enrolled in 268 colleges.

Studies of Two-Year Colleges in Other States

During the past 20 years, historical studies of individual colleges and of the two-year college movement in various states were made by staff members of state governing agencies for the purpose of preserving a

Table 1. Number of junior colleges and enrollments - 1900-1965 (4)

School year	Number of colleges	Enrollment
1900-1901	8	100
1915-1916	74	2,363
1921-1922	207	16,031
1925-1926	325	35,630
1930-1931	469	97,631
1935-1936	528	129,106
1936-1937	553	136,623
1937-1938	556	155,588
1938-1939	575	196,710
1939-1940	610	236,162
1940-1941	627	267,406
1941-1942	624	314,349
1942-1943	586	325,151
1943-1944	584	249,788
1944-1945	591	251,290
1945-1946	648	295,475
1946-1947	663	455,048
1947-1948	651	500,536
1948-1949	648	465,815
1949-1950	634	562,786
1950-1951	597	579,475
1951-1952	593	572,193
1952-1953	594	560,732
1953-1954	598	622,864
1954-1955	596	696,321
1955-1956	635	765,551
1956-1957	652	869,720
1957-1958	667	892,642
1958-1959	677[a]	905,062
1959-1960	663[a]	816,071
1960-1961	405[b]	644,968
1961-1962	426	713,334
1962-1963	422	814,244
1963-1964	452	921,093
1964-1965	503	1,152,086
1965-1966	565	1,316,980

[a]The decrease from 677 to 663 and a decrease in enrollment is the result of dropping certain university extension centers. Thirty-six other institutions were dropped because they no longer met the definition of junior colleges. One closed during the year. Twenty-three public junior colleges were added.

[b]The decrease to 405 resulted from dropping all private institutions from the directory listing.

record. Numerous others appeared as doctoral dissertations. These histories provided much pertinent information about the junior college movement, as well as exposing sources of additional information. The studies also provide other researchers an opportunity to review and analyze the historical method used by the researcher in each study. The majority of the studies trace the history of the development of the junior college movement within the state and record the activities of the several colleges during the period under study.

In 1968, Flint et al. (22) completed a history of the first 50 years of junior colleges in Kansas (1917-1967). The major concentration of the study was upon compilation of data from each of the colleges, such as dates of establishment, programs offered, legislation, enrollments, course standards, faculty numbers, qualification of faculty, finances, accreditation, and facilities. The primary purpose of the study was to preserve a detailed record of the activities of the several colleges in the state during the period.

The purpose of Lynch's (52) history of the two-year college in New Jersey was to fill a gap in the writings covering the two-year college in New Jersey by compiling a history of the transition from local district and private ownership of junior colleges to a comprehensive state system of community colleges. He gave a brief account of the initiation, development, and growth of the public community college system in the state.

Gerald Smith's (69) history of the junior-community colleges in Illinois covered the 78-year period beginning with the start of the

Joliet Junior College in 1902 through 1980. Smith, a participant in the Illinois two-year colleges for 34 years, gave a most comprehensive, factual portrayal of the development and growth of each college during the period. Meyer's (57) history of Minnesota's junior colleges completed in 1956, placed major emphasis upon the administrative, financial, curricular and growth trends during each period of development. Extensive use of primary sources was evident throughout the study. The conclusion reached was that finances were the biggest problem facing the junior colleges. He recommended that a statewide system of community colleges be developed that ensured equitable funding for all the colleges in the state. Cole's (14) 1955 study of the public and private junior colleges in Arkansas, recorded the starts and failures of eight colleges and gave a complete history of the six colleges operating in 1955. He recommended that Arkansas develop a statewide system of properly financed community colleges with more emphasis upon vocational-technical and adult education.

The study of the Virginia junior college system, completed in 1957 by Pearce (63), recorded the origin, gradual development, and standardization of both public and private colleges over a period of almost 100 years. The areas given major emphasis were administration, finance, and curriculum. In 1959, Crawford (18), completed a study of Washington's two-year colleges from 1915 to 1955. After a review of the national scene, he related the development of the Washington movement in chronological periods. Pesci's (64) 1963 study of the Maryland junior colleges reviewed the history of each of 16 colleges through 1962. He paid particular attention to the relationship of individual institutions to

the state agency.

Kenyon's (46) history of the two-year colleges in North Carolina, 1927-1963, sought to identify the forces and individuals responsible for the initiation of the community college system. He found that the interest and influence of the governor and the need for skilled workers and technicians, along with the need to provide educational opportunities for the returning World War II veterans, were factors in achieving positive legislation. The 1958 study of Georgia's system of junior colleges by Granade (24) concentrated upon trends in governance, administration, and curriculum. One of the major recommendations of the study was that the system of postsecondary area vocational schools operated by the Department of Public Instruction and the junior colleges operated under the Board of Regents be combined for a more effective and efficient system.

In a 1966 study of the 36 public and private junior colleges in Florida over the period 1905 to 1965, Morris (60) reported the development and growth of the colleges in a general way, giving much attention to the statewide plan and the passage of permissive legislation in each of the years 1939, 1947, and 1955. Florida and California were among the first states to pass legislation authorizing comprehensive community colleges, and led the nation in number of colleges and growth in enrollments for many years.

Taylor's (72) study of the Kentucky system in 1965 had two objectives: (1) a historical review of junior and community college education in Kentucky; (2) an assessment of the current status of the movement

as reflected by the seven nonpublic and one municipal junior college, and the University of Kentucky community college system consisting of seven campuses. The study concluded that the private colleges will not be able to compete with the public colleges for enrollment unless they become more distinctive in their mission and program. It was felt that the private and public junior colleges could and should complement each other.

A 1974 study of the public junior colleges in Illinois by Meisterheim (56) posed four questions for study relating to their influence upon the development of a state system of community colleges: (1) What influence did the office of the State Superintendent of Public Instruction exert on the development of community colleges? (2) What role did the universities play in the development of community colleges in Illinois? (3) How effective was the Illinois Association of Junior Colleges in promoting the state system? (4) What effect did the Chicago-downstate political conflict have on the passage of favorable legislation? The conclusions reached were that the State Superintendent of Public Instruction, the University of Chicago, the University of Illinois, and the Association of Junior Colleges finally joined together to promote permissive legislation. It was also concluded that earlier interest and leadership on the part of the Superintendent of Public Instruction would have speeded the development by a number of years.

Reid's (65) study in 1966 traced the development of junior colleges in California from their inception through the initiation and adoption of the master plan for higher education in 1961, in an effort to identify

trends which might be used to develop recommendations for the future of junior college education in California. Findings of the study were that junior colleges emerged in response to: (1) the need to accommodate more students; (2) the need to offer a more comprehensive curriculum to train technicians and skilled workers; and (3) the need to accommodate those students not ready for the university. Conclusions were: (1) junior colleges in California enjoyed phenomenal growth; (2) less than adequate financing was available; and (3) there was fear that tuition and fee charges to students would deny educational opportunity to those who needed it most.

Ten years after the beginning of the Virginia community college system, Armistead (5), in 1977, did a study of the state system. The method used was to obtain, through the interview process, the perceptions as to the expectations and success from 36 leaders who were involved in planning, promoting, and implementing the system, and who were available 10 years later. The responses varied from "success beyond imagination," to "should be vocational only," and "they should not advertise to 'drum up business.'"

In 1977, Shanahan (67), in his study of the Michigan system of community colleges, gave a thorough review of the development of the system, State Board of Education policies, and State Department of Education guidelines for implementation. The study related that the Michigan system was founded upon three basic elements: (1) equal access to postsecondary educational services for all persons in the community; (2) removal of geographic and economic barriers which prohibit an

individual from taking advantage of the opportunity; and (3) the reasonable opportunity for the individual to discover and develop his/her talents to a maximum at low cost.

In summary, many of the studies of community colleges in other states were made to compile a record of events surrounding the development and early years of operation of recently developed state systems of community colleges. Notable among the reasons given for the development of state coordinated systems of community colleges were: (1) the need to accommodate, in higher education, the baby boom of World War II; (2) the need to expand the curriculum in vocational education at the postsecondary level; (3) the need to increase access to higher education; and (4) the need to secure financial support separate from the local public school districts.

A Review of Public Junior Colleges in Iowa through Fiscal Year 1965

The origin of the public junior colleges in Iowa was similar to that of other states in that the colleges began as part of local school districts, were underfunded, were small, and attended primarily by students from the community in which they were located. Between 1918 and 1953, 36 public junior colleges opened, but 20 of them closed during the same period. The 16 remaining open in 1953 were still operating at the time of the passage of the legislation authorizing the statewide system of community colleges, as reported by the DPI (38). In 1918, Iowa was considered to be a prosperous agricultural state with few large population centers and with an educational system that ranked in the top

four in the nation in the percent of high school graduates attending college and the level of literacy of its people. The percent of income in the state was divided approximately evenly, with 50.9 percent from agriculture, and 49.1 percent from industry, trades and other pursuits. Johnson (45) cited the 1920 census as reporting an Iowa population of 2,403,751.

The Mason City Board of Education began the first junior college in the state by enrolling 28 students in college-level credit courses in the fall of 1918. Records of the school compiled by the Iowa Department of Public Instruction (DPI) (38) list Mason City as a town of 20,064, with a high school population of 824. The Mason City Junior College experienced steady growth and was one of the larger colleges remaining in 1965. Between 1918 and 1930, 30 colleges were started. Twelve of these were founded prior to legal sanction by the legislature in 1927. Six additional colleges were started between 1930 and 1953. These institutions were characterized by small staffs, small enrollments, and dual use of high school facilities and staffs. Table 2 presents the junior colleges that were opened and discontinued between 1918 and 1953, as related by the DPI (38).

The first enabling legislation, enacted in 1927 (41), authorizing the public junior colleges in Iowa, permitted the establishment of schools of higher order than a four-year high school course when duly authorized by the voters and approved by the State Superintendent of Public Instruction. Such schools were authorized to include courses of study covering one or two years of work in advance of that offered by

Table 2. Growth of public junior colleges in Iowa 1918-1953 (38)

No.	Town	Date established	Closed	Reopened	Closed
1	Mason City	1918	--	--	--
2	Burlington	1920	--	--	--
3	Fort Dodge	1921	--	--	--
4	Grundy Center	1921	1929	--	--
5	Red Oak	1922	1943	1945	1951
6	Clarinda	1923	1943	1946	--
7	Waukon	1923	1948	--	--
8	Estherville	1924	--	--	--
9	Sheldon	1926	1943	1945	1951
10	Creston	1926	--	--	--
11	Washington	1926	1943	1946	1951
12	Webster City	1926	1943	1946	--
13	Albia	1927	1943	--	--
14	Boone	1927	--	--	--
15	Britt	1927	1943	1947	1951
16	Chariton	1927	1943	--	--
17	Cresco	1927	1929	--	--
18	Marshalltown	1927	--	--	--
19	Osceola	1927	1943	--	--
20	Sioux City	1927	1928	--	--
21	Tipton	1927	1943	--	--

Table 2 (Continued)

No.	Town	Date established	Close	Reopened	Closed
22	Maquoketa	1927	1943	--	--
23	Bloomfield	1928	1943	1945	1949
24	Eagle Grove	1928	1943	1945	--
25	Earlham	1928	1931	--	--
26	Independence	1928	1943	--	--
27	Manchester	1928	1929	--	--
28	Clarion	1929	1930	--	--
29	Ellsworth	1929	--	--	--
30	Elkader	1929	1948	--	--
31	Muscatine	1929	--	--	--
32	Centerville	1930	1944	1945	--
33	Emmetsburg	1930	1943	1945	--
34	Clinton	1946	--	--	--
35	Perry	1947	1948	--	--
36	Keokuk	1953	--	--	--

an accredited four-year high school. The first restriction to the development of public junior colleges came in 1931, when the Forty-Fourth General Assembly (41) prohibited the establishment of a college in any school district having a population of less than 20,000. The Forty-Ninth General Assembly, in 1941 (41), reduced this population requirement from twenty thousand to five thousand. The Fifty-Third General

Assembly, in 1949 (41), established the concept of state aid to public junior colleges by approving the payment of twenty-five cents per day of attendance for each junior college student enrolled for twelve or more semester credit hours of work. In 1957, the Fifty-Seventh General Assembly (41) increased this amount to one dollar per day. State aid was later increased by the Fifty-Ninth General Assembly in 1961 (41), to one dollar and fifty cents per day for out-of-school-district students.

The American Association of Junior Colleges (4) 1967 Directory records the enrollment of the junior colleges operating in Iowa during the ten-year period immediately preceding the establishment of the state system of community colleges as 6,172. Table 3 presents enrollment from fiscal year 1957 through 1966, with the average enrollment for the 16 colleges as 582.

Research concerning the public junior college in Iowa was sparse prior to 1955. Johnson's (45) historical study of the Iowa junior college development from 1918-1965 is perhaps the most comprehensive. The completed studies and other sources, such as the Department of Public Instruction Reports, national studies by the American Association of Junior Colleges, and others, were used in the review of the junior colleges in Iowa from 1919-1966.

Love's (51) 1938 study investigated the origin of the Intercollegiate Standing Committee and the standards developed by the committee for the direction of the junior colleges. One important finding of the study was that fifty percent of junior college graduates transferred to senior

Table 3. Enrollments in Iowa public junior colleges: 1956-1966

Junior college	1956-1957	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966
Boone	120	120	141	114	124	132	157	157	167	285
Burlington	264	264	275	265	383	383	432	447	548	814
Centerville	88	80	88	79	99	130	198	276	353	580
Clarinda	150	125	126	114	108	149	170	231	292	499
Clinton	115	136	132	128	171	182	182	228	182	555
Creston	104	106	108	115	98	140	154	224	206	310
Eagle Grove	116	125	118	104	107	125	118	129	141	190
Ellsworth	169	201	180	194	207	312	388	458	635	835
Emmetsburg	69	48	86	102	83	84	85	85	113	146
Estherville	134	160	128	141	140	171	191	204	320	470
Fort Dodge	284	284	275	276	295	444	413	495	543	865
Keokuk	117	132	157	152	160	170	190	386	407	545
Marshalltown	162	178	161	168	245	297	331	404	524	867
Mason City	443	496	524	457	518	811	811	829	1,004	1,406
Muscatine	175	190	198	173	210	319	333	406	556	714
Webster City	88	94	103	84	104	127	127	139	181	245
Total	2,598	2,739	2,800	2,666	3,052	3,976	4,280	5,098	6,172	9,316
Institutional average	162	171	175	167	191	249	268	319	386	582

institutions. Love recommended a statewide system, under state direction and support, with the addition of a more comprehensive curricular offering than freshman and sophomore college parallel courses. Lagomarcino (48), in 1955, found from the 257 junior college graduate transfers studied that grades earned while in junior college were significant as a predictor of completion of four years at one of the three state institutions even though the grade point average earned in the four-year college was lower than that earned in the junior college. A study by Casey (11), in 1963, came to the same conclusions concerning transferees. Casey recommended additional guidance and screening of students. Both recommended a statewide system with a greater diversity of curricular offerings. Casey reported that, in 1957, only three colleges had separate buildings and only sixteen percent of the faculty taught full time. Of the eleven Iowa cities with populations of twenty-five thousand or more, only five maintained a junior college.

Hoffman (28), in 1963, determined that the closing of twenty junior colleges in the state was due to: (1) low enrollment, (2) financial difficulties, (3) local apathy, and (4) advice from the State Department of Public Instruction. Hoffman recommended a plan for sixteen regional community colleges for the state. The proposal included a recommendation that five of the existing junior colleges continue and expand, that eight others operate as attendance centers, and that three be discontinued.

A national study by Medsker (55), in 1960, characterized the history of Iowa junior colleges as marked by a slow and painful struggle. He

went on to cite the remaining 16 colleges in 1957 as small, with the populations maintaining the colleges varying from 4,500 to 34,000 with seven of the districts having fewer than 10,000 residents. Enrollments in 1957 ranged from 39 to 419 with 13 colleges enrolling fewer than 200 students.

From a study of 200 students who entered Iowa Central Community College during 1963, 1964, and 1965, Cramer (17) found academic differences between students who transfer and graduate, those who transfer and withdraw, and those who terminate at Iowa Central Community College. He found the most reliable predictors of the community college graduate transferee receiving a degree from a four-year school were the grade point average received at the junior college and the high school grade rank.

Johnson's (45) study cited four advantages commonly identified by local school districts when promoting local junior colleges: (1) to provide two years of college close to home so that the young student would have time to mature before going away to the university; (2) to provide college education for a student at lower cost than would be possible in an institution away from home; (3) to give the student more personal attention in curricular and extracurricular activities; (4) to keep the tuition in the local community; and (5) to provide cultural benefits to the local community. Johnson's study characterized the local school district junior college as: (1) being ill-housed; (2) being inadequately financed since the first priority was to secondary education; (3) promoted on the basis that tuition would pay total cost,

but taxpayers had to make up the difference; (4) having few full-time instructors; (5) having very limited autonomy with the local district superintendent serving as chief executive officer until the early 1960s when most remaining colleges had a dean who was given greater authority; and (6) having low enrollments until the early 1960s following a generous increase in state aid in 1957.

A major contributor to the initiation of an increase in vocational education and in postsecondary enrollment at the two-year level in the early 1960s was Title VIII of the National Defense Education Act approved by Congress in 1958. Federal funds, as a result of this Act, were made available to states on a matching basis for the development of post-secondary vocational programs. The Iowa State Board of Public Instruction implemented this legislation by modifying the state plan for vocational education to allow certain local school districts as well as the Technical Institute of Iowa State University to become eligible to operate as area vocational-technical schools.

During the school year 1965-1966, a majority of the 1,815 full-time day students enrolled in vocational education at the postsecondary level were enrolled in the 15 area vocational schools. Schools designed as area vocational schools were the Ames Community School District, Burlington Community School District, Cedar Rapids Community School District, Centerville Community School District, Clarinda Community School District, Clinton Community School District, Council Bluffs Community School District, Davenport Community School District, Des Moines Independent Community School District, Fort Dodge Community School District, Iowa

State University, Mason City Community School District, Ottumwa Community School District, Sioux City Community School District, and Waterloo Community School District.

Summary

The two-year or junior college movement grew out of a feeling on the part of university educators around the turn of the century that not all youth completing the high schools were prepared to attempt the specialized work at a university. Harper, President of the University of Chicago, was instrumental in the addition of two additional years of general education to the high school in Joliet, Illinois, which became the first public junior college in the United States.

Studies of public junior colleges, conducted on the national level and in the several states, show that most began as part of a local school district, with local financing, and a narrow college preparatory curriculum. Growth and expansion were slow until after World War II in the 1950s when California, Florida, and a few other states accepted the junior colleges as a state responsibility. However, it was not until the early and mid-1960s that the two-year colleges entered the boom period and became a recognized part of higher education in the United States. Chief among the factors accounting for the growth of the colleges were the need to expand opportunities in higher education, to provide skilled manpower to man the nation's industries, to advance the technology, and to provide a place in higher education for the college-age youth from the baby boom following World War II. These factors and

the stimulus from the federal government provided the incentive needed by the states to move forward with plans for the state coordination and financing needed for the establishment of viable, comprehensive institutions of postsecondary education. Iowa was perhaps a little slower than many of the states to develop a statewide system, but eventually produced a workable, permissive and flexible plan needed to develop a comprehensive system of educational opportunity.

CHAPTER III. TRANSITION FROM THE LOCAL SCHOOL DISTRICT OWNED JUNIOR COLLEGES TO A STATEWIDE SYSTEM OF PUBLIC COMMUNITY COLLEGES IN IOWA THROUGH FISCAL YEAR 1965

Introduction

Although an uneasy peace followed World War II, the United States emerged as the most advanced industrial nation in the world. Because of this position of power and capacity, much of the task of the redevelopment of the war ravaged areas of the world fell to the United States. Also, the major task of defending and supporting the non-Communist world against the aggressive acts of the Communist nations fell to the United States. In spite of this troubled period, population growth was rapid and there was general prosperity for most in the United States.

The G.I. Bill of Rights made educational opportunities readily available to more than 11,000,000 veterans from World War II and the Korean War; however, not everyone took advantage of the opportunity, or for some reason was not able to share in the "good life". Certain socio-economic barriers kept women, the unskilled, the undereducated, the handicapped, and some racial and other minority groups from sharing in the nation's wealth.

The launching of the first earth satellite in 1958 caused an immediate surge of interest in educating more persons in the scientific pursuits. The late 1950s and early 1960s also brought a humanistic movement with greater concern for the rights of the individual. These trends, along with the impending flood of college-age youth brought about by the World War II baby boom, prompted the federal government, educational

leaders, and others to begin to seek ways of accommodating greater numbers of students and expanding the opportunities for postsecondary education. Most states, including Iowa, had a component of higher education which could, with modification, meet these challenges. The junior colleges had been operating in Iowa since 1918, but were, for the most part, committed to providing the freshman and sophomore courses for the individual seeking a baccalaureate or higher degree.

This chapter will explore some of the events and analyze some of the forces operating in the era resulting in a tremendous increase in educational opportunity through the statewide system of community colleges.

Social, Political and Economic Influences

Throughout the history of education, leaders and philosophers have debated the purposes of education. Is education for the benefit of society, the individual, or both? The apparent answer is both. Bell (8) takes the broad view and relates that most of the world is still preindustrial, with more than sixty percent of the labor force engaged in extractive industries like fishing, agriculture, and mining. Their technology is basically that of raw materials and their labor force is unskilled. Areas in the world where this is especially true are Asia, Africa, Central and South America.

Another band of nations make up the industrial societies. These are the Soviet Union, Japan, Western Europe, Canada, and the United States. They are industrial societies in that they are primarily goods-producing

through manufacturing or processing. The predominant worker is the engineer, the technician, the skilled worker, the semiskilled production worker, the worker in distributive and inservice occupations.

Over the next thirty years, Bell sees the United States moving into an information and service economy. The new, science-based industries that will be arising, such as computers, electronics, optics, fluidics and lasers, have implications for greater utilization of human resources and the need for increasingly higher levels of knowledge and skill requirements for all jobs. With the accelerated rate of change occurring in technology, it will be difficult to identify talent and provide motivation for youth to prepare for jobs that are not yet in existence.

During World War II, the United States operated crash programs to train workers to man the industries producing goods for global war and, following the war, maintained a very high level of productivity to rebuild the economics of the western world and provide military hardware to the non-Communist world. Even with this accomplishment, the United States was, for a short time, considered second best when Russia launched the first satellite into space.

Writing in 1967, Collins (15) challenged the junior colleges to reverse the curriculum which designated 75 to 80 percent of the students as "transfer" students when only 20 to 25 percent actually transferred to baccalaureate programs. He chided the junior colleges for having, in 1961, only 20 percent of their enrollment in vocational-technical programs when, according to a special 1964 Department of Labor study, there

was a need for 700,000 new technicians during the 1960s. Collins further chided the junior colleges for training only four percent of the employed engineering technicians, only seven percent of the medical technicians, and for not offering programs in the maintenance and repair specialties and the service occupations.

During the late 1950s and the 1960s, there was an intense effort to promote vocational-technical education into a position of respectability in higher education. Sid Marland (53), promoter of the all-inclusive concept of "career education", quoted Alfred North Whithead from the Aims of Education:

> The antithesis between a technical and a liberal education is fallacious. There can be no adequate technical education which is not liberal, and no liberal education which is not technical. . . . Education should turn out the pupil with something he knows well and something he can do well.

James Conant (16), writing in Slums and Suburbs in 1961, gave strong support to the place of career education by stating: "I submit that in a heavily urbanized and industrialized free society, the educational experiences of youth should fit his subsequent employment."

Venn (77) made a strong argument for the comprehensive community college when he stated that higher education has a responsibility to raise the educational level of all American youth. It is no longer sufficient that junior colleges, colleges, and universities educate the relatively few. Rather, postsecondary education must be a catalyst for the overall improvement of a free society. The evidence was never clearer that the greatest waste of human talent results not only from a failure to educate the gifted, but from neglect of those who make up the

great "average" in America. He maintains that, due to the rapidity of change and the impact of technology on the degree of scientific knowledge, skills, and related education needed by the technician and skilled worker, vocational-technical education must be taught within the framework of the postsecondary educational system.

The United States Department of Labor (75) projected 26 million workers in the age group of 14 to 24 to enter the labor market between 1960 and 1970, a net increase of six million over 1950 to 1960. This represented almost 50 percent of the total expected increase in the labor force. The number of persons in the middle-aged groups would increase very little. An actual drop of 250,000 in those aged 35-44 was expected. This increase in the number of workers under 25 had great implications for the need for preemployment education and training. The Labor Department reported the occupational groups to experience the greatest increase in the number of workers in the 1960 to 1975 period were professional and technical, clerical, service, sales, and skilled workers. All of these groups require preemployment education and training.

Thornton (73) maintains that education is part of the great "American Dream," the belief inbred in every stratum of society that education is a social and individual good and that society is obligated to provide as much of it as any individual desires and can profit from. The comprehensive community college can make this dream a reality for countless thousands who could not otherwise participate in this dream. According to Hillway (27), three major currents have created the modern two-year community colleges: (1) the nineteenth century efforts to reform

American university education; (2) the extraordinary need in the United States of the various types of adult and vocational education as our economy became increasingly industrialized; and (3) the continuing democratic tendency toward the extension and equalization of educational opportunity for all Americans.

Expressing his thoughts concerning the need for better educated and trained workers, Lawson (49), Vice President of Philco Corporation, in 1962, made the following observations:

> It is good that science and engineering are highly respected and profitable professions. It is good that mothers and fathers want their children to be college graduates. But it is not good if that respect and that desire turn us from a critical goal of the development of a strong across-the-board labor capability.
>
> Our nation's technical progress is not in direct proportion to the number of college graduates. For example, I have heard it reported that Egypt has more college graduates per capita than England. But no one would suggest that Egypt's labor force is better trained and qualified than England's or that Egypt is more technologically advanced than England.
>
> What I think is true, of course, is that a nation's technical progress is strongly tied to its over-all labor capability.
>
> It is for this very reason that I am worried about our vocational preparedness for a technical age. I am worried that perhaps our inattentiveness to labor needs is preventing us from producing the across-the-board labor capability that we must have.

In further support of the equalization of educational opportunity, Stinchcomb (71) cited a portion of a June 29, 1963 report of the congressionally appointed National Commission on Technology, Manpower, and Economic Progress as follows: (1) to meet our social and economic needs, free public education through the fourteenth year, either at the community college or at appropriate postsecondary institutions, should be made available to all Americans. A nationwide system of community colleges

was recommended as one of the ways to achieve this end; (2) most vocational and occupational training should be given at the postsecondary level rather than in the high school; and (3) the opportunity for postsecondary education should not be denied to any qualified American and should be made available through an appropriate system of loans and grants. When reporting on a study by the American Council on Education, Venn (77) quoted the report as saying:

> If the two-year colleges in America are to assume their proper and effective role in the education system of the nation, they should make vocational and technical education programs a major part of their mission and a fundamental institutional objective.

McConnell (54) cited John W. Gardner as observing that a democratic, industrial society cannot exist and grow through the efforts of an elite alone, even though the few are selected on the basis of intelligence rather than privilege. Behind the great creative minds are required an enormous number of highly able and excellently educated scientists, technicians, and assistants.

In a 1967 study of higher education for the 1970s, the Carnegie Commission (10) registered concern about equality of opporunity. The commission expressed hope that most barriers, due to race, sex, family level of income and geographical location, could be eradicated by 1980 and all could be abolished by the year 2000. This was viewed to be of enormous potential benefit to American democracy. To achieve this, the Commission suggested: (1) the creation of a sufficiency of open access places, particularly at the lower-division level, defined as spaces available at low or no net tuition and within commuting distance of all high school graduates and adults who wish to attend; (2) the enhancement of

alternate methods of delivery of instruction to include apprenticeship, television, off-campus extension, etc.; and (3) financing through loans, grants, and work-study where there is inability to pay. The spread of comprehensive community colleges throughout the United States, with a diverse curricular offering and the ability to provide remedial work where needed, was recommended.

In an interview in December, 1971, by the "Des Moines Register," United States Commissioner of Education, Sidney P. Marland, cited such forceful figures as a projected shortage of 400,000 paraprofessional health workers by 1980 and a need for 1.5 million more secretaries by 1975. In 1980, the demand for nurses and other health workers was unmet, and the need for secretaries in Iowa had not declined, as verified by an interview with Charles Moench, Director, Community College Branch, Iowa Department of Public Instruction.

Chambers (12) reported that the search for jobs and greater economic opportunity has caused a population shift from rural to metropolitan areas to the extent that seventy percent of the total population live on one and one-half percent of the land. Most of those who migrated lacked the education and skill needed to compete in the technical labor markets where the manpower was in most demand. If higher education is to solve this problem, the two-year college, with a more comprehensive curricular offering, is best equipped to accomplish it.

Finally, in a 1967 study of comprehensive community colleges, Cross (19) found that the presence of a comprehensive community college more than doubled the opportunity for bright students whose fathers were

employed at the lower occupational levels. In community college communities, 53 percent of the bright students from lower socioeconomic levels entered college, but in communities with no public college facilities, only 22 percent of the group entered college. Research on the availability of college in the community seems to indicate that accessability of college has a particular impact upon students from lower socioeconomic levels. Thus, community colleges are demonstrating considerable effectiveness in the democratization of higher education.

The Role of the Federal Government

To give its young people the opportunity to acquire knowledge and skills and an opportunity to put them to use when acquired, are great obligations of a democratic society. With proper motivation and guidance, all youth, including the socioeconomically handicapped, can also make their contribution to society and achieve personal satisfaction. Labor, industry, the states, and the nation as a whole, all have a vital interest in solving the problems of the unemployed and the waste of human potential and resources. Well-trained employed workers mean purchasing power is increased throughout the population with everyone benefiting. Also, everyone would benefit if the vast sums of public money now being spent for welfare aid, crime control, and unemployment payments could be reduced substantially.

The high unemployment rate among the 18 to 24 age group, especially the minority segment, came about chiefly as a result of ignorance and apathy on the part of society as a whole. In recent years, it was

aggravated by the rapid pace of technological change, leaving the unskilled and semiskilled without jobs. Realizing that one of the only reliable and lasting solutions lies in education and training, the federal goverrment, first to educational institutions and later to students, invested increasing sums of money in education.

Mobley (58) cites the Morrill Act of 1862 as the first federal aid for vocational education. This act provided for the establishment of agricultural and mechanical colleges in each of the states.

Prior to 1915, most of the skilled labor in the United States was either imported or trained through the apprenticeship system. As immigration laws became more restrictive, resulting in curtailment of the influx of craftsmen, industry, labor, and government leaders recognized the need for direction and support from the national level. This, and the shortage of skilled workers to prepare for World War I, were among the factors contributing to the passage of the Smith-Hughes Act of 1917. As reported by the United States Office of Education (76), this act made $7.2 million available annually for the promotion of vocational education in agriculture, trade and industrial education, and home economics. In 1936, the George-Dean Act provided $14 million in perpetual appropriations for vocational education and added teacher training and distributive education to funded programs under the Smith-Hughes Act.

Between 1940 and 1945, congress provided $100 million annually for the training of defense production workers. Under the program, 11 million persons were given specialized training in occupations needed to arm, equip, and feed the armed forces of the United States and her

allies. Following World War II, the Serviceman's Readjustment Act, known as the "G.I. Bill of Rights," was passed and later extended to include Korean War veterans. Eight million veterans were to use this act primarily to obtain postsecondary education and training. In 1946, the George-Barden Act amended the George-Dean Act by raising the appropriation from $14 million to $29 million and included the education of persons above 18 years of age. The Health Amendments Act, in 1956, added $5 million annually to the George-Barden Act to be used for nursing education. Thoroughly concerned by the launching of the Russian Sputnik I, another amendment was added to the George-Barden Act, in 1958, to improve the teaching of mathematics, science, and modern foreign languages for all levels of education. Of significance to two-year institutions, was the authorization of $15 million annually to be expended in support of programs limited exclusively to the training of highly skilled technicians in occupations termed vital to the national defense. A 1961 amendment extended the act which motivated most states, including Iowa, to establish area vocational-technical schools at the postsecondary level. The Area Redevelopment Act of 1961, the Manpower Development and Training Act of 1962, and the Comprehensive Employment and Training Act of 1972 provided for the training and upgrading of the unemployed and underemployed.

The Vocational Education Act of 1963 resulted from recommendations of a panel of consultants appointed at the request of President Kennedy and headed by Dr. Benjamin Willis. The act continued $57 million, provided under the Smith-Hughes and George-Barden Acts, and appropriated

$108.5 million for fiscal year 1965; $177.5 million for fiscal year 1966; and $225 million for subsequent fiscal years. The act also provided funding for residential schools and work study programs.

Without doubt, the Vocational Education Act of 1963, with the Amendments of 1972, was the most comprehensive vocational education legislation to become law in the history of the country. Six major provisions of the act were: (1) to provide vocational-education programs more closely geared to labor-market demand; (2) to provide for training in all types of occupations except those professional occupations requiring a baccalaureate degree; (3) to provide training for persons of all levels of ability; (4) to develop vocational education in all kinds of institutions, including comprehensive high schools, specialized vocational high schools, area vocational-technical schools and institutes, junior colleges, community colleges, and four-year colleges and universities; (5) to provide for evaluation of the program at least every five years; and (6) to mandate greater accountability and coordination between agencies.

Schultz (66) cites Walter Arnold, Assistant Commissioner, Vocational Education, as stating: "There is little doubt that what we do in the area of technical education is going to have a direct bearing on how well this nation adapts to the continuing technological changes and multiplying demands upon our human resources."

The Higher Education Facilities Act of 1963, and the Amendments of 1966, were of considerable importance to junior colleges since 24 percent of the funds appropriated per year for construction went to two-year

colleges, with the states or institutions matching the funds. In 1967-1969, $500 million was allocated to two-year colleges. Iowa community colleges received seven million dollars for construction of facilities under the act.

The Higher Education Act of 1965, and the 1968 Amendments, appropriated funds to the community colleges for continuing education and community services, assistance to developing institutions, teaching fellowships, low interest loans to students, scholarship grants, and the work study program. The Amendments of 1972 placed stress on improvement, coordination, and accountability among all institutions receiving the funds.

There can be little doubt that the impact of the federal government upon the two-year college was tremendous. Federal funds were provided for facilities, equipment, and programs, as well as to students to provide them access to higher education.

The Status of Community Colleges in Other States

A rather comprehensive review of the two-year public educational institution in the nation was given in Chapter II. The intent here is to discuss the extent to which states have moved toward systems of state community colleges or state authorized and coordinated local or regional comprehensive community colleges. Some review and analysis will also be given of the type of institution in terms of comprehensiveness, financing, and governance.

The United States Office of Education (76) listed 43 states as

having some type of public two-year college in the 1963-1964 school year. These institutions, totaling 532, included 314 local junior colleges, 39 state junior colleges, 43 technical institutes, 110 branches or extension centers of universities, and 26 other two-year public institutions. The 39 state and 314 local junior colleges enrolled 90 percent of all two-year college students. Of the 43 states having laws authorizing junior or community colleges, 28 provide for locally operated colleges and 10 for state operated colleges.

In the case of the 28 states having locally operated junior-community colleges, it was usually the responsibility of the local community or region to take the initial steps to establish a junior-community college. The steps for organizing a college were usually stipulated in the permissive legislation or through guidelines formulated by the state agency having control. Control was usually by a local board with coordination by a state agency. Income for operation was normally from three sources: tuition, state aid, and a local tax levy. The source of funds for capital development varied from state to state, but the majority was derived from local sources.

In the ten states having two-year state colleges, the operation and control were in the hands of a governing board representative of the state, rather than the local area served.

In 1960, the Commission on Legislation of the American Association of Junior Colleges (3) issued a guide designed to assist state legislators in the formulation of adequate laws for the development and operation of community colleges. The major points suggested were: (1) a

statewide study of the needs for higher education should be made by the appropriate state agency; (2) a state agency should be responsible for the coordination, supervision, and evaluation of the community colleges, but the colleges should be locally controlled; (3) the administration of the colleges should be completely separate from that of the local high school; (4) tuition should be kept low and the state should pay a substantial share of the capitol and operating costs; (5) enrollment should not be less than 500 full-time students; (6) the curricular offering should be comprehensive to include college parallel, vocational-technical, adult and continuing education, and guidance services.

Fields (21), in 1962, identified five fundamental characteristics in a study which clearly established the uniqueness of the community college: (1) democratic--low tuition and other costs, nonselective admission policies, geographically and socially accessible, and popularized education for the largest number of people; (2) comprehensive--a wide range of students with widely varying abilities, aptitudes and interests, and a comprehensive curriculum to meet the broad needs of such students; (3) community-centered--locally supported and controlled, local resources utilized for education purposes, a community service improving the general level of the community; (4) dedicated to life-long education--education programs for individuals of all ages and education needs; and (5) adaptable--to individual differences among students, differences in communities, and the changing needs of society.

The public junior colleges in the various states found it increasingly difficult to finance expanded posthigh school education services

without additional state aid. Johnson (45) relates that, by 1963, some twenty-eight states had authorized some type of state aid to these institutions, although it was far from adequate in most cases. At the local level, the common sources of income were tax levies and student tuition. Only two states, California and Illinois, had legally barred the charging of tuition for resident students attending junior colleges. Table 4 reports the major provisions for financing operations of the nation's public junior colleges in the 1962-1963 school year.

Table 4. Major provisions for financial support of current operations: 1962-1963 (45)

Source of support	Number of states with such provisions
State aid	
Formula	23
Grant	5
No aid	8
Local sources	
Appropriation	4
Tax levy	28
None	3
Not specified	2
Student-tuition authorization	
Definite for residents	8
Definite for nonresidents	16
General to board of control	16

The transition from the junior college philosophy to the comprehensive community college concept was not a smooth one for many states. Monroe (59) relates that most advocates of a liberal arts education stress its nonvocational values, as if there is something demeaning about an educational program which has as its primary objective training which enables the student to find a job. Therefore, in the 1950s and before, a major debate among junior college leaders was whether any occupational education should be offered in the college curriculum. In general, the junior colleges before 1950 had imitated the liberal arts colleges by offering little more than the traditional liberal arts and preprofessional programs. Thus, it became customary for the early junior colleges to offer only transfer programs and to oppose the introduction of occupational education for the benefit of students who would not complete a four-year education.

Also, during the 1950s and 1960s, considerable debate was waged between the supporters of specialized technical institutes and the proponents of comprehensive community colleges. For example, in Illinois during the 1950s, a serious conflict arose in educational circles between (on the one side) vocational teachers and industrial leaders and (on the other side) community college leaders. The issue was whether the state of Illinois should set up a separate system of two-year technical institutes financed entirely by state funds or whether the public community colleges could be made to serve the occupational needs of the state. The conflict was eventually resolved in favor of the public community colleges when in 1965 the state legislature set up a statewide system of

state-supported community colleges. By law, according to Smith (69), 15 percent of all courses in those colleges were required to be in occupational education. In 1971, Smith (69) reported the 15 percent was increased to 30 percent.

Although tradition and philosophical opposition retarded the entry of occupational education into the community college, by 1960 occupational education had become an accepted and established part of the college curriculum in many states. Since World War II and the Sputnik era of the late 1950s, the nation had become aware of the importance of technical and other specialized occupational programs for national defense and economic progress. Increasingly, since 1950, the community colleges have concentrated on the development and improvement of occupational programs. Today, community college spokesmen seem to agree that at least 50 percent of the community college enrollment should be in occupational education. There should be no dichotomy between occupational education and any other kind of education. For most people, holding a good job is basic for the enjoyment of a good life.

Factors within Iowa Influencing the Transition

The need to expand access to higher education, the need to relieve the local school district of some of the financial burden, and the need to train technicians and skilled workers for incoming industry were some of the reasons influencing the change to a statewide system of community colleges. Other reasons include the need to provide a place in higher education for the increase in the college-age youth, and the inability

of the existing junior colleges to provide a diverse and viable program.

Data from the Iowa Employment Security Commission (40) related that the exodus from the farm was continuing and that greater numbers of people were relying on employment in industrial related jobs for their livelihood. Since less than twenty percent of the total jobs required a baccalaureate degree, it was apparent that opportunities for job preparation at the postsecondary level must be made available. The greatest projected need for the 1960-1975 period was for clerical and service workers, with over 60,000 new job openings for each. Next was the professional, technical, and kindred group with a need of just under 60,000 for the 1960 to 1975 period. Opportunities for employment for craftsmen and operators would be approximately 35,000 each, for the 15-year period. The need for a total of 204,568 new workers was projected between 1960 and 1975, due to expansion and the replacement of workers. Table 5 shows total employment in 1960 and projected needs for 1970 and 1975 in the various occupational categories. Many occupations having the larger projected increases are occupations which require education and training of two years or less.

Concerning industrial development in Iowa, Baumback (6), of the University of Iowa Business and Economic Research Department, stated that if Iowa is to continue to grow industrially, efforts must be made to expand and improve the state's industrial arts program in the high school and the vocational program at the posthigh level. Not only must there be a considerably more generous appropriation of state and local funds for that purpose, but also the content of current and proposed technical and

Table 5. Total Iowa employment in 1960 and projected needs for 1970 and 1975 for selected occupations (40)

Occupation	Employment 1960 census	Projected needs 1970	Projected needs 1975
Total all occupations	988,950	1,125,331	1,193,518
Professional, technical, kindred	99,335	139,435	159,485
Managers, officials, proprietors	79,017	89,386	94,570
Clerical, kindred	123,256	162,544	182,185
Sales workers	73,742	85,295	91,071
Craftsmen, foremen, kindred	113,646	136,292	147,616
Operatives, kindred	145,819	169,338	181,096
Service workers	108,601	145,534	163,998
Laborers, except farm and mine	40,883	40,610	40,474
Farmers, farm workers	204,651	156,897	133,023

vocational education programs must be reevaluated in the light of recent developments in science and in technology, notably automation.

Following the launching of Sputnik I, the federal government, in 1958, appropriated additional funds for vocational-technical education through Title VIII of the National Defense Education Act. This appropriation was expanded and increased with the passage of the Vocational Education Act of 1963. In meeting the requirements of the federal guidelines for the receipt of the funds, the State Board of Public Instruction approved fifteen centers, in addition to the existing junior

Table 5. Total Iowa employment in 1960 and projected needs for 1970 and 1975 for selected occupations (40)

Occupation	Employment 1960 census	Projected needs 1970	Projected needs 1975
Total all occupations	988,950	1,125,331	1,193,518
Professional, technical, kindred	99,335	139,435	159,485
Managers, officials, proprietors	79,017	89,386	94,570
Clerical, kindred	123,256	162,544	182,185
Sales workers	73,742	85,295	91,071
Craftsmen, foremen, kindred	113,646	136,292	147,616
Operatives, kindred	145,819	169,338	181,096
Service workers	108,601	145,534	163,998
Laborers, except farm and mine	40,883	40,610	40,474
Farmers, farm workers	204,651	156,897	133,023

vocational education programs must be reevaluated in the light of recent developments in science and in technology, notably automation.

Following the launching of Sputnik I, the federal government, in 1958, appropriated additional funds for vocational-technical education through Title VIII of the National Defense Education Act. This appropriation was expanded and increased with the passage of the Vocational Education Act of 1963. In meeting the requirements of the federal guidelines for the receipt of the funds, the State Board of Public Instruction approved fifteen centers, in addition to the existing junior

colleges, as area vocational-technical schools for the purpose of offering postsecondary level vocational programs. The Iowa Cooperative Study of Post High Education (31) reported a posthigh school vocational-technical enrollment in Iowa during the 1965-1966 school year of 1815. Indicative of the pattern and extent of vocational-technical education in Iowa, even after the infusion of the federal funds, it was reported that 763, or forty-two percent of the 1815 enrollments, were in one-year vocationally oriented programs, as contrasted with fifty-eight percent in two-year semiprofessional programs. Of the 763 in one-year programs, 434 were in thirteen one-year practical nursing programs and 146 were in six auto-mechanics programs. This left 183 enrollments in the remaining sixteen one-year programs, indicating both a lack of emphasis on vocational programs outside of practical nursing and auto mechanics, and a very low average enrollment of twelve in the remaining programs. Of the 1,052 students in two-year programs, 317 were in the Iowa State University Technical Institute.

The report continued by stating that the data available implied that planning for vocational-technical education in Iowa had been somewhat uneven. Approximately one-third of the programs considered desirable for a single comprehensive vocational-technical institute were not found in any of the Iowa institutions in 1965. In the fall semester of 1964, the median number of vocational-technical courses offered in the junior colleges was fifteen, twenty-five percent offered fewer than three courses. In a comprehensive community college, at least one-third of the course work should be in other than transfer programs; not a single

junior college in Iowa in the fall, 1964, met this minimum requirement.

The Iowa Cooperative Study of Post High School Education (31) accurately reported that Iowa, for the predictable future, would have a large "young" population with the percentage below thirty continuing to grow as follows.

Year	Percentage
1960	50
1965	51
1970	52
1975	53
1980	54

The projection was that there would be 50,000 more 18-21 year-olds in 1980 than there were in 1960.

Among the major recommendations of the study were that comprehensive community colleges be developed that would offer two-year programs in: (1) academic work of less than a bachelor's degree level; (2) vocational and technical programs; and (3) adult education and public services including workshops, conferences and cultural events.

Beginning with Love (51) in 1938, a number of researchers, in and out of the state, reported findings and made recommendations concerning the Iowa junior colleges that suggest a change was in order. Love (51), in 1938, found unequal educational opportunities and recommended a comprehensive system with statewide coordination. A statewide system of 35 community colleges was proposed in 1954 by Starrak and Hughes (70) to serve the transfer student, the adult student, and the vocational

student. In 1955, Lagomarcino (48) reported inadequate space, a curriculum limited primarily to college preparatory courses, no inservice training of staff, and more than 100 classes operated with five or fewer students. Casey (11), in 1963, found the curricular offerings seriously restricted, 58 classes with fewer than 5 students, and instructors with master's degrees in education rather than a subject field. He reported two colleges with no full-time instructors. His concluding observations were that facilities were inadequate, more instruction in vocational-technical education was needed, and a stronger financial base and statewide coordination were also needed.

Medsker (55), in reporting the results of a 1960 study, noted that Iowa had long been known as a state with many small junior colleges. The 1957 enrollments ranged from 39 to 419, with thirteen of the sixteen colleges enrolling fewer than 200 students. He found that only three colleges had separate buildings and that even they shared some facilities with the local high schools. Only 16 percent of the instructors taught full-time in the junior colleges, the remaining classes were shared with the local high school instructors. Medsker observed that the "history of the Iowa junior college is marked by a slow and painful struggle." He listed additional concerns as: (1) small enrollment per college; (2) only five colleges were located in one of the eleven cities in the state having a population of over 25,000; (3) the financial base of the small rural college supported by only one local school district was inadequate; and (4) weak curricular offering of a straight university parallel program. Medsker proposed two alternatives for improvement: (1) a

voluntary cooperative effort by contiguous school districts in the maintenance of a junior college; and (2) legislation permitting the creation of independent districts for the establishment of regional community colleges.

Hoffman's (28) study, in 1963, identified the reasons for failure of Iowa junior colleges which had been discontinued as: (1) low enrollment, (2) financial difficulties, and (3) local apathy. Hoffman recommended a plan of sixteen regional community college districts in Iowa. He proposed that five of the existing junior colleges continue and expand, eight others operate as attendance centers, and three be discontinued. The new regional community colleges would offer a comprehensive curriculum of college parallel, general education, vocational-technical, and adult education. In a 1965 study, Johnson (45) characterized the Iowa junior colleges through the 1950s as being plagued by inadequate support, a poor image, poor statewide coordination, and a lack of direction as to long-range goals for their development.

As related by the Iowa State Department of Public Instruction (36), an Iowa Study Committee on Higher Education was organized in the fall of 1955. The thirteen members represented the thirty-two private colleges, the three state institutions of higher learning, the junior colleges, the Board of Regents, and the State Board of Public Instruction. The study committee 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 concerns regarding higher education in the state that might be of

common interest to both the public and private colleges. Mr. David Cassat, member of the Board of Trustees, University of Dubuque, was chairman of the committee. The committee made several studies relating to higher education in Iowa, but, due to lack of financial support, was never able to complete a comprehensive study of the resources and needs for postsecondary education in the state.

Legislative Mandated Studies, Recommendations and Resulting Legislation

It was apparent to those who were informed concerning the status of the existing junior colleges in the state that major legislative action was required if the educational needs of the youth and adults of the state were to be met at the postsecondary level. However, it was felt the concerns regarding the junior colleges and the educational needs at the two-year level could not be addressed without a study of, and a plan for, all of higher education in the state. During the previous 10-20 years, a number of studies and recommendations had been made relating to the junior colleges in Iowa, but little had resulted from them.

The Fifty-Eighth General Assembly (41), in 1959, appropriated $25,000 for the Legislative Research Bureau to conduct a comprehensive study of the needs and facilities available for higher education in Iowa. A committee of seven legislators was appointed to advise the Research Bureau in the making of the study. After a review of similar studies made by other states, it was evident that the $25,000 available would not finance the desired study. The Legislative Advisory Committee chose eight subjects for study from a list of twenty-five suggested by the

Legislative Research Bureau. These eight were:

1. Facilities of public and private colleges and the use of these facilities.
2. Predictions of increased enrollments, the implications of these enrollments, and the ability of our higher educational system to take care of these needs.
3. The needs for education beyond the high school in Iowa, and the ability of our present educational system and training facilities to take care of these needs. This would include vocational and technical schooling beyond the high school.
4. The preparation of our high school graduates for college work or other posthigh school education or training.
5. The role of the junior colleges now, the kind of job they are doing, and their role in helping to meet further 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 the high school in Iowa. This would be a comprehensive survey of revenues and costs, especially of public colleges, and deal with such matters as methods of financing increasing enrollments.
8. Training, recruiting, keeping and utilization of faculty.

Two consulting firms advised that it would cost $40,000 to $45,000 to study the eight subjects under consideration. By adding $5,000 to

the $25,000 available, a contract was awarded to Raymond C. Gibson of Indiana University in November, 1959, to direct the reduced study. The agreement with him required that he make:

1. A prediction of Iowa college enrollments to 1970.
2. An analysis of the educational programs, 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 current educational system met these; and an analysis of the Iowa junior college.

The analysis of the facilities was later dropped because there was some doubt about the usefulness of the results.

Following extensive personal interviews, visits to the fifty-one colleges, and reviewing results of questionnaires, Gibson published four detailed reports and a summary as follows:

1. Projections of Enrollments for Fifty-one Public and Private Colleges in Iowa, 1960-1970.
2. Manpower Problems in Higher Education in Iowa: A New Alliance.
3. An Appraisal of Iowa Colleges: Facilities, Costs, Scholarships, and Administration.
4. The Junior Colleges of Iowa.
5. Resources and Needs for Higher Education in Iowa, 1960-1970.

Gibson discussed the report with, and sought recommendations from, the Junior College Association, the College Presidents' Association, the Iowa Study Committee on Higher Education, the State Department of Public Instruction, and other interested groups. He and Clayton Ringgenberg of

the Legislative Research Bureau met with legislators in four regions of the state to bring the results to them prior to the 1963 legislative session.

In beginning his Summary Report (23), Gibson stated that Iowa needed legislators and executives in government who supported education as the principal means by which a state can advance social and economic progress. He reported that the people of Iowa wanted postsecondary 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.

A number of the thirty recommendations made by Gibson had implications for the two-year colleges (23). They were:

Recommendation 1: Iowa colleges must plan for undergraduate enrollment of 44,786 in 1960, and 76,414 in 1970; an increase of seventy percent.

Recommendation 2: Public policy must relate higher education to manpower demands. Iowa's transition to an industrial economy had already been made, with income from business and industry more than double the income from agriculture in 1959. He cited the Bureau of Labor as predicting the greatest percentage of increase in employment in the 1960-1970 decade to be in the professional and technical occupations, service workers, clerical and sales workers, managers, skilled and semiskilled workers, in that order.

Recommendation 3: The State Department of Public Instruction and

the universities should join forces in bold new research, development and educational programs, necessary to prepare the youth of Iowa to do the work of the state and to increase industrial development. As a result of out-of-state corporations investing $159,000,000 in industrial expansion in Iowa during 1959, a total of 3,892 new jobs were created. Dynamic vocational and technical training could increase such investments still further.

Recommendation 4: Education beyond high school must be responsive to the needs of increasing numbers and groups of workers, because the demand for workers with limited education is decreasing.

Recommendation 6: Further industrialization of Iowa demands education beyond the high school for technicians and skilled craftsmen who will be needed to assist scientists and engineers. The United States Office of Education predicts that by 1965, as many as 165 skilled craftsmen and technicians will be needed to support each scientist and engineer in the labor force.

Recommendation 16: Public policy governing higher education in Iowa must recognize the educational and vocational aspirations of all students in the decade of the sixties. The present curricula of the colleges and universities, including the junior colleges, are related closely to the preparation of professional employees. This group makes up only sixteen percent of the total workers in Iowa. Present curricula are functionally inadequate for eighty-four percent of Iowa workers.

Recommendation 18: That the legislature authorize the establishment of regional community colleges as the best means of relating

education beyond high school to the manpower problem of Iowa. This is perhaps the most serious gap in the entire educational system of the state. The regional community colleges should have four distinct functions: (1) two years of general studies which will transfer to senior colleges; (2) guidance and counseling services to assist students in planning their education and careers; (3) inservice training of workers employed in local industries; and (4) terminal education, vocational in nature, from one to three years in length, preparing persons for jobs based upon community and state needs.

Recommendation 19: The State Legislature should authorize the establishment of regional community colleges where there will be 500 full-time students, and the state should pay at least one-half of the cost for building and operating such 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 authority for the community college should reside in a lay board composed of seven members elected by the voters of the region. The regional board should have the authority and responsibility for determining local policy, for levying a tax within the limitations prescribed by the legislature, and for employing personnel to operate the college.

Statewide policy, planning, organization, and coordination for the community colleges should be the responsibility of the State Board of

Public Instruction. There should be a director of a Community College Division in the State Department of Public Instruction to assist local regions in planning, organizing, and improving community college programs.

Gibson felt that 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 met in 1963.

The Gibson report (23), received by the legislature near the middle of the 1961 session, identified the problems of higher education in the state but did not present usable answers nor bills to implement the recommendations. This was pointed out in Resolution 6 (42) which 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 education. Along with the plan, bills for the implementation of the recommendations were to be submitted for consideration by the 1963 session of the General Assembly.

Such recommendations and plans were to relate to, but not be limited to, the following:

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 inservice training and retraining of workers;

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

e. community services.

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

The Department of Public Instruction was further directed to make recommendations to the General Assembly on specific ways and means of providing vocational and technical education for Iowa youth and adults at both the high school and posthigh school level.

With approximately eighteen months to complete the study as directed in House Resolution 6, Paul Johnston, State Superintendent of Public Instruction, appointed a twenty-one member State Committee on Public Area Community Colleges. The committee was composed of eight staff members from the department with David Bechtel as chairman, and twenty-one persons nominated by various agencies throughout the state.

Bechtel (7) relates that the State Department of Public Instruction proceeded with the study on two basic assumptions based upon House Resolution 6: (1) the sixteen junior colleges currently operating in the state were not adequate to provide extensive vocational-technical education within the existing structure; and (2) the legislature was interested in providing quality vocational and technical education programs at the high school level as well as at the posthigh school level to include adults.

In addition to specific directions from the legislature, the study committee of the State Department of Public Instruction conducted its work with some additional premises as guides:

1. That public area community colleges be developed to function within the pattern of the administrative structure of the public school system.
2. That a regional education area, created and authorized to establish a public area community college, be of sufficient size to provide the human and financial resources necessary to maintain an adequate educational and service program, and that all such areas be formed without the creation of additional legal taxing units.
3. That quality education, especially in occupation centered curriculums, requires a high level of financial support.
4. That an area community college be located within one hour's driving time of the majority of its students, but that the college be of sufficient size to offer a broad educational program at an economical cost, recognizing that the location of the central campus unavoidably may be beyond the optimum commuting distance for some students.

In a personal interview, David H. Bechtel related that, as directed by the legislature, the State Department of Public Instruction in December, 1962, completed its 18-month study and submitted to the General Assembly the report entitled Education Beyond High-School Age: The Community College. Suggested legislation by the Department staff for

implementing recommendations was submitted to the General Assembly along with the report. While proposing the legal framework for the development of area community colleges was recognized as the main intent of the legislature, the report was not limited only to this phase of Iowa's public education system. The Department was concerned also with the additional problem of restructuring the state's county intermediate districts. The Iowa Association of County Superintendents requested the Department to establish boundary lines to be incorporated into legislation for redistricting Iowa's 99 counties into fewer yet more effective intermediate units of school administration.

In researching the problems associated with establishing the area community colleges and in attempting to redistrict the boundary lines of the present county school system so as to provide more effective intermediate units, the Department found that both proposals had certain basic elements in common relating to organization. Each required defining specific areas or regions of the state from which financial support could be obtained. Each required that in defining such areas, basic criteria be established to insure that each area had the potential human and financial capacity to fulfill its educational intent. Each required that the area elect a lay board with responsibility for and control of the educational program. Each required that this board appoint an administrative officer to carry out the desired educational functions. In studying these similarities, the Department concluded that both these educational functions be performed within the same area unit, with one elected board, and that one executive officer be responsible for both

programs. It was recognized that to combine these two programs could bring about considerable dissatisfaction within the lay and educational leadership, but the Department of Public Instruction felt it had the obligation to keep all aspects of public education in perspective and not promote one phase or level of the system to the neglect of the other. Also, the Department of Public Instruction believed that the people of Iowa were unwilling to create a separate tax base for each of these proposals and thus introduce an additional educational taxing unit into the state. To provide both these functions, the Department proposed that the legislature create 16 areas encompassing the state. The boundaries of these areas were drawn along existing school district lines with the provisions that adjustments could be made as school district reorganization progressed in the state. Figure 1 shows a map with proposed boundary designations.

Each of the proposed area education districts was defined by applying the minimum criteria that insured adequate human and financial potential to permit the economic operation of both the intermediate unit and the community college. These criteria included:

1. Recognition of the cultural, social, and economic characteristics in an area;
2. The feasibility of an administrative structure for the area community college with an attendance center, or centers, located within one hour's driving time of the majority of the students to be served;
3. A minimum area school enrollment of 5,000 public and private

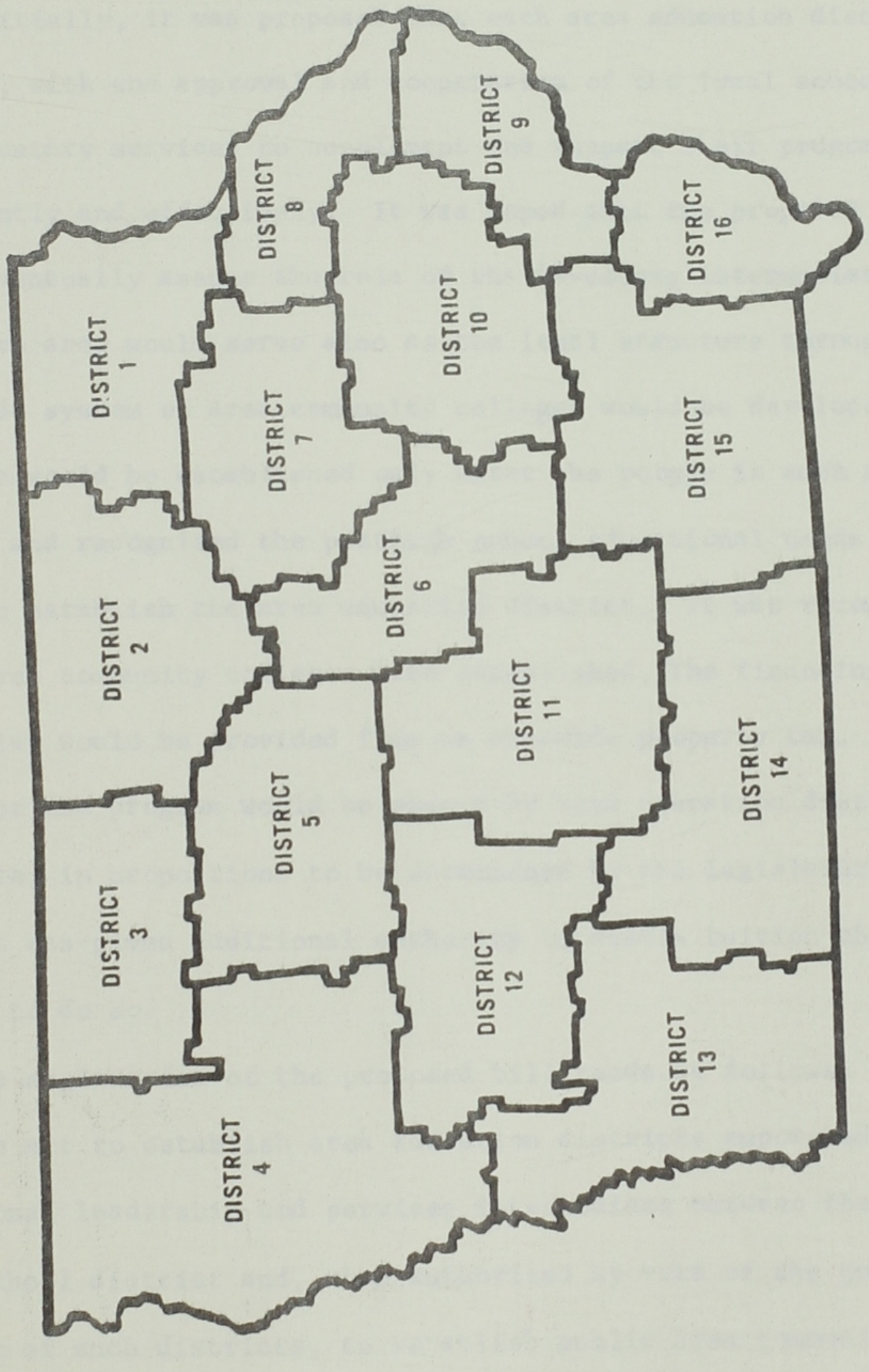


Figure 1. Proposed sixteen area education districts combined community colleges and intermediate units

students in grades 9-12;

4. A minimum assessed taxable valuation of $150,000,00.

Initially, it was proposed that each area education district would provide, with the approval and cooperation of the local school district, complementary services to supplement and support their programs more efficiently and effectively. It was hoped that the proposed 16 areas would eventually assume the role of the 99-county intermediate districts.

Each area would serve also as the legal structure through which a statewide system of area community colleges would be developed. These colleges would be established only after the people in each area had studied and recognized the posthigh school educational needs and then voted to establish the area education district. It was recommended that where area community colleges were established, the financing for capital outlay would be provided from an areawide property tax. Operational costs for the program would be shared by area education districts and the state, in proportions to be determined by the legislature. An area district was given additional authority to assess tuition charges if it desired to do so.

The explanation of the proposed bill reads as follows:

"an act to establish area education districts empowered to provide educational leadership and services intermediate between the state and local school district and, when authorized by vote of the qualified electors of such districts, to establish public area community colleges; to provide for an area education district board of education and an area superintendent and his assistants in each school district, to prescribe

their duties and powers; and to repeal Chapter Two Hundred Seventy-three and to amend certain sections of the code of 1962, as herein indicated."

The proposed bill received no action on the part of the Sixtieth General Assembly, meeting in 1963. Bechtel recalls that the probable reasons were: (1) the proposal called for a significant restructuring of many provisions in the Iowa Code relating to education; (2) the proposal mandated a major change in the organization of the school districts, rather than a permissive change; and (3) there was a lack of confidence that the needs for vocational education would be met if left under secondary school administration. It was felt noteworthy that no member of the State Department of Public Instruction's Study Committee was asked to appear before any legislative committee or subcommittee to review the proposal.

The Legislative Advisory Committee, appointed in 1959 to work closely with the Legislative Bureau in making a study of higher education in Iowa, advised the General Assembly in 1961, to have bills prepared to encompass some of the more important recommendations of the Gibson report. The committee also commended Governor Erbe for urging in his 1961 inaugural speech that the legislature make use of the Gibson Report.

Believing that further study might open new doors, the Sixtieth General Assembly appointed an interim committee of legislators to give continued study to the problems of providing vocational educational programs. The concept of combining vocational programs with the two-year colleges at first was rejected, but, as a result of further study,

support grew for the initial concept. However, it was decided that a permissive approach would be the channel through which this concept should develop.

With the passage of the 1963 Vocational Education Act, considerable impetus was given to the efforts of the interim committee, and as a result of their study, the following conclusions were reached:

1. The area vocational education schools and the two-year junior colleges should be joined in a single comprehensive institution.
2. An area or regional approach was necessary to obtain sufficient enrollment and adequate fiscal support.
3. The posthigh school program should not be state-operated but should have its own area board with the authority to appoint an administrative officer. Significant state funds should be made available for operation and capital outlay.
4. Methods should be devised to encourage permissive development of these institutions.
5. Problems associated with the development of the comprehensive area schools should remain separate from problems of merging the county intermediate districts.

During the study by the Interim Committee, the Department of Public Instruction continued a close relationship with the groups and associations representing the established two-year colleges, the vocational programs, and the county intermediate districts. These groups strongly opposed the mandated approach. They also agreed that legislation in regard to restructuring the county intermediate district should be

separate from legislation for the comprehensive area community college programs. But there was considerable reluctance on the part of those involved with the two-year junior colleges and those responsible for area vocational education to communicate on the Interim Committee's recommendation that the community colleges and the vocational schools be joined in one comprehensive institution. This problem was intensified further by the emphasis given to vocational education with the passage of the 1963 Vocational Education Act. Bechtel (7) used the words "cautious tolerance" as the best term to describe the attitude of these distinct forces in regard to the development of the regional community colleges.

During the two-year interim, 1963-1965, all concerned had an opportunity to state their views and to make their recommendations known. When all the viewpoints were brought together, studied, sifted, and evaluated, legislation was introduced to the Sixty-First General Assembly. The chances for strong support were good because time had been taken to develop proposed legislation in keeping with the recommendations of the Gibson report and that had the general support of the groups involved.

An unforeseen boost came about through a change in political control in the General Assembly, with the same party having majority control in both houses. This gave more assurance to passage of legislation when it gained the support of the party in control.

Upon enacting legislation, the legislature kept separate the establishment of the community colleges from the concept of the multicounty

intermediate unit, and in doing so, passed a separate bill to permit counties to merge in order to create enlarged intermediate units. The legislature also withstood pressure to permit the establishment of a state-operated system for the area community colleges which would have fallen under the direction of a separate state board created for that purpose.

The community college bill, Senate File 550 (Appendix A), which later became Chapter 280A, Code of Iowa as enacted, carried the following statement of legislative intent:

> It is hereby declared to be the policy of the State of Iowa and the purpose of this Act to provide for the establishment of not more than twenty areas which shall include all of the area of the state and which may operate either area vocational schools or area community colleges.

The major provisions for establishing a statewide pattern of community college districts were as follows:

1. Provides for, by concurrent action of the concerned county boards, the merger of total or partial county school systems into a new body politic as a school corporation for the specific purpose of operating an area vocational school or an area community college.
2. Designates to the State Board of Public Instruction the responsibility for receiving and approving, or rejecting, all proposals for such merger action so as to carry out the policy of the state that not more than 20 such areas, including all the territory of the state, be established for operating area vocational schools or area community colleges.
3. Sets forth the criteria by which a proposed merged area may

formulate a plan for submission to the State Board.

4. Provides for the creation and election of a board of directors, elected from elector districts within the area, to administer the area vocational school or community college.

5. Authorizes the board of directors to levy a tax on the property of the merged area not to exceed three-quarters mill for operational costs. Also authorizes, by vote of the people, an additional "site levy tax" not to exceed three-quarters mill in any one year for the purchase of grounds, construction of buildings, payment of debts contracted for construction of buildings, purchase of equipment for buildings, and the acquisition of libraries. Such a three-quarter mill levy cannot be authorized for a period to exceed five years without being revoted. The board of directors, when authorized by a vote of the poeple of the area, may also acquire sites and erect and equip buildings and may contract indebtedness and issue bonds to raise funds for such purposes.

6. Creates the payment, for residents of the state, of general school aid funds determined on the basis of $2.25 a day calculated on the average daily enrollment of full-time and full-time equivalent students.

7. Makes allowances for the charging of tuition and the acceptance of additional state and federal funds allocated for the construction or operation of area vocational schools or area community colleges.

8. Provides for the continued operation of existing community-junior colleges supported by the tax base of a single school district and also establishes an equitable means for the transfer, and reimbursement, for such facilities to the merged board of directors where such action is desired.

9. Creates the establishment and provisions for enforcement of approval standards for area community and junior colleges and area vocational schools.

10. Establishes a division of community and junior colleges within the State Department of Public Instruction and creates an advisory committee to the State Board of Public Instruction, parallel to the already established advisory committee on vocational education, for public and area community or junior colleges.

Interviews with John Kibbie, Chairman of the Senate Education Committee; Paul Johnston, State Superintendent of Public Instruction; David Moorhead, President, Iowa Association of County Superintendents; Alvie Sarchett, representative of the Iowa Council of Local Administrators of Practical Arts and Vocational Education, reveal that a very thorough discussion of the subject, as well as intense lobbying of legislative members, occurred in the interim between the 1963 session and the 1965 legislative session. A review and analysis of the minutes of meetings by the various groups, position statements, newspaper articles, and letters show that it was no easy task for the Department of Public Instruction to obtain any degree of consensus on the proposed bill that was

introduced in the Sixty-first Session of the General Assembly in 1965. With minor revisions, the bill, as proposed by the Department of Public Instruction, was passed as the Community College, or Merged Area School bill.

The vocational educators lobbied for a postsecondary statewide system of area vocational schools. They expressed great concern that the federal funds, recently provided through the Vocational Education Act of 1963, would be used for liberal arts instruction since the comprehensive community college would, no doubt, have an academic administrator.

The representatives of the existing junior colleges were not all convinced that vocational education belonged on the postsecondary level, but they were most emphatic in their stand that the community colleges should not be a part of a local school district. They were strong in their advocacy of a separate board of the state level for community colleges.

The county superintendents settled for permissive legislation that encouraged contiguous county school systems to merge for greater efficiency and effectiveness.

Representative Leroy H. Petersen, Chairman of the Legislative Committee on Educational Programs, Representative John Kibbie, and Senator Vern Lisle, members of the committee, were effective as liaison in assisting the Department of Public Instruction in the drafting of the bill and in obtaining support among legislators during the 1963-1965 period. John Kibbie was elected to the Senate in 1964, and, as chairman of the Senate Education Committee, was the persistent, driving force working

with Paul Johnston, State Superintendent of Public Instruction, that resulted in final passage of the Senate File 550.

As an indication of his support of the plan for regional comprehensive community colleges, Governor Harold Hughes made the following statement in a workshop conducted at Iowa State University:

> The days of opportunity for the untrained, unskilled worker are past. We have been making great strides in industrial development, to provide jobs for our young people right here in Iowa. It would be the ultimate irony if we attained the industrial flowering of our valley that we have so long hoped for - only to find that we have failed to provide our own sons and daughters with the modern day skills, through regular high school or vocational training, to handle the jobs available.

The diversity of educational programs and services specified in the Act to be offered by the community colleges in Iowa certainly places the Iowa colleges in the category of community colleges when compared to the criteria as determined by Fields (21) in a national study in 1961. The range of programs and services for the Iowa colleges included:

1. The first two years of college work including preprofessional education.
2. Vocational and technical training.
3. Programs for inservice training and retraining of workers.
4. Programs for high school completion for students of posthigh school age.
5. Programs for all students of high school age who may best serve themselves by enrolling for vocational and technical training while also enrolled in a local high school, public or private.
6. Student personnel services.

7. Community services.
8. Vocational education for persons who have academic, socioeconomic, or other handicaps which prevent succeeding in regular vocational education programs.
9. Training, retraining, and all necessary preparation for productive employment of all citizens.

Commenting upon the passage of Senate File 550, Boyd Greaber (25), Director of Vocational Education in the Department of Public Instruction during the 1958-1967 period, stated: "Whether it succeeds or not will depend largely upon the foresight of the educators of Iowa. We must remember that this institution was formed to serve those not now being served, or inadequately served, in the present system of public education. It will require vision, patience, and the possibility of error in some cases. The people of Iowa have given us a new educational tool to work with and we cannot, yes, we dare not fail them."

Governance of the Community Colleges

The period between action of the General Assembly directing the Legislative Bureau to conduct a study of higher education in Iowa in 1961 and the passage of Senate File 550 permitting the establishment of regional community colleges or vocational schools was well spent. All of the special interest groups were given an opportunity to be heard. Some states have separate boards, some have community colleges reporting to the board governing the universities of the state, some have state systems operated by the Department of Public Instruction, but perhaps the

most unsatisfactory structure is in those states which have a system of postsecondary vocational schools reporting to the Department of Public Instruction with the academic junior colleges reporting to the governing board of the state universities.

The governance structure for the statewide system of comprehensive community colleges, as detailed in Chapter 280A of the Iowa Code, is among the best in the nation for efficiency of operation and for effectiveness of the educational program. The original legislation, Senate File 550, provided for the establishment of a division of community colleges within the State Department of Public Instruction and an advisory committee to the State Board on Community Colleges. Also required was the establishment of guidelines and the enforcement of approval standards relating to such aspects as sites, facilities, administration, personnel certification, funding, instruction, instructional materials, counseling and guidance, library, and maintenance. Approval standards for area community colleges were to be adopted jointly by the State Board of Public Instruction and the State Board of Regents. Criteria set forth in the standards provide a basis for evaluating on an annual basis the programs of the area community colleges and vocational schools.

The Iowa State Plan for Vocational Education required that a school receiving funds for the operation of a vocational program from federal or state sources have an overall advisory committee to give guidance as to program offerings, curriculum content, promotion and placement. Also required was that each vocational program receiving federal or state funds have an advisory committee made up of persons active in the trade

or craft represented by the vocational program.

The state board was given authority to adopt such administrative rules and regulations as it "deems necessary" to carry out the provisions of the Act.

The governing board of a "merged area" or community college district became a "body politic" as a school corporation with authority to sue and be sued, hold property, levy taxes, receive and expend state and federal funds, employ personnel, determine curriculum, establish policy, and make and enforce rules concerning all functions of the district, not inconsistent with law and state board policies.

Legislation established the "mission" of the community colleges and their scope of operation within the total system of public education in Iowa. The legislation provided for a chief administrative officer responsible to the regional community college board. The State Board of the Department of Public Instruction established operational guidelines and a reporting procedure, but did not prescribe an organization structure for each district.

This study found that the personnel of the Department of Public Instruction during the 15-year period sought the suggestions, advice, and, in too many cases, a consensus from all the 16 colleges before proceeding with changes in existing legislation, funding formulas, standards, rules, and guidelines. Issues that received attention during the 15-year period, but remained unresolved in 1980, were a standardized tuition for all colleges, a uniform enrollment driven funding formula written into legislation, and authority to issue revenue bonds for the acquisition

of student housing and student centers.

Summary

During World War II, the United States was forced into a crash program of training skilled workers, developing its resources, and providing the military hardware needed by its armed forces and those of its allies to win the war. This same industrial productive capacity was needed to provide the goods and services required to bolster the post-war economics of the allies and to assist the defeated nations in re-building theirs. Also, during and following the war, Russia, the leader of the communist world, experienced an industrial revolution which gave her the capacity to become a threat to freedom in many areas of the free world. In order for the United States to remain the protector of the free world, it was necessary that all of its people be productive. To maintain a productive citizenry in an era of increasing technology, increased levels of education and opportunities for education and training were required.

Due to mechanization and automation, there was a decreasing need for unskilled and semiskilled workers in most occupations, but espectially in farming. All across the United States, and especially in Iowa, increasing numbers were leaving the farms and rural areas and migrating to the cities in search of jobs. Due to the mobility of the population and the need to be competitive in a world economy, the federal government provided "seed money" as an incentive to states to intensify their educational effort, especially in vocational education.

California led the way in breaking the elitest attitude of higher education by establishing a statewide system of comprehensive community colleges with only minor fee and no tuition charges to students. Florida, Pennsylvania and other states soon followed with community colleges offering a diversified program of education designed to accept the posthigh school-age students at their given level and assist them in advancing to their greatest potential. The federal government provided funds for the education of disadvantaged groups, for college construction, as well as grants for scholarships and loans at low interest rates. This action was designed to stimulate universal access to higher education for all persons in the society. Traditionally, the major emphasis of higher education was upon preparation for the professional jobs requiring at least a baccalaureate degree. Since only sixteen to twenty percent of the jobs in the labor market required a four-year degree, it became obvious that the curricular offerings of higher education had to be diversified to serve the needs of the individual and of society.

Until Title VIII of the National Defense Education Act of 1958 provided funds for vocational and technical education at the posthigh school level, the junior colleges in Iowa were offering an almost entirely liberal arts curriculum. The existing sixteen junior colleges operated by local school districts in Iowa were, with minor exceptions, housed in space not needed at the moment in high schools and in abandoned secondary school buildings. The sixteen colleges were underfunded, poorly located, and did not have the capability needed to diversify the curriculum and to serve students from all areas of the state. Since Iowans were leaving

the farms in greater numbers and more than half of individual income was from business and industrial pursuits, it was time to open the access to, or to democratize higher education.

The Iowa legislature, in 1959, provided $25,000 for a study and recommendations concerning the needs of public and private higher education in the state. The junior colleges and vocational schools were cited for special emphasis. The consultants making the study recommended that a statewide system of regional community colleges be established, but since the recommendations were not specific and no legislative proposals made, no action was taken. The State Department of Public Instruction was awarded $12,000 in 1961, to study the junior colleges and vocational education at the postsecondary and secondary levels. Specific recommendations with proposed legislation were to be submitted to the legislative advisory committee by December, 1962. Using data and recommendations from the higher education study, a bill was presented proposing that sixteen area intermediate public school districts be formed with authority to establish a community college if voted by the people. The proposal received no consideration. The members of the legislature were not ready for such an arbitrary and drastic reorganization of the secondary school system in the state.

The 1963 General Assembly appointed an interim committee from the Senate and one from the House to further study higher education. Representatives of the Junior College Association, the Association of Private Colleges, and the Association of Local Administrators of Practical Arts and Vocational Education conducted a major lobbying effort in the interim

between 1963 and 1965, as well as during the Sixty-first General Assembly sessions in 1965. The private colleges opposed any expansion of public higher education, the junior college representatives wanted a statewide system of junior colleges governed by a separate board, and the representatives of vocational education were convinced that vocational education would be the "poor relative" of academic education should the two be combined in the same institution. Many of the vocational educators argued that vocational education belonged in comprehensive high schools, while others lobbied for a separate statewide system of postsecondary area vocational schools governed by the State Board of Public Instruction.

Without having achieved a consensus among the professionals, the legislative proposals of the Department of Public Instruction, in 1965, included a bill providing for a statewide system of not more than twenty regional community colleges. Intensive lobbying continued well into the 1965 session of the General Assembly and the issue was finally decided in an all-day open session on the senate floor with participation of the full senate and anyone else who desired to be heard.

This study identified no one individual or organized group outside the Department of Public Instruction who gave the movement any real leadership. Paul Johnston, who became Superintendent of Public Instruction in 1963, was the moving force in final passage of the act creating the community colleges. Harold Hughes, Governor of Iowa from 1963 to 1969, vigorously supported the community college concept in speeches throughout the state and by working with individual legislators.

Senate File 550, the final bill, provided for supervision and coordination of the community colleges by the State Board of Public Instruction, and operation on the regional or district level by an elected board of not more than nine members. The Board of Regents was to be involved in setting approval standards and in conducting an annual evaluation of each institution. The permissive educational offering was very diverse, including two years of arts and science courses, preparatory and supplemental vocational education, adult and continuing education, as well as all of the related services such as counseling, placement, etc., needed to support the educational program.

Effective July 4, 1965, the stage was set in Iowa for the accommodation into postsecondary education of persons of all ages with very diverse levels of educational background and levels of expectations.

CHAPTER IV. THE FIRST FIFTEEN YEARS OF THE STATEWIDE SYSTEM OF COMMUNITY COLLEGES IN IOWA, 1965-1966 THROUGH 1979-1980

Introduction

With the passage of legislation authorizing the establishment of a statewide system of community colleges, effective July, 1965, events moved at a rapid pace. It was related to this researcher many times during this study that the intent of the legislature was that only four colleges be started initially, with others being added over a ten-year period. While the act did not convey this intent, the amount of state aid appropriated for the first two years of operation gave some credibility to this thought. Once it became obvious that the need and student interest were so great, the legislature made every effort to provide a reasonable share of the funding necessary to ensure the accomplishment of most of the objectives as set forth in the original legislation.

Formation and Approval of the Community College Districts

The new community college act became effective July 4, 1965, and on July 5, the next day, the State Board received the first formal proposal from an area composed of all or parts of seven counties in the state. This proposal had been developed in anticipation of the passage of such legislation. Those responsible for its preparation had guessed correctly as to the final form of the bill.

Other districts had gone through a planning and organizational

process anticipating the community college reporting to an intermediate unit as proposed by the Department of Public Instruction in 1963. While the majority of the community college districts were formed and had obtained State Board of Public Instruction approval within the first year, it was not until the end of fiscal year 1971, that all secondary school districts in each of the 99 counties were an integral part of one of the 15 operating community college districts. Action on the part of the 16 existing junior colleges moved only slightly faster, with the last one merging with an operating district July 1, 1970.

The act provided the necessary legal framework for two or more counties to plan the merger of the county school systems to develop either an area vocational school or an area community college. The county boards of education, designated as the planning boards, were responsible for the development of the merged area proposal.

It was specified in the act that each proposal include a description of the geographic limits, projections of population data, nine through 12 grade secondary school enrollment, educational offerings and needs, assessed valuation, proposed curricula, an outline of five to nine director districts of approximately equal population, and most importantly, an evaluation of local interest. Each elected director was to represent a district on the local board of directors. It was also necessary that plans to integrate existing vocational schools, or public junior colleges, be agreed upon and clearly stated in the proposal.

Upon approval by the State Board of Public Instruction, the school

superintendent of the county in which the physical plant facilities and administrative center of the area vocational school or area community college were to be located was responsible for conducting a special election to choose the initial governing board of the regional community college district. The newly elected board was required to meet within 15 days after the election, and formally organize. Once organized, the board became a body politic as a school corporation for the purpose of exercising the powers granted by the General Assembly.

By July, 1966, one year after the effective date of the community college act, all counties in the state had participated in some form of study or planning for the development of an area vocational school or area community college. As a result of these planning studies, 13 area districts were formed. Of these 13, four were approved as area vocational schools and nine as area community colleges. These 13 area districts encompass 83 of Iowa's 99 counties.

During January, 1967, the last of the 15 regional community college districts was formed. All had obtained State Board of Public Instruction approval and had employed a chief executive officer by July 1, 1967. Howe (29) provides a progress report in Table 6. All counties were in a community college district by January, 1967, except Cherokee, Crawford, Carroll, Audubon, Delaware, Dubuque, and Jackson. Figure 2 shows the location of these counties as presented by Bechtel (7).

By July, 1966, all but three of Iowa's junior colleges, under the jurisdiction of a local school district board of education, had transferred or were in the process of being transferred to the community

Table 6. Status of the community college districts July 1, 1967 (7)

Area	Administrative center	Original superintendent	High school enrollments (grades 9-12)	Population[a]	Assessed valuation[b] (millions)	State board approved
I	Calmar	Max R. Clark	8,900[c]	116,000	$233	May 2, 1966
II	Mason City	Wm. F. Berner	11,000	175,000	340	May 3, 1966
III	Estherville	H. Edwin Cramer	7,000	86,000	220	January 12, 1967
IV	Sheldon	R. O. Borreson	5,500	70,000	180	April 27, 1966
V	Fort Dodge	Edwin Barbour	13,500	184,300	466	April 25, 1966
VI	Marshalltown	Robert Horsefall	7,200	96,400	232	July 7, 1966
VII	Waterloo	W. Travis Martin	15,000	190,000	375	May 25, 1966
VIII	Dubuque		(9,400)	(119,000)	(221)	
IX	Davenport	Robert Johnson	14,000	208,000	534	March 18, 1966
X	Cedar Rapids	Selby A. Ballantyne	21,400	307,000	623	May 18, 1966
XI	Des Moines	Paul Lowery	31,000	484,000	836	April 23, 1966
XII	Sioux City	Robert Kiser	12,900	156,400	301	December 8, 1966
XIII	Council Bluffs	Robert Looft	14,000	182,000	390	May 26, 1966
XIV	Creston	Wm. R. Pierce, Jr.	5,600	83,000	170	April 24, 1966
XV	Ottumwa	Mel Everingham	9,900	159,000	230	April 22, 1966
XVI	Burlington	Robert Burkhimer	7,900	111,500	181	July 26, 1966

[a] 1960 census.

[b] Based on 1965 data.

[c] Numbers rounded.

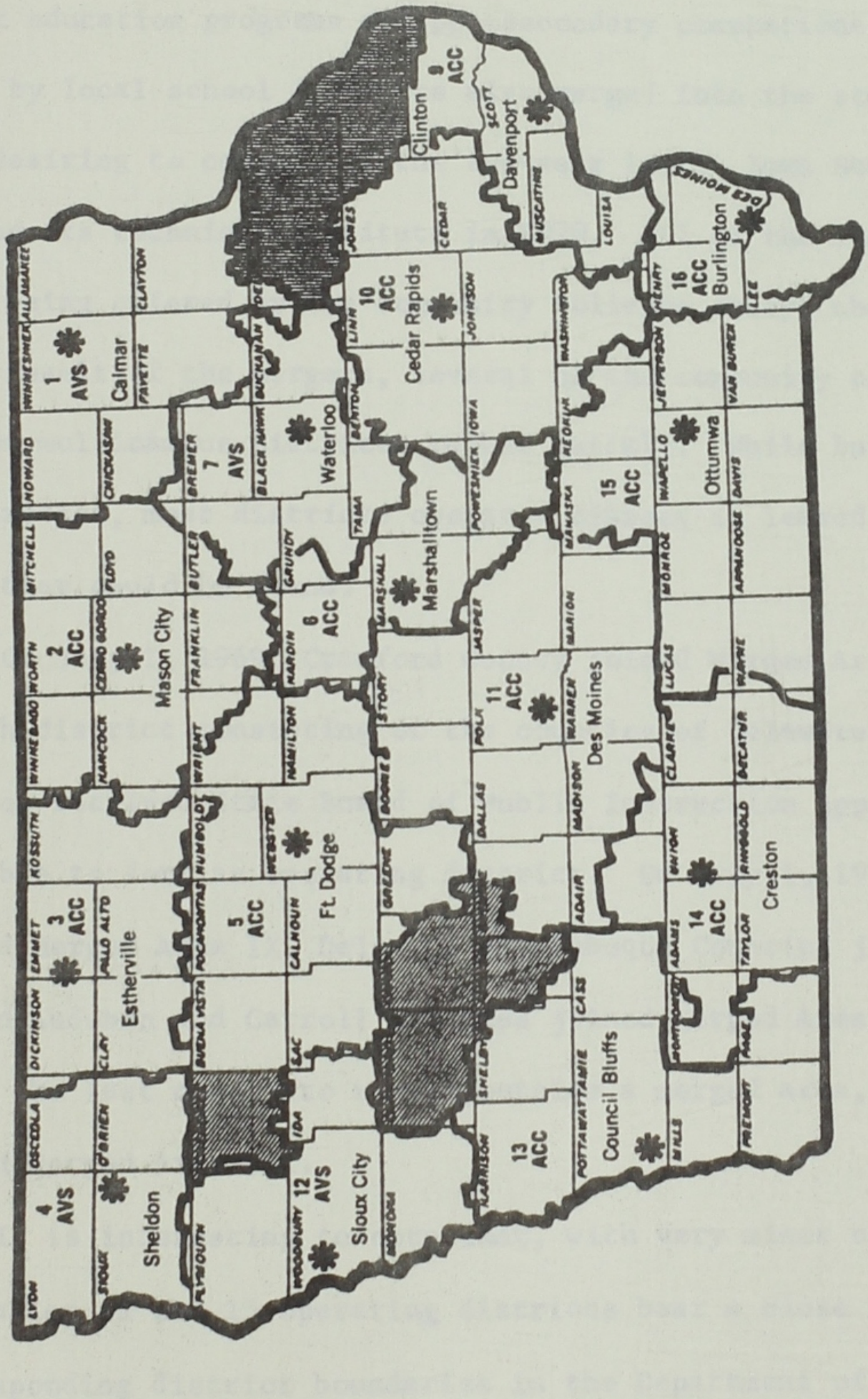


Figure 2. Area community colleges (ACC) and area vocational schools (AVS) showing administrative centers

college district administration. On July 1, 1970, the last of the junior colleges remaining outside of a community college district, Emmetsburg Junior College, merged with Iowa Lakes Community College District. Many adult education programs and postsecondary occupational programs operated by local school districts also merged into the statewide system. Not desiring to compete at the two-year level, Iowa State University closed its technical institute in 1970. All of the institute programs were being offered by the community colleges except chemical technology. As a result of the mergers, several of the community college districts became multicampus districts rather quickly. While buildings were being constructed, most districts operated classes in leased facilities wherever they could be found.

On July 1, 1969, Crawford County joined Merged Area XII. A sixteenth district consisting of the counties of Delaware, Dubuque, and Jackson received State Board of Public Instruction approval, but were not able to form an operating district. On July 1, 1970, Jackson County joined Merged Area IX, Delaware and Dubuque Counties joined Merged Area I, and Audubon and Carroll Counties joined Merged Area XI. By July 1, 1971, the last county to remain outside a merged area, Cherokee County, joined Merged Area XII.

It is interesting to note that, with very minor exceptions, the boundaries of the 15 operating districts bear a close resemblance to the corresponding district boundaries in the Department of Public Instruction's recommendations to the Fifty-ninth General Assembly in 1961.

While the remaining school districts and the last seven counties

were in the process of joining existing community college districts, store fronts were rented, enrollments were on the increase, buildings were being constructed, and a major effort was underway to determine the educational needs of industry and the people within each district. Figure 3 identifies boundaries of the districts as of July 1, 1971, after Cherokee, the last county, was split between Area IV and Area XII. See Appendix B for important factual data about each district as of July 1, 1971, DPI (38).

With all local school districts incorporated within a college district, the number was established at 15, eleven community college districts and four vocational college districts. District IV (Sheldon) and District XII (Sioux City) requested and received approval of the State Board of Public Instruction (44) in the fall of 1973 for a change in status from a vocational school to a community college. The two remaining districts having the status of vocational education districts were District I and District VII. There were no additional changes in boundaries or status through fiscal 1980.

Students and Student Services

While there might have been some floundering and indecision on the part of some legislators as to the role and function, as well as the number of community colleges the state should have, there was no hesitation on the part of students. Eager students from age 18 to 80 appeared to be standing by waiting for the doors to open. Headcount enrollment made a phenomenal jump from 9,110 in the junior colleges during the fall

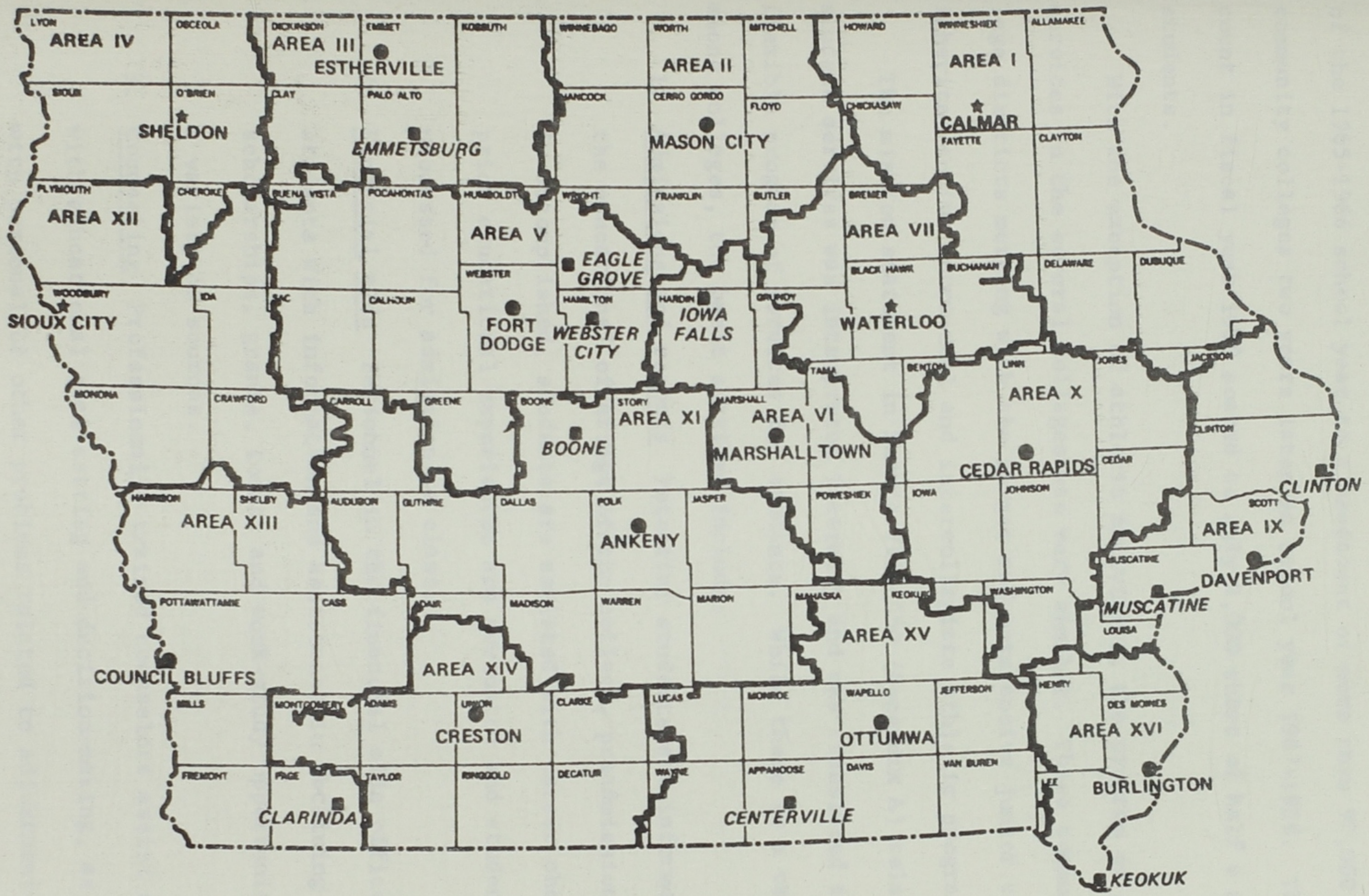


Figure 3. Status of community college districts as of July 1, 1971 (38)

of the 1965-1966 school year to a headcount of more than 52,000 in the community colleges two years later in school year 1967-1968. The headcount in fiscal year 1980 soared to only 2,000 short of half a million students.

With the exception of athletic activities, the program of student services in the several colleges was very similar. Those community college districts merging with the larger and more active junior colleges inherited active intramural and intercollegiate athletic programs.

The mission statement in Senate File 550 (Appendix A) relating to student services was interpreted literally and was translated into a flexible program of services for students. While there is a variation among colleges, the basic services include:

1. Admissions and records Potential students are informed about the educational offerings of the college, preadmissions testing is accomplished, students are assisted with career choices, prior educational experiences are evaluated and students are processed for admission to class.
2. Financial aids Personnel in the financial aids office provide students with information and assistance in obtaining available scholarships, grants, loans, and work-study opportunities from a variety of sources.
3. Counseling Professionally trained counselors assist students with educational goal setting and decision-making, as well as with personal or other problems related to adjustment to college life. Each college had a full-time counselor on loan from the

Vocational Rehabilitation Service to assist students with various handicaps.

4. Student activities In an effort to enhance the involvement and welfare of the student, assistance is given to the student government association, program related clubs, intramural and intercollegiate athletics, trips off campus, student newspaper, and the scheduling of various personalities and programs on campus.

5. Health services Nursing personnel provide health and related services on campus with quick access to doctors and hospitals.

6. Placement and follow-up Professional personnel assist students in obtaining employment while in school and upon graduation. Efforts are also made to determine the success of the graduate in employment at intervals after graduation.

Of the many studies made concerning enrollment projections, the one most often quoted was made by the Iowa Cooperative Study of Post-High School Education (31) in 1967. Table 7 relates the projections through 1980 while Table 8 shows actual enrollments as compiled from annual reports of the Department of Public Instruction (38). It is obvious that the projection of the sharp increase in the number of arts and science students was inaccurate since the increase over the 12-year period was only approximately 1000. The vocational and adult enrollments grew faster than predicted. Comments from a number of persons interviewed indicated that the private colleges had a great fear that students desiring a baccalaureate degree would attend the community colleges during

Table 7. Full-time equivalent enrollment projections made in 1967 for the community colleges by curriculum classification (31)

Year	Arts and sciences	Vocational-technical	Adult	Total
1968	10,305	7,654	3,362	21,321
1970	13,300	11,475	6,600	31,375
1975	18,905	15,554	9,662	44,121
1980	24,600	22,000	14,525	61,125

Table 8. Actual full-time equivalent enrollment by curriculum classification (38)

Year	Arts and sciences	Vocational-technical	Adult	Total
1968	9,572	5,478	2,894	17,944
1970	10,071	8,209	5,888	24,168
1975	9,369	18,323	10,701	38,393
1980	10,491	23,979	13,580	48,050

the first two years, causing a severe drop in enrollment in the private colleges. It is within the realm of possibility that, as the community colleges continue to mature, obtain student housing, and achieve a greater degree of credibility, the enrollment in the arts and sciences will increase. This study found that many still consider the community colleges to be vocational schools and not suitable for students desiring to enter the professions requiring a four-year degree. For thousands of others, it is the only entrée into higher education in any form.

A significant and little noticed fact was the involvement of the community colleges with students who had not completed high school. Table 9 gives the number of adults who were issued High School Equivalency Diplomas from fiscal year 1966 through fiscal year 1980. The total number of adults earning a high school diploma during the 15-year period was 48,689.

Table 9. High school equivalency diplomas awarded 1966-1980

Year	Diplomas	Year	Diplomas	Year	Diplomas
1966	586	1971	2,975	1976	4,102
1967	1,387	1972	3,292	1977	3,758
1968	2,372	1973	3,449	1978	4,155
1969	2,759	1974	3,120	1979	5,172
1970	2,925	1975	3,185	1980	5,452

Despite the fact that many of the colleges occupied rental facilities during a greater part of the first three years, enrollment growth was brisk and continued at a fast pace until fiscal years 1973 and 1974, as shown by annual reports of the Department of Public Instruction (38). Table 10 depicts the growth in career education from 2,490 full-time equivalent students in fiscal 1967, to 23,979 in fiscal year 1980. The numbers would have been greater had the supplemental or inservice training for employed workers not been reported through adult education.

The pattern of enrollment in the college parallel classification is illustrated in Table 11. With the exception of college district IX, those districts that inherited junior colleges with large enrollments tended to lose enrollment between fiscal year 1967 and fiscal 1980. Districts X, XI, and XIII began college parallel classes in large population centers and accounted for the major portion of enrollment growth. Enrollment in college parallel courses peaked in fiscal year 1971, took a dip in fiscal 1973 and 1974, but regained most of the loss by 1980 through the initiation of a number of associate degree level paraprofessional programs.

Table 12 portrays a constant and continuous growth in the number of adult part-time students. Courses and programs attracting the greatest number of students were adult basic education, high school completion and supplemental or inservice vocational education for employed workers. As noted earlier, 48,689 adults received a high school diploma between 1967 and 1980. The drop in enrollment during fiscal year 1972 was accounted for by a change in the formula for counting full-time

Table 10. Full-time equivalent enrollment (FTEE) in career education by community college district during selected years between 1967 and 1980 (38)

College district	1967	1968	1969	1970	1971	1972	1973	1974	1975	1980
I	10	193	325	470	561	1039	1051	1093	1098	1480
II	207	301	398	334	371	499	569	715	760	876
III	--	108	171	203	299	744	854	877	944	1465
IV	163	209	324	355	499	757	736	715	706	676
V	216	345	394	448	515	812	992	1007	1055	1343
VI	253	321	361	285	313	392	479	520	511	899
VII	416	712	837	870	1067	1620	1606	1962	1983	2350
IX	298	494	653	620	648	1144	1404	1256	1321	1846
X	276	436	938	929	1286	1824	2251	2509	2250	2667
XI	41	592	1257	1588	1779	2908	2869	2985	3065	3717
XII	95	304	469	482	594	783	1063	1062	1121	1710
XIII	94	218	343	498	561	960	959	1033	1128	1713
XIV	25	138	105	143	161	254	268	271	340	427
XV	225	840	976	712	1062	1109	965	1063	1286	1815
XVI	171	268	304	272	272	466	457	650	756	996
Totals	2490	5479	7855	8209	9988	15,311	16,523	17,718	18,323	23,979

Table 11. Full-time equivalent enrollment (FTEE) in the arts and science curriculum by community college district for selected fiscal years between 1967 and 1980 (38)

College district	1967	1968	1969	1970	1971	1972	1973	1974	1975	1980
I	--	--	--	--	--	--	--	--	--	--
II	1454	1452	1289	1334	1240	1099	1008	1029	971	1073
III	--	585	689	696	735	599	533	792	879	579
IV	--	--	--	--	--	--	--	--	--	--
V	1324	1308	1277	1432	1509	1466	1232	1122	1083	980
VI	1782	1770	1743	1768	1725	1590	1316	1141	1135	1077
VII	--	--	--	--	--	--	--	--	--	--
IX	1078	1045	902	873	924	872	771	749	778	1218
X	--	380	807	1040	1382	1244	1190	1150	1199	1378
XI	282	306	389	467	886	1053	1273	1353	1508	1885
XII	--	--	--	--	--	--	--	--	--	--
XIII	485	616	632	688	629	616	644	608	619	916
XIV	274	361	340	297	308	274	233	218	213	232
XV	--	682	645	531	538	506	421	324	290	413
XVI	1059	1066	1072	945	944	826	849	770	695	741
Totals	7738	9571	9785	10,071	10,820	10,145	9470	9256	9369	10,491

Table 12. Full-time equivalent enrollment (FTEE) in adult education by community college district during selected fiscal years between 1967 and 1980 (38)

College district	1967	1968	1969	1970	1971	1972	1973	1974	1975	1980
I	9	21	110	180	236	345	450	578	910	972
II	39	42	83	204	285	273	319	564	811	1025
III	--	6	90	154	242	244	299	336	470	491
IV	4	28	55	87	148	120	126	144	186	360
V	23	36	186	357	427	408	495	530	647	742
VI	53	51	92	263	373	333	415	513	637	422
VII	235	393	297	502	568	493	565	646	665	981
IX	63	82	144	272	296	284	441	403	552	925
X	215	1082	978	1306	1414	1282	1179	1089	1819	2504
XI	79	468	884	912	1290	1287	1227	1359	1380	1740
XII	--	172	318	645	660	713	732	718	766	755
XIII	3	138	153	252	334	397	487	593	651	817
XIV	12	49	57	120	207	154	219	321	360	289
XV	74	190	181	244	376	380	935	773	457	1082
XVI	99	137	175	390	520	381	359	278	385	473
Totals	908	2895	3803	5888	7376	7094	8248	8845	10,699	13,580

equivalent adult students. Table 13 records continuous growth in total enrollment with only a slight slowdown in fiscal year 1974. Table 14 presents full-time equivalent enrollment by the three major curriculum classifications between 1967 and 1980. Table 15 gives analysis of head-count enrollment by college district in all major program areas for fiscal year 1980. The 254,672 in career education in the adult category represent the large number of employed adults seeking to upgrade themselves in their current job.

Data from the Iowa College Aid Commission (30) permit a comparison of undergraduate enrollment growth in the state. Table 16 shows the percentage of growth in the Iowa universities and the public community colleges to be very similar between 1975 and 1980. The increase in enrollment in the public institutions in 1980 over 1979 was very likely due to the high unemployment existing in the state. It should be noted that enrollment in adult education in the community colleges was not reported in this comparison.

With their broad offerings and their "open door" policy, the community colleges were attracting a student body with diverse backgrounds, needs, and aspirations. In a study of student characteristics in 1970 through 1974, Page (62) found the students in 1974 more likely to be older, married, more affluent, Caucasian, female, and the number employed on the increase. The information in Table 17 was provided from a statewide survey of full-time students in 1975 by Page, using the same questionnaire as used in his earlier study. Comparable data were not available for years more recent than 1975.

Table 13. Total full-time equivalent enrollment (FTEE) by community college district during selected fiscal years between 1967 and 1980 (38)

College district	1967	1968	1969	1970	1971	1972	1973	1974	1975	1980
I	19	214	435	650	797	1384	1501	1671	2008	2452
II	1700	1795	1770	1872	1896	1871	1896	2308	2541	2974
III	--	699	950	1053	1276	1587	1686	2005	2293	2535
IV	167	237	379	442	647	877	862	859	892	1036
V	1563	1689	1857	2237	2451	2686	2719	2659	2785	3065
VI	2088	2142	2196	2316	2411	2315	2210	2174	2283	2398
VII	651	1105	1134	1372	1635	2113	2171	2608	2648	3331
IX	1439	1621	1699	1765	1868	2300	2616	2408	2651	3989
X	491	1898	2723	3275	4082	4350	4620	4748	5270	6549
XI	402	1266	2530	2967	3955	5248	5369	5697	5953	7342
XII	95	476	787	1127	1254	1496	1795	1780	1887	2465
XIII	582	972	1128	1438	1524	1973	2090	2234	2398	3446
XIV	311	548	502	560	676	682	720	810	913	948
XV	299	1712	1802	1487	1976	1995	2321	2160	2033	3310
XVI	1329	1471	1551	1607	1736	1673	1665	1698	1836	2210
Totals	11,136	17,945	21,443	24,168	28,184	32,550	34,241	35,819	38,391	48,050

Table 14. Distribution of full-time equivalent enrollments (FTEE) by curriculum classification in all community college districts during selected fiscal years, 1967 through 1980 (38)

Program area	1967	1968	1969	1970	1971	1972	1973	1974	1975	1980
Adult education	908	2895	3803	5888	7376	7094	8248	8845	10,699	13,580
Career education	2490	5479	7855	8209	9988	15,311	16,523	17,718	18,323	23,979
College parallel	7738	9571	9785	10,071	10,820	10,145	9470	9256	9369	10,491
Totals	11,136	17,945	21,443	24,168	28,184	32,550	34,241	35,819	38,391	48,050

Table 15. Headcount enrollment by college district and program area for fiscal 1980 (38)

Merged area	Career education			College parallel			Adult education			
	Full-time	Part-time	Total	Full-time	Part-time	Total	Career	General adult	Total adult	Grand total
I	1,486	459	1,945	--	--	--	21,363	10,210	31,573	33,518
II	806	69	875	1,476	510	1,986	18,738	12,450	31,188	34,049
III	838	1,352	2,190	503	687	1,190	20,929	5,005	25,934	29,314
IV	762	86	848	--	30	30	10,516	2,465	12,981	13,859
V	1,029	797	1,826	978	797	1,775	13,362	21,219	34,581	38,182
VI	746	2,936	3,682	1,168	1,103	2,271	11,224	10,749	21,973	27,926
VII	2,664	98	2,746	--	--	--	21,638	12,407	34,045	36,807
IX	2,007	3,017	5,024	1,158	2,002	3,160	17,502	11,237	28,739	36,923
X	3,326	762	4,088	1,563	3,255	4,818	15,741	19,871	35,612	44,518
XI	3,606	4,739	8,345	2,141	4,452	6,593	25,964	21,198	47,162	62,100
XII	2,011	1,579	3,564	--	171	171	31,122	5,338	36,631	40,392
XIII	2,618	803	3,362	888	1,418	2,306	16,151	21,178	37,329	43,056
XIV	421	468	859	299	207	506	9,747	3,174	12,921	14,316
XV	1,614	1,139	2,753	481	1,339	1,820	13,192	7,355	20,547	26,274
XVI	1,136	569	1,705	845	1,340	2,185	7,483	5,155	12,937	16,827
Totals	25,070	18,873	43,812	11,500	17,311	28,811	254,672	168,808	425,474	498,061

Table 16. Postsecondary undergraduate full-time equivalent enrollment in Iowa by type of institution from fall of 1975 to 1980 (30)

	1975	1976	1977	1978	1979	1980	% of change 1975-80
Regents	40,748	41,231	43,096	43,645	44,323	47,247	+15.94
Independent 4-year	29,571	29,172	30,127	30,127	32,808	33,338	+12.73
Independent 2-year	3,040	3,060	3,334	3,298	909[a]	798	-73.75
Area schools	30,784[b]	27,617	30,388	30,587	31,261	35,477	+15.24
Bible & theological schools	921	1,045	985	852	938	812	-11.83
Business schools	1,562	1,181[c]	1,926	1,622	1,651	1,813	+16.06
Nursing schools	1,632	1,577	1,525	1,485	1,337	1,243	-23.83
Grand total	108,258	104,883	111,381	112,226	113,277	120,728	+11.51

[a] Ottumwa Heights College and Palmer Junior College were merged with the Area.

[b] Does not include enrollment in adult education.

[c] American Institute of Commerce and Sawyer School enrollments not reported.

Table 17. Iowa student characteristics as of fall, 1975 (62)

	Total Number	Total Percentage
1. Educational background		
a. Grade school or less	116	0.5
b. Some high school	519	2.2
c. Equivalency certificate	1,262	5.4
d. High school graduate	15,638	67.2
e. Some higher education	5,750	24.7
2. Age		
a. 17 or less	863	3.7
b. 18	6,248	26.8
c. 19	4,127	17.7
d. 20-22	3,824	16.4
e. 23-25	2,424	10.4
f. 26-35	3,876	16.6
g. 36-45	1,438	6.2
h. 46-65	465	2.0
i. Over 65	33	0.1
3. Sex		
a. Male	13,486	57.9
b. Female	9,793	42.1
4. Minority or ethnic group		
a. Black	535	2.3
b. Indian	132	0.6
c. Caucasian	22,117	95.1
d. Oriental	96	0.4
e. Spanish surname	119	0.5
f. Other	249	1.1
5. Marital status		
a. Single	16,216	69.6
b. Married	7,076	30.4
6. Best source of information		
a. Parent(s)	1,673	7.2
b. Employer	873	3.7
c. Other student	7,786	33.3
d. High school teacher	896	3.8
e. High school counselor	4,827	20.6
f. Admissions counselor	4,675	20.0
g. Vocational rehabilitation	654	2.8

Table 17 (Continued)

	Total Number	Total Percentage
6. Best source of information (Continued)		
h. ISES or welfare	633	2.7
i. Public media	1,895	8.0
7. Most important reason for selecting this school		
a. Program	6,384	27.5
b. Close to home	5,696	24.5
c. Cost	2,288	9.9
d. Individual attention	2,006	8.6
e. Can work also	2,108	9.1
8. Dependence on parents for support		
a. Dependent	10,427	45.2
b. Independent	12,631	54.8
9. Annual family income		
a. Less than $3,000	2,013	12.5
b. $3,000 - $5,999	2,442	15.2
c. $6,000 - $8,999	2,419	15.1
d. $9,000 - $11,999	3.053	19.0
e. $12,000 - $14,999	2,601	16.2
f. $15,000 - $17,999	1,452	9.0
g. $18,000 or more	2,088	13.0
10. Distance to and from school each day		
a. Less than 10 miles	12,575	54.1
b. 11-25 miles	6,185	26.6
c. 26-50 miles	3,236	13.9
d. 51-100 miles	1,072	4.6
e. More than 100 miles	179	0.8
11. Where students live		
a. Home with parents	7,392	31.9
b. On my own	9,152	39.5
c. Private housing	4,726	20.4
d. Dormitory - institutional	1,698	7.3
e. Dormitory - noninstitutional	228	1.0
12. Employment plans while enrolled		
a. No work	6,311	27.2
b. Less than 15 hours	4,148	17.9

Table 17 (Continued)

	Total Number	Total Percentage
12. Employment plans while enrolled (Continued)		
c. 16-25 hours	5,686	24.5
d. 26-39 hours	1,905	8.2
e. 40 hours or more	5,228	22.1
13. Veteran status of students		
a. Vet on GI Bill	4,508	19.4
b. Vet not on GI Bill	514	2.2
c. Nonveteran	18,245	78.4
14. Transfer plans		
a. University of Northern Iowa	686	3.0
b. Iowa State University	1,431	6.2
c. University of Iowa	1,218	5.2
d. Private college in Iowa	756	3.3
15. Employment history		
a. Never	1,951	8.4
b. 1-2 summers	4,181	18.0
c. Year or less	2,070	8.9
d. 1-3 years	4,165	17.9
e. 3 or more years	8,223	35.4
f. Part-time	2,617	11.3
16. Last year in high school		
a. 1900-1949	890	3.9
b. 1950-1959	1,660	7.2
c. 1960-1965	2,160	9.4
d. 1966-1970	3,623	15.7
e. 1971	920	4.0
f. 1972	1,064	4.6
g. 1973	1,649	7.1
h. 1974	4,210	18.2
i. 1975	6,922	30.0

As the community colleges in Iowa began to mature, an increasing number of students transferred from four-year colleges and universities. Newsham (61) reported 741 transfers in 1970, in 1971 an increase to 980, and 1,845 in 1973. The reasons given in order of importance for this reverse transfer were: (1) variety of curricular offering, (2) low cost, (3) closeness to home, and (4) open admissions policy.

In an effort to respond to student concerns regarding the lack of a "collegiate" atmosphere, all of the colleges developed extensive intramural activities, but this was not adequate to dispel the concerns. Since many of the existing junior colleges that became a part of a community college district continued their participation in an intercollegiate program of athletics, it was only natural that all college districts would soon become involved. Discussions with the college superintendents revealed that students in the early years referred to the colleges as "glorified high schools," and as "high schools with ash trays." Table 18 portrays the participation of 15 college campuses from 11 college districts by athletic activity during fiscal year 1980. Increased participation occurred in baseball, softball, basketball and golf, but the number of colleges participating in football decreased from six to four during the 15-year period.

Personal interviews with the district superintendents revealed great diversity of opinion concerning the tuition charge to community college students. Approximately seventy-five percent of the superintendents felt that many students in the lower socioeconomic group were being denied an opportunity to obtain a marketable skill due to the barrier of costs.

Table 18. Participation of the community colleges in intercollegiate athletics during fiscal year 1980 (30)

College	Base-ball	Basket-ball	Women's basket-ball	Foot-ball	Golf	Women's soft-ball	Tennis	Women's volley-ball
II North Iowa	X	X	X	X	X	X		X
III Iowa Lakes	X	X	X	X	X	X		X
V Iowa Central	X	X	X	X	X	X		
VI Ellsworth	X	X	X	X	X	X	X	X
Marshalltown	X	X	X		X	X	X	
IX Clinton	X	X	X			X		
Muscatine	X	X	X		X	X		
X Kirkwood	X	X	X		X	X		
XI Boone	X	X	X			X		
XIII Council Bluffs	X	X	X			X		
Clarinda	X	X				X	X	
XIV Southwestern	X	X	X		X	X	X	
XV Indian Hills	X	X	X		X	X		
XVI Burlington	X	X	X		X			
Keokuk	X				X			

However, each one pointed out that additional funding was not likely to be available from property tax, the federal government, or general state aid. Tuition was the only source of revenue over which the colleges had decision-making power. The tuition by college district for fiscal years 1967, 1970, 1975, and 1980 is shown in Table 19. The average tuition in Iowa for fiscal 1980 was $504, compared to the national average for two-year public colleges of $389.

Through interviews with the superintendents of the community colleges, this study found that between fifty percent and seventy percent of the students worked on a full- or part-time basis while attending college. Information contained in Table 20 from the Iowa College Aid Commission (30) relates the amount of state and federal assistance received by the students in each college district. When the number of students receiving this aid was added to the number receiving assistance from Social Security, Vocational Rehabilitation, the Veterans Administration, and all the other participating agencies, the total number receiving assistance was fifty-eight percent of the full-time students enrolled during 1980.

Instructional Programs

The community colleges were given great latitude in the range of students to be served and in the diversity of curricula to be offered. This is evident in the educational offerings specified by the legislature (41) in defining the educational mission of the colleges:

1. The first two years of college work including preprofessional education.

Table 19. Tuition charges for residents of Iowa for a thirty-six-week school year of three quarters or two semesters (30)

College district	Fiscal year 1967	Fiscal year 1970	Fiscal year 1975	Fiscal year 1980
I	$200.00	$225.00	$405.00	$450.00
II	200.00	300.00	400.00	480.00
III	200.00	300.00	400.00	450.00
IV	180.00	180.00	375.00	480.00
V	200.00	350.00	400.00	440.00
VI	200.00	210.00	400.00	460.00
VII	200.00	240.00	420.00	495.00
IX	200.00	300.00	405.00	450.00
X	200.00	345.00	435.00	480.00
XI	200.00	360.00	405.00	495.00
XII	200.00	203.00	375.00	450.00
XIII	200.00	400.00	420.00	555.00
XIV	200.00	450.00	400.00	440.00
XV	200.00	300.00	400.00	480.00
XVI	200.00	300.00	432.00	507.00

Table 20. Student financial aid received by college district and source during fiscal year 1980 (30)

College district	State programs			Federal programs		
	State scholarships	Iowa voc.-tech. grants	Guaranteed student loans	Supplemental educational opportunity	National direct student loans	College work-study
I	$ --	$ 74,310	$ 339,484	$ 30,115	$ 21,618	$ 15,642
II	5,180	38,236	407,413	57,540	11,635	48,715
III	2,260	42,836	394,496	11,993	9,082	62,866
IV	--	33,652	248,747	6,844	--	14,000
V	2,940	40,616	462,556	32,000	3,359	49,000
VI	4,144	35,064	376,967	92,174	5,000	130,586
VII	3,000	75,076	794,994	38,643	26,064	84,833
IX	1,754	34,486	437,328	93,271	--	124,981
X	3,566	105,932	839,618	217,704	250,544	210,000
XI	4,816	120,174	1,131,707	51,186	57,736	66,687
XII	840	52,956	503,762	17,147	13,961	41,261
XIII	3,792	53,740	667,637	4,461	--	41,805
XIV	--	32,726	187,362	5,198	2,481	18,288
XV	1,416	67,552	379,840	21,746	26,664	60,657
XVI	2,120	10,520	156,481	10,000	--	18,000
Total	$35,828	$817,876	$7,328,392	$690,022	428,144	$987,321

2. Vocational and technical training.

3. Programs for in-service training and retraining of workers.

4. Programs for all students of high school age who may best serve themselves by enrolling for vocational and technical training while also enrolled in a local high school, public or private.

5. Vocational education for persons who have academic, socio-economic or other handicaps which prevent succeeding in regular vocational education programs.

6. Training, retraining, and all necessary preparation for productive employment of all citizens.

7. Vocational and technical training for persons who are not enrolled in a high school and who have not completed high school.

8. Programs for high school completion for students of post-high school age.

9. Community service.

For reporting purposes, the educational programs were divided into three broad categories: college parallel, career education, and adult education.

College parallel

In this division, college credit courses that parallel the freshman and sophomore courses offered at four-year colleges and universities, and certain related specialized and general education courses, are offered for students in vocational and other programs. Also offered, are specialized two-year programs of study at the paraprofessional level which prepare an individual for initial employment, but later offer an opportunity for application of credits earned toward a baccalaureate degree as the individual person advances professionally. Examples of the

latter type of program are community service aide, library science, marketing, community corrections, and law enforcement. In most cases, courses leading to the associate in arts, the associate in science, and the associate in general studies degrees were taught in this division.

Career education

Courses and programs offered in this category vary in length from one term to two years and include preparation for a variety of careers from those that require mastery of a narrow specialized skill, to those more technical careers requiring extensive application of math and science principles. Vocational programs for high school students, inservice training for employed workers, retraining to provide entry into new or different jobs, and training for new and expanding industries are a part of career education. The associate in applied science and associate in applied arts are normally earned in some phase of career education. Diplomas are normally awarded to those taking less rigorous programs of more than one term in length, and certificates are awarded to those taking programs or courses of less than one term in length.

Adult education

During fiscal 1979, enrollments were reported in 16 classifications of adult education. The majority of the adult education programs were intended for the part-time student and were offered on and off campus. The most commonly offered programs and courses were adult basic education, high school diploma credit, high school equivalency, general and continuing education, career inservice, apprenticeship, agriculture

production, and short-term preparatory. Except for those completing the requirements for a high school diploma, the awards given upon completion were certificates. It was noteworthy that 48,689 individuals earned their high school diploma between 1966-1980. Adult education was the vehicle through which college districts IV and XII were given approval by the State Board of Public Instruction (44) to offer courses for college credit on the freshman and sophomore level. At the end of fiscal year 1980, only districts I and VII did not have appproval to offer courses for college credit.

From the narrow curriculum in 1965, the Iowa Community Colleges continued to diversify the educational offerings and to expand the concept of the open door to include a more heterogeneous student body. The elderly, incarcerated persons, mentally retarded adults, the handicapped, the underprepared, persons who had not completed grade school, and many others were being served. To serve these diverse groups, the colleges increased their emphasis upon personal development and individualization of the educational process. Programs which included the use of learning objectives, modular courses, multimode learning arrangements, peer teaching, audiotutorial learning programs, programmed instruction, variable credit and computer-managed instruction were initiated.

Through cooperative efforts with other governmental agencies and using a variety of funding sources, specialized educational services and programs were provided to various target groups. The handicapped and disadvantaged received special assistance and programs through "special needs" funds earmarked for that purpose. The underemployed, unemployed,

and minorities were provided access to skill training through the cooperation of several agencies and funds provided by the Manpower Development and Training Act and later the Comprehensive Employment and Training Act. English as a second language classes were provided for the adult refugees being admitted to the state. A three-year agricultural production program, known as the "veterans farm program," was developed in cooperation with the Veteran's Administration, the Department of Public Instruction, and Iowa State University. Iowa State provided special inservice education for the instructors. In 1975, the peak year of enrollment in the farm program, 3,000 veterans enrolled in 102 centers throughout the 15 community college districts.

When planning or making decisions concerning new program development or expansion of existing ones, data concerning student interests and employer needs were secured from the statewide Career Education Needs Information System, Job Service of Iowa, the Department of Social Services, and from surveys within the local community college district. Approval of full-time programs was made by the State Board of Public Instruction based upon data presented by the college district, state needs on a priority basis, and the availability of funding.

The growth in the number of additional programs was clear evidence that the comprehensive community colleges were long overdue. The number of postsecondary vocational preparatory programs increased from seven in 1964 to 145 in 1980. As recorded by the Department of Public Instruction (39), 12 were operated in 1965, 25 in 1966, and 84 in 1969. The 145 vocational-technical programs offered in the career

education category during 1980 were grouped into seven major occupational areas. The major occupational areas, with the number of programs in each, were as follows: agriculture - 15, marketing - 17, health - 23, home economics - 7, office - 16, technical - 19, trade and industrial - 48. While all 15 community colleges had programs to train general office clerks, auto mechanics, and secretaries, only one college had meat cutting, piano technician, and sanitation technology. Thirty-seven paraprofessional programs with a career objective, as well as the transfer option, were offered under the college parallel classification in fiscal year 1980.

Several persons interviewed agreed that few programs had been developed to produce engineering technicians with a facility to make application of higher levels of math and science principles. The reasons advanced were high cost of equipment needed in the instructional laboratories, and that many more skilled workers could be trained in high demand occupations at much less cost.

Records in the Department of Public Instruction give little information about the types of adult education programs and the enrollments prior to 1965-1966. Interviews with Glen Holmes, retired professor of adult education at Iowa State University, and Dr. Louis Newsham, Director of Junior Colleges and continuing education in the Department of Public Instruction from 1962 to 1964, revealed there was considerable activity in adult education across the state by several agencies, but with little central coordination. Apparently a large number of local school districts conducted special programs for veterans and for adults

in general. Many of the noncredit courses for adults in the junior colleges prior to 1965 appear to have been in cultural enrichment and leisure time activities. No attempt was made to ascertain the extent of courses provided for adults by the three state universities.

Many persons interviewed place C. J. Johnson, Director of Civil Defense in the DPI, with declining duties in the early 1960s. Apparently he was in the right place at the right time. He not only gave direction to the activities in adult education being conducted across the state at the time, but is also credited with being primarily responsible for the prominent place given adult education in the community colleges. He is given credit for initiating a bill passed by the General Assembly in 1965, authorizing the state to grant high school equivalency certificates to those adults demonstrating certain levels of proficiency on standardized tests in the basic subject areas.

It was related that only the local school districts of Clinton, Des Moines, and Davenport operated their adult programs at least partially independent of their district community college in 1980. These three school districts had a combined headcount enrollment of approximately 40,000 in 1980.

Instructional support The number of library books owned and periodicals subscribed to by the colleges in support of the instructional program increased substantially between 1970 and 1980. Records of the DPI (38) show in Table 21, the total number of books owned in 1980 was 566,881 and the total number of subscriptions to periodicals was 6,526. Many colleges also maintained quantities of tapes, film strips, and

Table 21. Books and periodicals in the libraries in each community college district at the end of fiscal years 1970, 1975, and 1980 (38)

College district	Fiscal year 1970		Fiscal year 1975		Fiscal year 1980	
	Books	Periodicals	Books	Periodicals	Books	Periodicals
I	4,819	96	12,686	301	19,688	479
II	26,365	293	29,422	356	32,023	419
III	10,966	233	25,344	282	31,558	332
IV	965	40	1,558	96	30,212	267
V	37,175	361	55,356	692	60,687	461
VI	30,414	654	49,661	609	55,620	647
VII	5,000	255	10,000	700	15,490	550
IX	27,718	570	34,734	655	40,079	506
X	14,061	309	25,049	290	43,670	448
XI	18,013	315	48,579	675	76,696	752
XII	3,273	99	5,317	201	11,473	445
XIII	27,481	490	47,000	415	54,904	429
XIV	9,387	249	14,066	240	16,717	234
XV	15,520	75	20,900	231	31,208	262
XVI	24,508	408	32,492	452	40,856	295

other forms of nonprinted materials for student use.

Campus Developments

Once a community college district received State Board of Public Instruction approval as an operational unit, there was an immediate need for facilities. Some college districts were fortunate in that facilities being used by the existing junior colleges were available to them. Local school districts in Boone and Fort Dodge had new junior college academic buildings of limited capacity under construction. However, in no college district were the existing facilities adequate for a comprehensive educational program. Therefore, the only choice was to lease space until sites could be purchased and buildings constructed.

Realizing that it would be three or four years before the property tax levy would yield adequate funds needed to begin construction, Governor Harold Hughes recommended, and the Sixty-first General Assembly (41) in 1965, appropriated $6,000,000 for site acquisition and construction. In a personal interview, it was related that Governor Hughes called a member of the DPI staff to inquire as to the amount of money needed to construct the first phase of four vocational schools. When told that $1,500,000 per school, or a total of $6,000,000 would be the minimum needed, that was the sum he proposed to the legislature. A number of persons interviewed related that it was the feeling of many legislators that the community college system would begin with four operating districts and develop slowly over a ten-year period to include all counties of the state. In 1967, the legislature (41) appropriated an additional $9,500,000 for capital purposes as presented in Table 22.

Table 22. Distribution of state and federal funds for site acquisition and new construction

College district	State funds Sept. 1, 1966	State funds Nov. 15, 1967	Federal funds 1967-1971	Totals
I	$ 500,000	$ 340,000	$ --	$2,340,000[a]
II	--	1,000,000	500,000	1,500,000
III	--	750,000	987,000	1,737,000
IV	750,000	--	--	750,000
V	750,000	100,000	1,109,243	1,959,243
VI	--	750,000	789,799	1,539,799
VII	1,100,000	235,000	--	1,335,000
IX	--	1,190,000	207,437	1,397,437
X	1,000,000	300,000	844,000	2,144,000
XI	--	1,800,000	1,345,000	3,145,000
XII	--	1,000,000	--	1,000,000
XIII	1,000,000	250,000	500,000	1,750,000
XIV	900,000	85,000	646,769	1,631,769
XV	--	950,000	--	950,000
XVI	--	750,000	295,543	1,045,543
Totals	$6,000,000	$9,500,000	$7,224,791	$22,724,791

[a]Includes $1,500,000 appropriated in 1977 to be distributed $500,000 each in fiscal years 1978, 1979, and 1980.

Fourteen of the colleges received $7,224,791 on a matching basis from the Higher Education Facilities Act of 1963 as shown by the Higher Education Facilities Commission (26).

The voters in nine college districts passed the three-quarter mill property tax levy for capital purposes at the general school election in the fall of 1966. Table 23 gives a status report of site acquisition and development as of February, 1968. Thirteen districts had passed the capital levy, 14 had employed architects, and one had construction underway. In 1967, the legislature (41) limited the number of acres of land that a community college district could own to not more than 320, except that additional land could be acquired by donation or gift. In an effort to assist the colleges in acquiring facilities more quickly, the legislature (41) in 1970 authorized the college districts to enter into lease agreements with an option to purchase. To further enhance the process, the code (41) was amended in 1972, to enable community colleges to borrow in anticipation of the collection of the voted tax levy. The colleges were given even greater flexibility through a code (41) amendment in 1978, that permitted the extension of the capital fund levy from five to ten years upon approval of the voters of the district.

The yield from the property tax levy for the plant fund increased approximately six percent each year, going from $2,284,280 in fiscal year 1967, to $10,092,943 in fiscal year 1980. Table 24, using data provided by the DPI (38) and the Iowa College Aid Commission (30), shows the physical assets owned by all college districts at the end of fiscal year 1980.

Table 23. Status of college district sites, plans and construction as of February, 1968 (41)

College district	Acres	Site approved	Architect employed	Preliminary plans approved	Final plans approved	3/4 levy approved	Construction started	Bid openings scheduled
I	111	X	X	X	X	X		2-28-68
II	304	X	X					
III	120	X	X			X		
IV	147	X	X	X	X	X	X	
V	108	X	X	X	X	X		
VI			X			X		
VII	320	X	X	X	X	X		2-13-68
IX	181	X	X	X		X		
X	180	X	X	X	X	X		2-1-68
XI	240	X	X			X		
XII	139	X	X			X		
XIII	282	X	X	X		X		
XIV	406	X	X	X	X	X		
XV	215	X	X					
XVI						X		

Table 24. Summary of physical assets by college district, fiscal year 1980 (38, 30)

College district	Acres owned	Site costs	Building costs	Site and building costs
I	314.7	$ 118,460	$ 6,129,876	$ 6,248,336
II	326.5	237,931	9,354,671	9,592,602
III	174	193,669	2,368,233	2,561,902
IV	264	359,280	4,374,276	4,733,556
V	133	695,851	8,867,071	9,562,922
VI	230.4	162,000	2,289,906	2,451,906
VII	320	282,150	8,287,334	8,569,484
IX	215.4	242,693	13,952,744	14,195,437
X	326	408,020	17,949,770	18,357,790
XI	310	631,000	24,396,843	25,027,843
XII	167.6	356,943	9,753,451	10,110,394
XIII	469.1	483,699	10,885,799	11,369,498
XIV	357.7	160,000	4,435,089	4,595,089
XV	287	281,000	5,173,294	5,454,294
XVI	151.7	233,916	5,514,736	5,748,652
Totals	4047.1	$4,846,582	$133,733,123	$138,579,705

Twenty-seven major campuses were operated in 1980 by the 15 community college districts. These campuses included locations in each of the 16 communities where local public junior colleges operated prior to 1966. Additional campuses were developed in merged areas where no public junior college existed and in major population centers. The last major campuses to be developed were the Dubuque campus in 1971, and the Urban Campus in Des Moines in 1979. In addition to the 27 major campuses, the colleges offered courses and programs in local schools, Veteran's Administration hospitals, the State Penitentiary, the Men's Reformatory and many other locations throughout the state. In 1980, eight of the major campuses had arrangements for student housing adjacent to the campus and 11 colleges owned a gymnasium for athletic activities. Through interviews with the college district superintendents and others, this study found that in 1979 and 1980 the margin with which tax levies for capital purposes were passing was closer with lower percentages of the voters in favor of them, and in some cases they were not passing. The economic downturn had begun.

Faculty

At the core of every school, from kindergarten through the university, lies the faculty. They are the people with whom students have the most contact, the figures who exercise the most influence by virtue of their positions, if not their actual personage. Faculty members participate and have input into all facets of college governance through committees, and in many cases have formal faculty senates. Faculty at 10

of the colleges engage in collective bargaining with the board of trustees. Faculty members must possess the specific skills and flexibility to deal with students from widely varied and diverse backgrounds. They must also have a concern for, and an understanding of, the evolving role of the community college as an institution and of the local community in which the college is located.

The American Association of Community Junior Colleges (1) characterizes the full-time community college faculty member teaching credit courses as being male (sixty-six percent), between the ages of 35 and 55, and as having a master's degree. Most faculty teach from 12 to 17 credit hours per week, with the average being 15 credit hours. Forty-four percent of the faculty teaching nonadult courses were listed as full-time and fifty-six percent part-time.

The characteristics of faculty in Iowa, teaching in college parallel and career education in 1980, varies little from the national picture. Of the 2,231 full-time instructors, one-half time or more instructors, and educational coordinators, supervisors, and administrators who teach part-time, sixty-eight percent were male and thirty-two percent were female. The average age of the instructor was 43, with an average of six years of teaching in the district.

In 1980, of the 1,530 instructors on a full-time and more than half-time on a regular basis, 371 had less than an associate degree, seven had an associate degree, 445 had a bachelor's, 612 a master's, and 72 had a doctorate.

The average salary of the full-time instructor on a 180-day teaching contract in 1980 was $19,000 as compared to the national average of $21,000 for two-year public community colleges. For the Iowa instructor, the change from an average salary in 1975 of $13,250, to an average of $19,000 in 1980, represents a forty-six percent increase over the five-year period.

Part-time, adjunct, and supplemental instructors in Iowa increased on a ratio equal to that of the part-time students. The number of part-time instructors used by individual colleges varied widely with the location of the college, the major curricular emphasis, the extent of off-campus and evening offerings, and to a great extent, the financial condition of the college. Issues in recent years concerning the use of part-time instructors revolved around pay, the rights of the regular full-time instructors to the overload assignment, and the inclusion or exclusion of part-time instructors as members of the collective bargaining unit.

Very little research has been done concerning the faculty in the community colleges of Iowa. Witt (79), in the 1971-1972 school year, found a variance in certain aspects of interpersonal behavior between 69 new teachers and 69 effective teachers. In a 1979 study of staff development needs of full-time instructional staff in Iowa's community colleges, Shepard (68) encountered a mixed reaction to inservice training from various teacher groups in 11 of the 15 community colleges. The study found that teachers with fewer years of teaching experience, fewer years

of education, and those without formal teacher education, rated teaching skills generally as being more important, their ability to perform lower, and their willingness to receive assistance as being greater than the other teacher groups under study. Much needs to be done in an effort to determine the skills needed by community college instructors and a major effort must then be made to assist those instructors in attaining those skills.

Two items adopted by the legislature were of great interest to the faculty and had a great impact on the colleges. In 1967, Senate File 616 (41) changed the academic workload of an instructor in arts and science courses from 12 to 15 credit hours. Senate File 531, in 1974, authorized public employees to organize and bargain collectively.

From personal interviews with the superintendents of the community colleges and others, there was a perception of a tendency on the part of the faculty to institutionalize many of the off-campus, community-based activities.

Finances

It was clear, from the small sum of money appropriated by the Sixty-first General Assembly for the operation of the community colleges during the 1965-1967 biennium, that the need and demand for the new educational opportunities provided for in Senate File 550 had been woefully underestimated. No general state aid beyond that available to the existing, locally-owned junior colleges was made available to the newly formed community colleges. A sum of only $2,400,000 for each of the

two years was made available to aid existing vocational programs and to assist in the development of new ones. This shortage of operating money during the transition and development period of the first two years caused a deficit in many institutions. This situation resulted in a poor image before the colleges had an opportunity to "get their feet on the ground."

Once the legislature realized that the existing junior colleges were merging with the community college districts, and that additional large numbers of vocational and adult students were entering the fifteen newly-organized community colleges, additional appropriations were made and the process of carrying out the mandates of the authorizing legislation was underway.

This portion of the study will portray and analyze the funding plan and trace the application of the plan and the financial status of the institutions from the initiation of the act in July, 1965, through fiscal year 1980.

Although the amounts of funding and the impact upon budgets have changed, the sources of funding provided by the enabling legislation in 1965, remained the same through fiscal year 1980. The four sources of operational monies in the general fund were:

1. Tuition and fees paid by students. The maximum tuition that could be assessed a full-time student could not be greater than that assessed by the state university in Iowa having the lowest tuition charge. Out-of-state students could not be charged more than two times the amount charged in-state residents.

2. Without a referendum, a community college district property tax not to exceed three-quarters of one mill could be levied each year.
3. State general aid initially was computed by multiplying $2.25 by the average daily enrollment of students enrolled on a full-time basis times the actual days school was in session. Additional funds were allocated on an annual basis to match federal funds earmarked for vocational, adult, and other specialized purposes. Funds from state sources were also made available for special projects and purposes at a number of colleges and at various times throughout the state. Among these projects were radio stations, instructional-equipment replacement, new and expanding industry training programs, and salary supplements.
4. Federal funds for vocational and adult education were administered by the Department of Public Instruction. Other federal funds for a variety of purposes were available directly to the colleges through special grants.

In addition to the four major sources of income for operational purposes, the colleges had minor income available through earned interest, sales and services, and gifts.

For purposes of site and building acquisition and repair, income and expenditures were handled through the plant fund. The plant fund had four major sources of income as follows:

1. Bonds, when approved by sixty percent of the voters of a district for a period not to exceed twenty years. During the fifteen-year period, only Southwestern Community College District was successful in passing a bond issue. Only a few other districts attempted to use this source of funding.
2. A district property tax levy each five years not to exceed three-quarters of one mill when approved by a simple majority of the voters. In 1978, the duration of the levy was changed from the five years to ten years by legislative action (41).
3. State facility grants for the construction of buildings to house vocational education programs. Six million dollars were appropriated in 1965 to seven colleges, $9,500,000 in 1967 to 14 colleges, and $1,500,000 in 1977 for a vocational facility in Dubuque (Table 22).
4. Federal grants directly to colleges, on a matching basis from the Higher Education Facilities Act of 1963. Ten community colleges in the state received $7,224,791 through this source during the 1967-1971 period (Table 22).

In addition to the four sources of income to the plant fund, a few schools received gifts of land. The most significant of the gifts was 181 acres at Riverdale presented to Eastern Iowa Community College by the Alcoa Aluminum Company.

During the first school year 1966-1967, as operating districts, most of the colleges were forced to borrow money to stay in operation. There was considerable discussion in the Sixty-second General Assembly

concerning "deficit spending," fiscal mismanagement, and the need for "bail-out money" for the community colleges. The deficit situation was due to the fact that no general state aid was appropriated for fiscal years 1966 and 1967. Apparently it was assumed that the general aid, based upon the reimbursement that had previously gone to the local districts for the operation of the junior colleges, would be adequate. Another existing condition was that only sixty percent of the district tax levy was collectable during the first year. The 2.4 million dollars appropriated in 1965 for each of the fiscal years 1966 and 1967, to be used in maintaining the 15 existing posthigh vocational centers, as well as initiating new vocational programs in community colleges, was far from adequate to finance the quickly accelerating enrollments.

This situation was resolved with the appropriation of $4,500,000 by the General Assembly in 1967 to pay state aid claims for the school year 1966-1967. The enrollment as of May 1, 1967, was treated as if it were the average daily enrollment for the entire year for reimbursement purposes. Based upon the funding formula, the appropriation was inadequate; therefore, the colleges received $1.91 instead of $2.25 per day for each full-time reimbursable student.

The Sixty-second General Assembly in 1967 appropriated $6,000,000 for each year of the 1967-1969 biennium. These appropriations, again, proved not to be great enough to meet claims at the end of each fiscal year; consequently, the amount paid to the community colleges again had to be prorated for both fiscal years 1968-1969. The amount paid during 1968 was $2.01 or $.24 less than the $2.25 required by the formula and

in fiscal year 1969, the amount further decreased to $1.67 or $.58 less than the amount required.

By the end of fiscal year 1969, the third year of operation, the colleges were facing a serious financial crisis. Not only was the number of dollars inadequate, but also the schools never knew until after the completion of the year, when all claims were in, the actual amount of operating revenue they would receive. This situation was not conducive to good educational planning and accountability, nor did it create any feeling of security on the part of the staff of the colleges.

Recognizing that the popularity of the educational offerings of the new colleges far exceeded original expectations, the Sixty-third General Assembly (41) in 1969, made a serious effort to stabilize the funding situation. The funding formula was changed to provide, beginning on July 1, 1970, $2.25 per day for the full-time equivalent enrollment of state residents based on a computation using actual contact hours of students rather than average daily enrollment. In addition, the formula established the state aid for full-time equivalent enrollment as being equal to the sum of 180 days times $2.25. The formula provided for the following definitions in determining full-time equivalent enrollment. First, the formula provided that full-time equivalent enrollment means the quotient of the total number of reimbursable hours carried by residents of the state attending a single area school, divided by 540, which represents 15 reimbursable hours per week for a period of 36 weeks. The key to this formula then became reimbursable hours. The formula further specified that a "reimbursable hour" meant any of the following:

1. One contact hour of lecture in an approved course in arts and science or vocational-technical education.
2. Two contact hours of laboratory in an approved course in arts and science or vocational-technical education.
3. Two contact hours in an approved course of adult education that is eligible for state general aid, except that basic adult education, high school completion, and college credit courses that qualify as lecture courses will be reimbursed on a one contact hour basis. Courses dealing with recreation, hobbies, casual cultural, or self-enjoyment subjects will not be eligible for reimbursement.

Other positive action taken by the legislature was to allocate the state aid available to each college on a line-item basis, and direct that the state aid be distributed in four equal sums at the beginning of each calendar quarter. Not everyone was pleased with the formula used to determine the allocation to each college, but the action provided greater financial stability to all schools. At least for the second year of each biennial appropriation, each college knew the funds available for budget planning.

Apparently a permanent study committee of college superintendents and Department of Public Instruction consultants kept the funding formula under constant review and change in an effort to ensure the equitable distribution of funds to the several colleges. Financial data in the tables to follow in the section on Finances were taken from financial reports of the Department of Public Instruction (38). Table 25 presents

Table 25. State general aid by community college district during selected fiscal years between 1967 and 1980 (38)

College district	1967	1970	1973	1975	1977	1978	1980
I	$ 4,754	$ 186,208	$ 511,429	$ 490,605	$ 1,326,141	$ 1,626,450	$ 1,929,040
II	663,237	738,222	1,028,182	1,222,930	1,962,975	2,192,515	2,733,833
III	0	404,747	677,733	794,085	1,893,806	1,992,789	2,464,600
IV	45,018	189,157	307,892	325,135	737,010	747,895	868,613
V	679,866	742,121	1,175,689	1,427,105	2,380,025	2,556,210	3,111,971
VI	815,563	896,020	1,178,242	1,645,445	2,146,771	2,238,326	2,707.690
VII	105,195	472,714	766,501	1,114,315	2,096,543	2,135,419	2,997,490
IX	588,911	772,928	1,125,003	1,321,205	2,039,300	2,466,688	3,460,903
X	189,214	1,165,180	1,724,525	2,172,155	3,696,976	3,686,010	5,120,162
XI	93,711	1,035,739	1,737,597	2,283,180	4,553,243	5,035,761	6,313,960
XII	30,663	327,058	611,255	750,965	1,502,642	1,633,166	1,916,996
XIII	261,605	499,859	914,271	1,267,650	1,796,015	2,229,588	2,973,597
XIV	114,383	266,424	407,974	455,515	691,692	840,181	1,075,177
XV	137,351	665,737	926,633	1,121,330	1,555,115	1,771,115	2,498,359
XVI	414,772	560,531	807,074	965,680	1,521,746	1,562,035	1,996,109
Centerville[a]	212,841	0	0	0	0	0	0
Estherville[a]	35,425	0	0	0	0	0	0
Emmetsburg[a]	107,491	77,355	0	0	0	0	0
Totals	$4,500.00	$9,000,000	$13,900,000	$17,357,300	$29,800,000	$32,714,100	$42,168,500

[a]Public junior colleges operated by local school districts that later merged with operating districts.

the amount of general state aid received by each college during selected years between fiscal year 1967 and fiscal year 1980. The category of general state aid provided an increasing percentage of operating funds, going from a low of 23.19 percent in fiscal year 1969 to 42.99 percent in fiscal year 1980, as shown in Table 26. General state aid was, and continued to be, the equalizer in the formula for funding the community colleges.

The amount of state aid to be awarded an individual college was calculated by determining the cost per full-time equivalent student and subtracting the amount of tuition, property tax, and state-federal funds supporting each student. The difference was requested of the legislature in the form of general state aid. Table 27 lists the number of students eligible for general state aid, the amount of aid allocated and the amount per full-time equivalent enrollment by college district for fiscal year 1980. Through personal interviews and observation, it was learned that the disparity in the amount of general state aid allocated to each college per full-time equivalent student was the source of much dissatisfaction with the allocation formula.

District property tax became a decreasing source of general fund income, going from 27 percent to 10.89 percent of the operating budget in 15 years. The dollar amount of revenue from property tax increased approximately six percent per year, but did not keep pace with inflation nor with the growth of enrollment. Table 28 gives the district property tax support per full-time equivalent student for fiscal year 1980 and and Table 26 relates the percentage of the budgets supported by property

Table 26. Proportion of general fund revenue derived from major sources for fiscal years 1967-1980 (38)

Fiscal year	Tuition and fees	Property tax levy	State general aid	State and federal voc. aid	All other sources of income
1967	13.95%	27.19%	00.00%	42.86%	16.00%
1968	13.92%	16.46%	36.91%	26.02%	6.89%
1969	20.99%	15.46%	23.19%	31.74%	8.62%
1970	20.95%	18.06%	29.32%	23.21%	8.46%
1971	23.59%	15.84%	28.98%	21.46%	10.13%
1972	24.06%	14.04%	29.78%	20.74%	11.38%
1973	23.24%	13.12%	30.19%	20.12%	13.33%
1974	22.79%	11.79%	30.92%	20.99%	13.61%
1975	21.49%	5.42%[a]	31.63%	18.74%	22.72%
1976	21.58%	9.88%	34.76%	16.10%	17.68%
1977	21.65%	14.51%[b]	38.06%	15.32%	10.46%
1978	21.95%	11.30%	39.84%	16.62%	10.29%
1979	21.17%	11.58%	42.08%	16.15%	9.02%
1980	21.17%	10.89%	42.99%	15.71%	9.24%

[a]Due to change in fiscal year, during 1975, only three-eighths rather than three-fourths of one mill could be levied.

[b]Colleges were permitted to levy not more than three-eighths of one mill to cover any deficits due to the restriction of 1975.

Table 27. State general aid for full-time equivalent enrollment (FTEE) by college district for fiscal year 1980 (38)

College district	FTEE eligible for state general aid	State general aid	State general aid per FTEE
I	2,196.29	$ 1,929,040	878.31
II	2,879.79	2,733,833	949.31
III	1,991.94	2,464,600	1,237.28
IV	968.60	868,613	896.77
V	2,615.57	3,111,971	1,189.78
VI	2,180.17	2,707,690	1,241.96
VII	3,216.07	2,997.490	932.03
IX	3,481.65	3,460,903	994.04
X	5,809.08	5,120,162	888.29
XI	6,992.49	6,313,960	902.96
XII	2,227.74	1,916,996	860.51
XIII	2,903.69	2,973,597	1,024.07
XIV	869.87	1,075,177	1,236.02
XV	3,144.04	3,498,359	794.63
XVI	1,925.60	1,996,109	1,036.61
Total	43,402.59	$42,168,500	971.56

Table 28. College district property tax support per full-time equivalent enrollment (FTEE) by institution for fiscal year 1980 (38)

College district	Total FTEE	Property tax	Local support per FTEE
I	2,452.84	$ 709,267	289.16
II	2,974.82	644,070	216.51
III	2,534.76	511,734	201.89
IV	1,035.92	349,068	336.96
V	3,065.61	849,594	277.14
VI	2,399.00	453,666	189.11
VII	3,330.82	724,699	217.57
IX	3,989.03	947,702	237.58
X	6,548.25	1,123,709	171.60
XI	7,342.34	1,826,904	248.82
XII	2,464.75	716,579	290.73
XIII	3,444.71	646,775	187.76
XIV	937.86	295,519	311.77
XV	3,309.28	495,031	149.59
XIV	2,209.82	386,814	175.04
Total	48,049.81	$10,681,131	222.29

tax in relation to the other sources of income by year between 1970 and 1980. Table 29 presents the number of dollars provided by the district property tax levy by district for selected years between fiscal years 1970 and 1980.

Tuition and fees from students were the only source of income over which the colleges had any control. During the years prior to massive federal aid to students, tuition was kept low for fear of creating a financial barrier to admission. Table 26 shows that the percentage of total income from tuition as a source has kept pace with the other sources of income. Table 30 gives the amount of income generated from this source during selected years between fiscal years 1970 and 1980. The amount of tuition paid by each student more than doubled during the 15-year period, but due to the increase in enrollment, the total income from this source more than tripled during the period.

The impact of federal funds, as provided through the Vocational Act of 1963 and amended in 1968, was very significant in that it created an incentive for states to develop programs in vocational education. The total sum of dollars increased approximately two-fold between 1970 and 1980 as shown in Table 31, but decreased from forty-two percent in 1967. to sixteen percent in 1980 as a source of income as given in Table 26. In fiscal year 1980, the federal share of this category was $4.3 million while the contribution of state funds was approximately $9.4 million.

A more accurate portrayal of sources of funds for the operation of the community colleges is presented in Table 32. Tuition, fees, and district property tax need no explanation. State funds were allocated in

Table 29. Revenue from district property tax levy by community college district for selected years between 1970 and 1980 (38)

College district	1970	1973	1975[a]	1977	1978	1979	Local revenue tax 1980
I	$ 333,492	$ 381,531	$ 249,613	$ 810,263	$ 598,966	$ 648,850	$ 709,267
II	344,271	361,170	202,576	536,908	544,171	593,863	644,070
III	233,794	249,092	132,684	566,440	425,868	447,577	511,734
IV	209,936	211,060	108,445	462,555	311,575	346,905	349,068
V	564,025	480,016	255,791	883,640	730,417	837,679	849,594
VI	245,952	259,381	151,466	390,733	407,201	439,328	453,666
VII	318,327	391,667	220,704	605,824	594,940	711,107	724,699
IX	447,438	545,828	295,225	973,982	798,573	880,792	947,702
X	881,060	676,941	355,005	1,270,479	984,037	1,104,691	1,123,709
XI	882,688	1,039,219	579,260	2,021,810	1,666,256	1,724,530	1,826,904
XII	307,128	382,433	194,731	782,765	601,537	732,644	716,579
XIII	373,760	364,864	206,302	803,004	576,893	614,753	646,775
XIV	156,692	166,239	103,108	375,645	270,774	290,654	295,519
XV	280,667	265,889	169,488	548,861	420,893	435,776	495,031
XVI	322,734	224,742	137,237	328,450	343,467	386,259	386,814
Total	$5,901,964	$6,000,072	$3,361,635	$11,361,359	$9,275,568	$10,195,408	$10,681,131

[a]Local tax revenue reduced by one-half as result of change in fiscal year 1975 and this amount collected in fiscal year 1977.

Table 30. Tuition and fees by community college district during selected fiscal years between 1970 and 1980 (38)

College district	1970	1973	1975	1977	1978	1979	Tuition and fees 1980
I	$ 141,136	$ 380,562	$ 556,320	$ 736,435	$ 728,016	$ 765,562	$ 832,396
II	662,251	681,022	901,108	1,093,829	1,109,193	1,030,217	1,141,916
III	295,159	478,440	769,687	846,181	895,598	858,499	950,473
IV	82,895	200,636	286,123	411,547	410,449	390,838	420,819
V	763,179	954,682	991,555	1,126,659	1,139,736	1,233,832	1,318,189
VI	814,790	785,617	804,401	945,801	972,119	977,210	1,027,654
VII	273,919	535,074	780,169	1,058,213	1,150,878	1,207,165	1,274,401
IX	523,010	793,379	1,001,805	1,341,974	1,669,367	1,705,529	2,063,283
X	974,954	1,429,110	1,913,300	2,577,330	2,617,144	3,028,350	3,271,922
XI	545,910	1,578,454	2,043,000	2,546,697	2,839,920	2,739,082	2,983,314
XII	154,352	433,162	639,640	777,995	811,355	896,661	1,028,833
XIII	442,593	914,977	875,324	1,292,581	1,343,629	1,457,214	1,684,483
XIV	153,071	225,558	297,123	371,937	379,750	378,101	368,474
XV	449,122	598,484	673,378	926,811	1,014,556	1,000,756	1,275,801
XVI	568,753	634,025	796,480	896,006	942,867	973,874	1,128,898
Total	$6,845,094	$10,623,183	$13,329,413	$16,949,996	$18,024,567	$18,642,890	$20,770,856

Table 31. State and federal vocational aid by community college district for selected years between 1970 and 1980 (38)

College district	1970	1973	1975	1977	1978	1979	1980
I	$ 444,154	$ 523,411	$ 786,722	$ 901,317	$ 700,014	$ 778,741	$ 819,812
II	329,754	391,737	471,746	548,318	457,822	485,866	530,283
III	246,550	332,693	471,364	501,275	544,851	693,960	696,042
IV	266,112	305,049	348,279	409,082	452,772	542,055	590,537
V	417,200	516,324	568,137	737,315	653,465	604,004	589,619
VI	258,974	328,774	396,441	424,353	471,568	444,924	516,963
VII	764,177	979,747	1,286,569	1,288,381	1,546,193	1,521,647	1,505,882
IX	543,728	765,118	860,885	927,683	1,035,345	1,018,894	1,037,769
X	922,716	1,306,552	1,313,709	1,515,630	1,767,914	1,770,071	1,754,046
XI	864,235	1,068,705	1,310,304	1,523,936	1,658,176	1,750,519	1,835,124
XII	514,360	677,620	662,245	770,271	767,007	977,992	1,013,762
XIII	650,281	861,039	1,074,477	1,099,950	988,799	976,930	1,019,811
XIV	142,204	163,377	265,985	281,451	269,333	287,472	286,902
XV	751,463	909,229	877,162	917,214	843,963	914,389	943,526
XVI	357,503	414,678	571,769	506,777	434,009	446,982	482,523
Total	$7,473,411	$9,544,053	$11,265,794	$12,352,953	$12,591,231	$13,214,446	$13,622,601

Table 32. General fund revenue by category for all fifteen community colleges, fiscal years 1967-1980 (38)

Revenue source	1967	1969	1970	1971	1973	1975[a]	1980
Tuition and fees	$ 898,997	$ 5,218,918	$ 6,844,894	$ 8,466,804	$10,623,183	$13,329,413	$20,770,856
District property	1,752,636	3,843,495	5,901,864	5,686,517	6,000,072	3,361,635	10,681,131
State funds	200,868	10,998,688	15,101,036	15,448,236	19,317,597	26,816,994	53,642,753
Federal funds	3,312,371	3,797,846	4,221,566	5,472,110	7,722,957	10,336,544	9,499,573
Other	136,040	142,416	603,432	815,571	1,146,802	3,023,901	2,442,617
Subtotal revenue	$6,300,912	$24,001,363	$32,672,892	$35,889,238	$44,810,611	$56,868,487	$97,036,930
Reserves	-0-	865,552	-0-	145,256	903,651	5,176,694	962,948
Total revenue	$6,300,912	$24,866,915	$32,672,892	$36,034,494	$45,714,262	$62,045,181	$97,999,878

[a]District property tax levy was reduced by one-half in 1975, as a result of change in fiscal year. Deficits due to this reduction were made up in fiscal year 1977.

the form of general state aid, equipment replacement, new vocational program development, and for industry training programs. Federal funds were allocated for restricted purposes such as vocational education and as grants to the individual colleges for a variety of purposes. The "other" source of income consists of earned interest, income from sales and services, gifts and auxiliary enterprises. A summary of total revenue by community college district during selected years between 1970 and 1980 is given in Table 33.

The increase in full-time equivalent enrollment and expenditures for fiscal years 1967-1980 are shown in Table 34. The expenditures represent funds from all sources. An analysis of expenditures by major function for selected years between 1970 and 1980 are presented in Table 35. Also given is the percentage of the budget devoted to each of the functions for fiscal year 1980. Due to enrollment trends, the percentage of budget for arts and sciences decreased, the percentage for vocational education grew in the early years and remained constant after 1975, the percentage for adult education grew steadily each year. As a percentage of the total budget, student services, administration, and physical plant remained rather constant during the 1970-1980 period. Total expenditures by college district for selected years between 1970-1980 are related in Table 36.

Occasionally, special appropriations (41) were made to various schools for specific purposes. A review of the record revealed that after the initial appropriation was made, those funds that were for operational functions were continued as part of the regular line item

Table 33. Summary of total revenue by community college district during selected fiscal years between 1970 and 1980 (38)

College district	1970	1973	1975	1977	1978	1979	1980
I	$ 1,275,356	$ 1,962,584	$ 2,812,030	$ 4,038,741	$ 4,056,804	$ 4,408,513	$ 4,750,284
II	2,152,362	2,601,464	3,535,224	4,485,224	4,756,714	5,012,758	5,711,887
III	1,243,073	1,821,880	2,871,093	4,571,098	1,725,246	4,970,409	5,749,358
IV	833,642	1,180,225	1,616,014	2,159,042	2,098,108	2,196,676	2,410,508
V	2,729,228	3,380,801	4,383,134	5,745,302	5,849,880	6,025,575	6,481,660
VI	2,325,810	2,975,113	3,613,741	4,425,303	4,425,303	4,796,508	5,308,210
VII	2,088,641	2,868,002	4,358,061	5,574,741	6,306,819	7,024,373	7,373,301
IX	2,936,937	3,584,878	4,177,893	5,917,198	6,562,754	6,994,323	8,112,122
X	4,374,545	6,607,481	8,610,343	9,921,062	10,353,373	11,306,787	12,408,697
XI	4,412,065	6,892,951	10,391,879	11,934,618	12,446,441	13,051,925	14,750,163
XII	1,491,168	2,180,165	2,895,559	4,140,593	4,254,637	4,658,518	5,001,467
XIII	2,261,647	3,408,578	4,417,501	5,450,822	5,872,521	6,468,790	7,250,087
XIV	730,613	1,011,812	1,435,769	1,873,190	1,901,478	2,052,775	2,164,447
XV	2,486,645	2,968,854	4,048,669	4,376,384	4,434,109	4,821,210	5,802,368
XVI	2,023,583	2,269,474	2,878,271	3,695,387	3,914,153	4,248,053	4,653,453
Total	$33,365,315	$43,714,262	$62,045,181	$78,308,705	$82,121,420	$88,037,193	$97,928,012

Table 34. Increase in community college enrollments and expenditures for fiscal years 1967-1980 (38)

Fiscal year	Full-time equivalent enrollment	Expenditures
1967	11,134.23	$ 6,608,823[a]
1968	17,944.25	20,172,391
1969	21,433.82	25,436,135
1970	24,158.86	31,358,404
1971	28,185.68	36,034,495
1972	32,553.52	40,674,524
1973	34,245.23	45,090,174
1974	35,816.29	51,387,102
1975	38,393.43	62,045,181
1976	43,761.51	71,872,955
1977	44,413.94	73,929,224
1978	42,720.68	80,719,178
1979	44,573.28	87,418,803
1980	48,049.81	97,585,190

[a]Expenditures appear unrealistically low due to the fact that this was the first year of operation, some of the colleges were in operation for only a part of the year, and in many cases the expense of the operation of existing junior colleges was being carried by the local school districts.

Table 35. Expenditures[a] by function for all fifteen community college districts, fiscal years 1970-1980, and as a percentage of budget for 1980 (38)

Function	1970	1971	1973	1974	1975	1980	Percentage of 1980 budget
Arts and sciences	$ 7,633,879	$ 8,103,449	$ 8,386,493	$ 8,162,464	$ 8,878,430	$13,610,401	13.97
Vocational education	11,318,307	12,237,539	15,141,418	18,818,764	21,418,996	36,212,749	37.18
Adult education	2,853,439	3,443,388	5,594,132	5,872,775	8,483,626	14,299,673	14.68
Learning resources	2,289,670	2,915,552	3,891,036	5,524,891	7,061,471	3,508,792	3.60
Student services	2,103,237	2,754,375	3,546,841	3,956,486	4,425,826	7,523,312	7.72
Administration	2,426,509	2,890,113	3,170,477	3,696,440	4,773,012	10,613,371	10.90
Physical plant	2,736,363	3,690,078	5,359,777	5,455,282	7,003,820	11,635,949	11.95
Totals	$31,361,404	$36,034,494	$45,090,174	$51,487,102	$62,045,181	$97,404,247	100.00

[a]Expenditures by function not available prior to 1970 due to lack of a uniform accounting system. Total expenditures for fiscal 1967 were $6,608,823; 1968 - $20,172,391; and for 1969 - $25,172,391.

Table 36. Expenditures by college district during selected fiscal years between 1970 and 1980 (38)

College district	1970	1973	1975	1977	1978	1979	1980
I	$ 1,028,722	$ 1,962,584	$ 2,812,030	$ 3,408,127	$ 3,768,696	$ 4,408,513	$ 4,750,284
II	1,963,490	2,453,109	3,535,224	4,203,160	4,756,714	5,012,758	5,711,887
III	1,243,073	1,765,969	2,871,093	4,431,633	4,725,246	4,850,272	5,720,496
IV	634,928	1,180,225	1,616,014	1,939,110	2,098,108	2,196,676	2,341,691
V	2,596,846	3,332,547	4,383,134	5,345,827	5,571,201	6,025,575	6,385,532
VI	2,233,324	2,975,113	3,613,741	4,398,848	4,471,427	4,796,508	5,280,092
VII	2,088,641	2,868,002	4,358,061	5,370,470	6,306,819	7,024,373	7,373,301
IX	2,936,937	3,584,878	4,177,893	5,606,741	6,545,579	6,957,482	8,079,335
X	3,900,192	6,607,481	8,610,343	9,377,498	10,353,373	11,306,787	12,407,800
XI	4,160,368	6,706,432	10,391,879	11,285,268	12,086,435	13,051,925	14,750,163
XII	1,368,981	2,124,468	2,895,559	3,937,772	4,254,637	4,658,518	5,001,467
XIII	2,146,379	3,408,578	4,417,501	5,161,286	5,863,872	6,454,331	7,116,388
XIV	708,741	926,176	1,435,769	1,719,048	1,901,478	1,952,311	2,086,772
XV	2,457,811	2,925,138	4,048,669	4,049,049	4,223,620	4,622,082	5,767,110
XVI	1,892,971	2,269,474	2,878,271	3,695,387	3,791,973	4,100,692	4,631,929
Total	$31,361,404	$45,090,174	$62,045,181	$73,929,224	$80,719,178	$87,418,803	$97,404,247

appropriation to the college involved.

1971	HF 744	$100,000 for each year of 1972-1973 biennium for operation of Dubuque Campus in District I.
1971	SF 179	$434,167 for District XVI (Burlington) for facilities to replace funds that reverted to General Fund.
1976	SF 1333	$60,000 to District XII (Sioux City) for radio facilities.
1977	SF 622	$500,000 each year for three years to District I (Calmar) for construction projects within Dubuque County.
1977	SF 214	$134,000 to District X (Cedar Rapids) for continuation of waste water program.
1977	SF 214	$120,000 for operation of radio station in District XII (Sioux City).
1978	SF 2125	$120,000 for operation of radio station in District XII (Sioux City).
1978	SF 2229	$85,000 to District XIII (Council Bluffs) for radio facilities.
1978	SF 2268	$10,500 for salary adjustments to District XII (Sioux City) for radio.
1979	SF 485	$114,800 to District V (Fort Dodge) for radio facilities.
1979	SF 485	$130,500 to District XII (Sioux City) for operation of radio for each year of biennium.
1979	SF 485	$120,000 to District XIII (Council Bluffs) for operation of radio for each year of biennium.
1979	SF 485	A special appropriation to District IX (Davenport) of $282,474 for fiscal years 1980 and 1981 due to a merger with Palmer Junior College and an appropriation of $228,300 each of the two years due to a merger with Ottumwa Heights College.

It was concluded, through interviews with personnel from the various

colleges, the Department of Public Instruction, and observation, that funding was only slightly inadequate during the 15-year period. An almost uniform expression of concern related to the inability of the colleges to acquire modern equipment for vocational programs comparable to that found in the industries using the graduates. Another concern expressed was that funding was not available to expand vocational programs in which there was a high demand for graduates. Examples were electronics, data processing, nursing, and other health-related occupations.

Status of the Graduates

Due to the ever-increasing number of part-time students enrolling in the community colleges and the propensity for students to "stop out" for indefinite periods, it was difficult to trace the further progress of many students. Those completing specific programs were more traceable. The three state universities provide some information regarding the progress of community college students who transfer to their institutions. A review of the data available from the universities revealed that a drop occurred in grade point average during the first term at either of the universities, but in succeeding terms the grade point average tended to improve. Further dialog needs to be held with both public and private four-year schools to obtain additional data needed to analyze the path of the community college transfer student through to graduation.

The graduates of career education programs were more easily traced in that the majority entered employment in the state immediately upon graduation. A total of 9,406 career education graduates completed

programs in seven major occupational areas in the 15 community colleges during 1978. In a follow-up study made by the DPI (37) one year later, 85.8 percent of the graduates available for employment were found working in jobs related to their training. As related in Table 37, of the 6,592 available for employment, 5,658 were in training-related jobs and 571 were employed in other occupations for a total of 6,229 employed and 363 unemployed. The major reason graduates were not available for employment was that they were continuing their education.

Follow-up studies of graduates and also noncompleters are important instruments in institutional improvement. Since the success of an institution is determined by the success of the graduate, it is important to measure that success.

External and Internal Organizations

Outside of the formal governance structure of the community college boards reporting to the State Board of Public Instruction, a number of legal and quasi-legal councils, commissions, advisory committees, and organizations were found to be in a position to influence the direction of the community colleges. A brief review of these should enhance the reader's understanding of the functional management of the colleges.

The state advisory committee on community and junior colleges, mandated in the original legislation establishing the community colleges, was disbanded by Senate File 544 (41) in 1975, at the request of the members of the committee. The original legislation also provided that the State Board of Public Instruction and the Board of Regents, acting

Table 37. Employment follow-up study of 1978 graduates of career education and paraprofessional programs in the 15 community colleges one year after graduation (37)

Occupational area in which trained	Number completing program	Available for employment	Employed in area trained	Percent employed	Other employment
Agriculture	658	547	500	91.4	34
Distributive education	313	249	218	87.05	15
Health occupations	2,307	1,787	1,676	93.7	39
Home Economics	158	111	73	65.7	24
Office occupations	1,414	1,131	941	83.2	117
Technical occupations	462	387	361	93.2	20
Trade and industrial occupations	3,804	2,209	1,751	79.2	293
Paraprofessional (Career option)	290	171	138	80.7	29
Totals	9,406	6,592	5,658	85.8	571

jointly, establish approval standards and determine that the standards were being met by the various community colleges. As a result of this action, a representative of each board made a joint visit to each of the community colleges on an annual basis for the purpose of determining compliance with the standards. Also, to enhance articulation between the public universities and public community colleges, a Regents' Committee on Educational Relations was established. Interaction between members of this committee and representatives from the community colleges over a 15-year period resulted in a curriculum for the associate in arts degree that was fully acceptable for transfer to the three state universities.

The Iowa Coordinating Council for Post-Secondary Education, organized in September, 1967, was a nonlegal organization composed of twenty-one members representing the public universities, the private colleges, the public community colleges, and the postsecondary proprietary schools. The monthly meetings gave representatives of the higher education community an opportunity to get to know each other and to discuss items of mutual interest and concern. Representatives of the community colleges serve on the 38 person Teacher Education and Certification Committee and on the College Aid Commission.

Minutes of the Iowa Council of Area School Boards (32) record that a board organization began as the "Area Schools Steering Committee" in October, 1966, with B. A. Jensen of Cedar Rapids, as chairman. In August, 1971, Max Kreager and Leslie Ward signed the Articles of Incorporation of the succeeding organization, the Iowa Council of Area School

Boards. A parent organization of community college trustees on the national level was formed as part of the National Association of School Boards at Des Plaines, Illinois, on August 15, 1967. The community college trustees later formed a separate organization with headquarters in Washington, D.C. The superintendents of the community colleges formed the merged area superintendents' organization in September, 1966, with Selby Ballantyne as the first chairman. The superintendents' organization and the trustees' organization worked together to formulate legislative proposals and to make recommendations to the State Board of Public Instruction concerning all matters relevant to the community colleges.

All of the Iowa community colleges had institutional membership in the American Association of Community/Junior Colleges, which in its 1981 Directory (2) listed 903 of the 1231 colleges in the United States as members.

Iowa, being in the 19-state region constituting the North Central Accrediting Association, has the privilege of participating in the evaluation system of the Commission on Institutions of Higher Education. A check with the college superintendents by this researcher revealed that all the 15 two-year college districts were accredited as a college district as of 1980, except VI, which elected to seek separate accreditation for its Ellsworth and Marshalltown campuses; and District XVI which received separate accreditation for Keokuk and Burlington. This means that all campuses and college districts in Iowa sought and received full accreditation status from the North Central Association.

Internally, and between colleges, there was considerable interchange

on a regular basis between various groups having similar interests and concerns. The installation of an audio closed-circuit telecommunication system enhanced this interchange considerably. Articulation between the community colleges and the three public universities progressed more rapidly as the community colleges gained maturity and credibility.

Individuals Who Made It Happen

It was impossible to mention all the persons responsible for the development, growth, and success of the Iowa community colleges during the first 15 years. However, many individuals made a significant contribution to the system, and the history would not be complete without mentioning some of them.

Interviews with various individuals who were on the scene at the time, and information from the State Board of Public Instruction minutes (44) reveal that through the years a number of regional consultants in the Department of Public Instruction were assigned the task of inspecting the local junior colleges as part of their duties. Boyd Greaber inspected the junior colleges from 1955-1958, Guilford Cullison was assigned the duty from 1958 to 1960, and Dr. Wayland Osborne continued the responsibility until late 1962. In 1962, Louis Newsham left the deanship of the Centerville Junior College and served as a full-time consultant until 1964. The experiences of Boyd Greaber, and others, were called upon during the planning of the community college system.

Following passage of legislation in 1965, authorizing the community colleges, Dr. Robert Burkhimer, a person with much community college

experience in Illinois, was employed to guide the development of the fledgling system of two-year institutions. Burkhimer and Doyle Carpenter, Associate Superintendent of Vocational Education, with less than two years in their new roles, left to assume positions as superintendents of two of the newly-formed community colleges. Burkhimer went to Burlington and Carpenter to Estherville amid speculation that they had established lucrative salaries for the position of superintendent and now were planning to take advantage of the situation. Each remained in his new job through the 1967-1968 school year, or approximately two years.

State Superintendent Paul Johnston established the Area Schools Division with Dr. William Baley as Associate Superintendent of Area Schools and Career Education, and Charles Moench as Director of the Area Schools (Community College) Division. Both individuals were in those positions through 1980. Charles Moench proved to be well-suited to the role of working with the 15 superintendents/presidents of the community college districts during the development and early years of the colleges. Dr. Robert Benton, assuming the position of State Superintendent of Public Instruction in 1972, met with the college superintendents more frequently than had his predecessor and was a strong advocate of the colleges.

The superintendents, selected by the college boards to administer the college districts, brought a variety of skills, philosophies and experiences to their positions. Table 38 reveals that four vacancies occurred during the first two years. Other districts experienced changes, while Districts V (Fort Dodge), XI (Des Moines), XII (Sioux City), and

Table 38. Presidents of the community colleges in Iowa, 1966 through 1980

College District	1966 1967	1967 1968	1968 1969	1969 1970	1970 1971	1971 1972	1972 1973	1973 1974	1974 1975	1975 1976	1976 1977	1977 1978	1978 1979	1979 1980
I (Calmar)	Dr. Max Clark									Dr. Charles Joss		Clyde Cramer		
II (Mason City)	Dr. Wm. Berner				Dr. David Pierce									
III (Estherville)	Doyle Carpenter	Dr. Edwin Cramer				Richard Blocker								
IV (Sheldon)	Ralph Borreson				Dr. Daniel McPherson					Clarence Martin				
V (Fort Dodge)	Dr. Edwin Barbour													
VI (Marshalltown)	Rbt. Horsefall	Dr. Donald Skinner						Dr. John Prihoda						
XII (Waterloo)	Dr. Travis Martin										Dr. John Howse			
IX (Davenport)	Dr. Robert Johnston	Gerald Clemmensen	Dr. Orville Carnahan			Gerald Clemmensen						James Loper	Michael Crawford	
X (Cedar Rapids)	Dr. Selby Ballantyne											Dr. Ira Larson	Dr. Wm. Stewart	
XI (Des Moines)	Paul Lowery													
XII (Sioux City)	Dr. Robert Kiser													
XIII (Council Bluffs)	Dr. Robert Loft													
XIV (Creston)	Dr. Wm. Pierce, Jr.							Dr. John A. Smith						
XV (Ottumwa)	Dr. Mel Everingham										Dr. Lyle Hellyer			
XVI (Burlington)	Dr. Robert Burkhimer	C. W. Callison												

XIII (Council Bluffs) experienced no change in chief executive officers during the 1966-1980 period. Of the original 15 superintendents, Clark, Carpenter, Borreson, Barbour, Horsefall, Ballantyne, Kiser, Loft, and Everingham had considerable educational administrative experience in the secondary school system in Iowa. Pierce came to Iowa from the public school system in Missouri. Berner, Martin, Lowery, and Burkhimer brought two-year postsecondary experience from Illinois, North Carolina, Georgia, and Illinois, respectively. Johnston was an Iowan and an instructor at the University of Northern Iowa before assuming the superintendency of District IX at Davenport. Of the replacements through 1980, all had previous educational and administrative experience at the postsecondary level except Joss and Martin, whose experiences were at the secondary level.

From the record of tenure of the superintendents, it would be difficult to be specific concerning qualifications for the job. For this reason, and due to the fact that community colleges should serve the educational needs of the community in which they are located, it is reasonable to conclude that the task of selecting the chief administrative officer should be left to the district board of directors.

Others making a significant contribution to the transition from the local junior colleges to the state system were the deans of the local junior colleges operating in 1965. As a group, they had administered quality programs of education in less than ideal situations. Many of them remained with the community college district, giving leadership to the college transfer program of the new institution.

Many of the local school district directors of vocational education joined the community colleges and were the guiding force in the development and rapid growth of the vocational programs in the community colleges. Mr. William Scheurman, State Director of Vocational Education during most of the 15-year period, devoted much of his time to the postsecondary effort.

The resources of the two state universities were invaluable in the planning and development of the state system of community colleges. Dr. Trevor Howe, Associate Professor of Education at Iowa State University, worked part-time with the research coordinating unit of the Iowa Department of Public Instruction in skilled needs assessment and in other planning activities for vocational education at the postsecondary level. Dr. Duane Anderson, Director of Community College Affairs at the University of Iowa worked very closely with the fledgling institutions. He gave particular attention to assisting the colleges in addressing the purposes as identified by the legislature (41).

Many others in the three state universities, the Iowa Department of Public Instruction, and the public secondary school districts made significant contributions to the development of the community colleges, but are too numerous to mention here.

Finally, the rate of growth and the increase in the percentage of state funds making up the colleges' budgets are indicative of the support of Governor Robert Ray, who was in office during the 1969-1980 period of the study. Three other supporters of the colleges related their sentiments in writing.

Dr. William Boyd, President of the University of Iowa, 1969-1981,

made the following comments in a letter:

> Building on existing junior colleges, the State of Iowa established a network of fifteen area community colleges in the middle 1960's. These colleges were designed not only to provide arts and science education, but also vocational-technical, and additional areas of learning needed by the general citizenry. Through a system of open admissions, geographical proximity, flexible curriculum, and low tuition, they have greatly increased access to post-secondary education by all Iowa citizens. Together with the independent colleges and the regents universities, the community colleges provide comprehensive educational opportunity for all Iowans. As a part of a voluntary system of coordination, the community colleges have worked cooperatively and closely with the independent colleges and regents universities.

Harold Hughes, Governor of Iowa, 1963-1968, had this to say about the community colleges in their sixteenth year:

> The system of community colleges was badly needed to lift the burden from our state institutions of higher learning. Opportunity was needed in the vocational and technical education fields. Development was essential to industry and business. I personally have felt they have been a tremendous success and I am proud of what we began.

Dr. Ray Bryan, Head of the Department of Education at Iowa State University until 1968, and Head of the Department of Professional Studies until his retirement in 1975, related in an interview and in writing, that the community colleges "grew out of the unmet educational needs of the people of Iowa." He related that the down-to-earth concepts upon which the colleges were based earned them the title of "people's colleges," and contributed greatly to their becoming "a vital part of the post high school educational opportunities provided for the people of Iowa."

Community influence, federal and state guidelines, and direction by the boards of trustees, all played significant roles in the development

and growth of the state system of community colleges in Iowa, but the sense of mission, dedication, and hard work on the part of the individual superintendents made the difference in the quality of education at his institution. C. W. Collison, Superintendent at Burlington, made a good summation recently when he related, "it's been difficult to see the forest for the trees at times, but one hell of a lot of good has been accomplished in 15 years."

The Public Community-Junior College in the United States, 1965-1980

A review of the development and growth of the public two-year post-secondary educational institution in the United States through school year 1964-1965, was presented in Chapter II. The purpose of this section was to review the progress of public two-year colleges beginning with fiscal year 1966 through fiscal year 1980.

Although the transformation from liberal arts to comprehensive institutions had began earlier in some states, the transition was accelerated after the mid-1960s. Lombardi (50) noted that enrollment in vocational-technical programs in community colleges increased from thirteen percent in 1965, to thirty percent in 1970, to fifty-two percent in 1976, and fifty-two percent in 1978. A further indication that students were becoming more realistic in their aspirations was that 79.4 percent cited "ability to get a better job" as a primary reason for attending.

Enrollment in adult education in 1980 jumped 16.21 percent over 1979 for a total headcount of 3,977,050. The AACJC Directory (2) reveals

that adult enrollment tripled from 1.3 million in the fall of 1975 to 3.9 million in the fall of 1980. These figures, when added to the credit enrollment, mean that 8.7 million individuals were enrolled in community-junior colleges in the United States during 1980.

The 1981 AACJC Directory (2) lists 4,825,931 credit students in all community-junior colleges during 1980, a gain of 7.53 percent over 1979. Table 39 provides the number of public colleges, opening fall enrollment, and the percentage of change from 1966 through 1980. Indications are that the number of institutions is increasing slowly while the size is increasing at a more rapid pace. It might also be concluded that due to the increasing number of part-time, older students attending, enrollments will stabilize or perhaps continue some growth even in the face of a decreasing high school graduating seniors.

Summary

Once passage of permissive legislation was assured, preparation of proposals for community college districts in Iowa was underway. On July 5, 1965, the day after the Act became effective, one proposal was submitted to the Iowa State Board of Public Instruction. One year later, 11 districts were approved and on January 12, 1967, the last of the 15 became an operating college district. The last of the existing local junior colleges merged with a community college district July 1, 1970. In July of 1971, the last of the secondary school districts became a part of an operating college district, finalizing the geographic borders of the 15 community college districts.

Table 39. Enrollments in public community, junior, and technical colleges in the United States, 1966 through 1980 (2)

Year	Total number of colleges	Opening fall[a] enrollment	Percentage change from previous year
1966	565	1,316,980	14.30
1967	648	1,528,220	16.04
1968	739	1,810,964	18.50
1969	794	2,051,493	12.72
1970	847	2,366,028	15.33
1971	872	2,543,901	7.52
1972	910	2,729,685	7.30
1973	933	3,014,211	10.42
1974	981	3,394,447	12.61
1975	1,014	3,921,542	15.53
1976	1,030	3,939,173	.45
1977	1,037	4,160,611	5.62
1978	1,047	4,159,456	.03
1979	1,044	4,334,344	4.02
1980	1,049	4,666,286	7.66

[a]This was a count taken of credit students in class, two weeks after classes began in the fall and did not include adult students.

With the exception of the college parallel curriculum, enrollment growth was phenomenal. Full-time equivalent enrollment (FTEE) in college parallel courses only grew from 7,738 in fiscal year 1967 to 10,491 in fiscal year 1980. In fiscal year 1967, the FTEE in vocational-technical education grew from 2,490 to 23,979 in fiscal year 1980. The FTEE growth in adult education from 908 in fiscal year 1967 to 13,580 in fiscal year 1980 is understated due to the fact that the formula for equating certain adult FTEE required approximately two times the number of contact hours as for college parallel and vocational-technical courses. Total FTEE in the first full year of operation of the community college districts in fiscal year 1966 was 11,136 in all curricular areas. Total FTEE in fiscal year 1980 was 48,050. Perhaps the most startling numbers are the headcount enrollments which rose to 498,061 in fiscal year 1980. It should be noted here that a large number of local public districts operated adult education programs which, with three exceptions, were merged with the colleges' adult education programs. During fiscal year 1980, the school systems of Des Moines, Clinton, and Davenport enrolled approximately 40,000 students on a headcount basis. Another significant development is that the community colleges presented 48,689 high school diplomas, or the equivalent, to adults during the 15-year period. Also, credit FTEE in the community colleges in fiscal year 1980 was greater than the undergraduate enrollment of the four-year independent colleges in Iowa for the first time.

As the colleges mature, students tend to be older, more of them are female, have a higher level of education upon entry, have previous

postsecondary educational experience, spend more hours on a job, and are more independent of their parents. Also, the number of intercollegiate sports and the numbers of students participating in them was on the increase, with the exception of football. The number of schools participating in football dropped from six to four between 1966 and 1980. Tuition charges for full-time students increased from an average of $200 per academic year in 1967, to $504 in 1980.

The major emphasis in instructional program development and construction of facilities was in support of vocational-technical education. A total of 182 programs preparing persons for employment ranging in length from one quarter to two years were in operation during 1980. Taking into consideration funds from the Higher Education Facilities Act, state construction grants, and the college district property tax levy of three-fourths of one mill, when approved by the voters, the colleges own physical assets costing $138,579,705.

The operational funding plan for the colleges included tuition, a three-fourths mill levy on property in the college district, federal funds and state funds. For the operating budgets, 14 percent came from tuition in 1967, and 21 percent in 1980. District property taxes funded 27 percent in 1967, and only 11 percent in 1980. Federal funds and other income dropped rapidly in the later years, leaving state funds to provide approximately 55 percent of the operating costs and the expectation of less from the federal government, the students will no doubt be expected to pay a greater share of the cost of their education.

Instructors in the Iowa community colleges vary only slightly from

national norms. Of 1,530 full-time or more than half-time instructors in Iowa, 371 had less than an associate degree, seven had an associate, 445 had a bachelor's, 612 a master's, and 72 had an earned doctorate. Salaries for instructors increased 46 percent between 1975 and 1980, bringing the average to $19,000 for an academic year. The number of part-time instructors increased proportionately with the part-time students, which was on the increase, especially in the college parallel courses.

Eighty-five percent of graduates of vocational-technical education programs during 1978 were found working in jobs related to their training one year later in 1979. The three state universities and the community colleges reached agreement in 1980 on the content of an associate in arts degree that would permit a student to transfer two full years or 60 semester hours to the universities.

The trustees of the community colleges maintain an active group with one member representing each college district constituting a council. The council maintains affiliation with a national organization. On the state level, the council is active in legislative affairs, public relations, and relationships with the State Board of Public Instruction.

A number of outside observers interviewed related that the colleges have a better image and an increased credibility since the midseventies. No doubt this came about due to the maturing of the faculty, the leadership of the administrators and trustees, and to the greater efforts at articulation between the community colleges and the state universities.

Public two-year colleges in the United States grew in number and students between 1966 and 1980. The number of colleges grew from 565 in

the fall of 1966 to 1,049 in the fall of 1980. Predictions were that the rate of enrollment growth would decrease, but some growth could be expected due to the increase in the number of part-time students.

In summary, it was obvious that access to higher education had been placed within the hopes and aspirations of many who never considered further education a possibility.

CHAPTER V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to analyze the events leading to, and provide a history of, the transition from the locally-owned junior colleges in Iowa through the development stages, and during the first 15 years of operation of the statewide system of comprehensive community colleges. To more closely define the problem and give direction to the investigation, several questions were posed at the beginning of the study. At one time or another, within the text, a response was made to each of the questions. However, a brief answer here will provide a focal point for the major elements of the study.

1. What forces in the world, nation, and state were interacting to bring about a change in postsecondary education? The position of leadership of the free world, thrust upon the United States immediately following World War II, dictated that the nation remain strong militarily and economically. The rehabilitation of the economies of the war allies and the protection of the free world from communist take-over required that the United States develop its human resources for maximum productivity. Also, the heretofore nonindustrialized nations of the world, with cheap labor, were beginning to compete in the production of goods in the world market, creating the need for the United States to become more efficient in the production of goods and services. Perhaps no event caused the United States to take a more critical look at the quality and direction of its

educational system than did the launching of the Russian space satellite in 1958. Following this event, the federal government provided funds for the escalation of education and training of individuals at the skilled and professional levels in the technical and scientific pursuits.

2. What economic and technological events in the nation and state led to the change in the type of education needed and the change in the delivery system? The accelerated advances in technology that occurred during and following World War II created the need for a higher level of education for everyone and virtually eliminated the need for unskilled workers. The no-longer-needed farm workers converged on the cities and industrial centers in search of jobs as the nation and Iowa continued the change from a rural to an industrial economy. Not only was there a need to provide a more diverse and relevant education for the existing population, there was a need to create a place in higher education for the increased numbers that would reach college age during the 1960s.
3. What were the factors influencing the educational system that led to the development of more comprehensive offerings at the two-year college level to include college parallel, vocational-technical, and adult education? The quality of the system of education from kindergarten through the university placed Iowans among the best educated in the nation. However, diversity of opportunity at the postsecondary level was lacking. The three

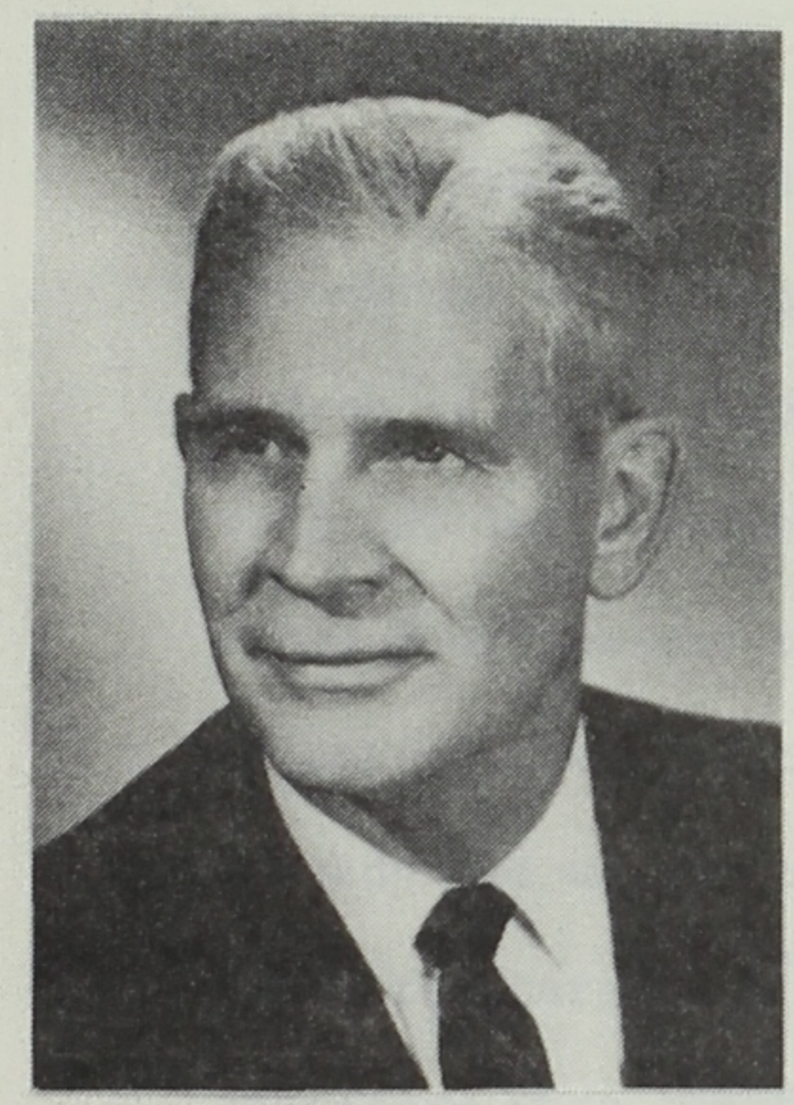
public universities, the 32 private colleges, and the 16 locally-operated public junior colleges were all preparing individuals for a baccalaureate or higher degrees and eventually for a position in one of the major professions. The increasing realization on the part of the individual that education is the avenue to a better life, the need to provide a skilled work force to attract industry to keep the youth in Iowa, and the need to provide a place in postsecondary education for the baby boom reaching college age in the mid-1960s motivated the leadership of the state to begin planning the expansion of educational opportunity. It was also realized in the early 1960s that the existing junior colleges being academically oriented, locally-owned, underfunded, having poor facilities not well-located, were not suitable to provide the diversity of curriculum needed.

4. Who were some of the individuals instrumental in bringing about the change in Iowa and nurturing the movement through the early years? Increasing enrollments, the infusion of federal funds for vocational-technical and adult education, and the fact that many other states were moving ahead, created sufficient awareness of the need on the part of the legislature and leading educators in the state for expanded educational opportunity in Iowa. In 1959, the legislature funded out-of-state consultants, directed by Dr. Raymond C. Gibson, Professor of Higher Education at the University of Indiana, to make a study of higher education needs in the state and present recommendations. Upon

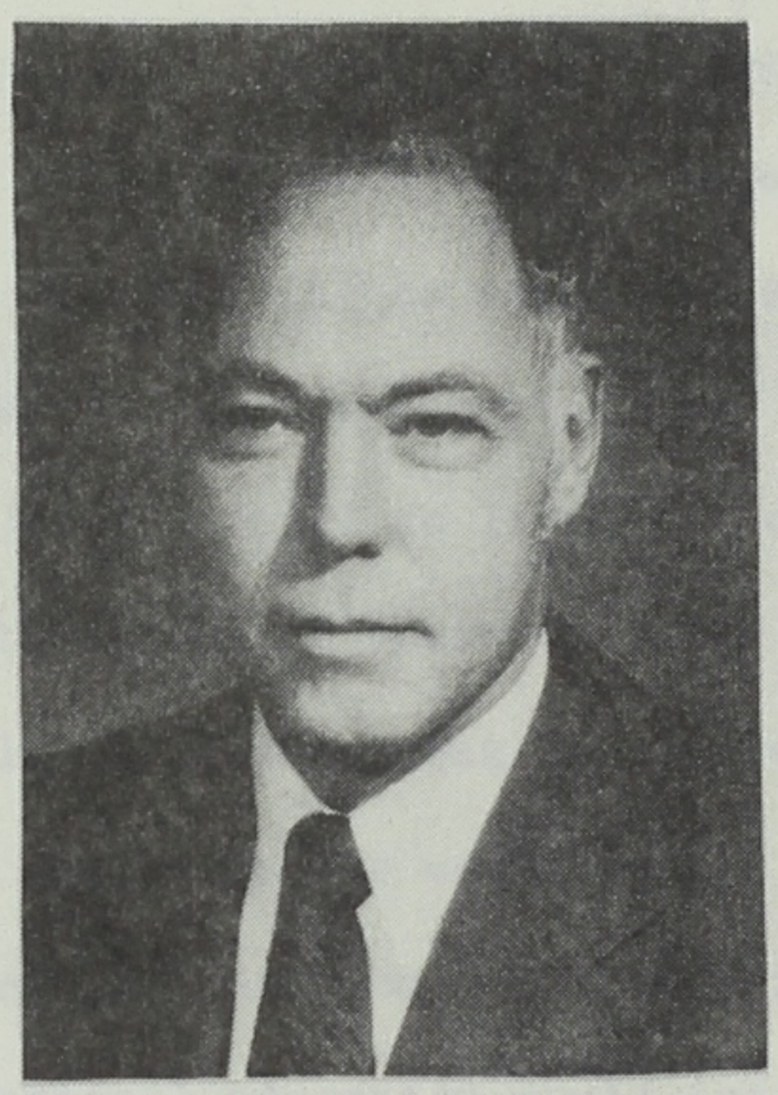
completion of the study in 1961, the House of Representatives directed the State Department of Public Instruction to present a plan along with appropriate legislative proposals for a statewide system of public community colleges. With this mandate, Paul Johnston, State Superintendent of Public Instruction, assumed the leadership of the movement and presented the requested proposals to the legislature in December, 1962. The General Assembly took no action on the proposals in 1963, and appointed a legislative committee to work with the Legislative Research Bureau and the Department of Public Instruction in the development of acceptable legislation by 1965. With David Bechtel, Administrative Assistant to Paul Johnston, as chairman of the statewide committee representing all segments of higher education, a plan using many of Gibson's recommendations was developed and accepted by the legislature in 1965. John Kibbie, Chairman of the Senate Education Committee in 1965, was very instrumental in securing legislative approval. He worked very closely with State Superintendent Paul Johnston in the preparation of legislation that was acceptable. Boyd Greaber, State Consultant for Junior Colleges, played a positive role in the planning stages. Once the community colleges were formed, Dr. William Baley was named Associate State Superintendent of Area Schools and Career Education. Charles Moench, Director, Instructional Services for the Community Colleges during the 15 years, worked very closely and cooperatively with the

superintendents of the colleges in every phase of the development and growth of the colleges. The three state universities maintained a positive attitude toward the community colleges. Dr. Robert O. Benton replaced Paul Johnston as State Superintendent of Public Instruction in 1972, and continued the strong support and leadership from that office. Pictures of Paul F. Johnston, State Superintendent, Department of Public Instruction, 1961-1972; David H. Bechtel, Administrative Assistant to the State Superintendent, 1961-present; Senator John P. Kibbie, 1965-1972; and Dr. Robert Benton, State Superintendent, Department of Public Instruction, 1972-present, appear in Figure 4.

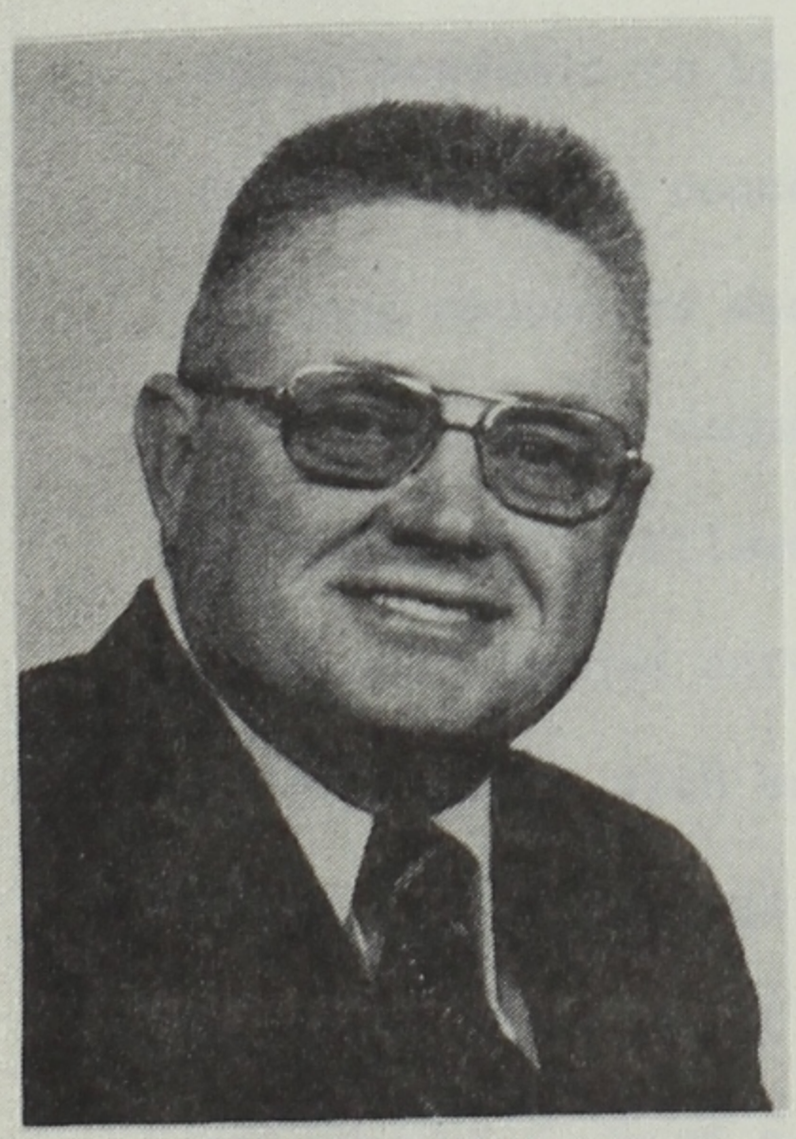
5. What was the success of the community college system during the first 15 years? The rapid rate of development, growth, and student appeal was truly phenomenal, and beyond the expectations of most. Full-time equivalent enrollment grew from the 9,000 enrolled in the local junior colleges in 1965, to more than 48,000 in 1980. Headcount enrollment in the same period grew from 11,000 to 2,000 short of 500,000 students. Of the graduates of vocational programs in 1978 available for employment, 85 percent were employed in the field for which they were trained one year following graduation. Students transferring to the three state universities experienced an initial drop in grade point averages, but tended to regain the loss in succeeding school terms.



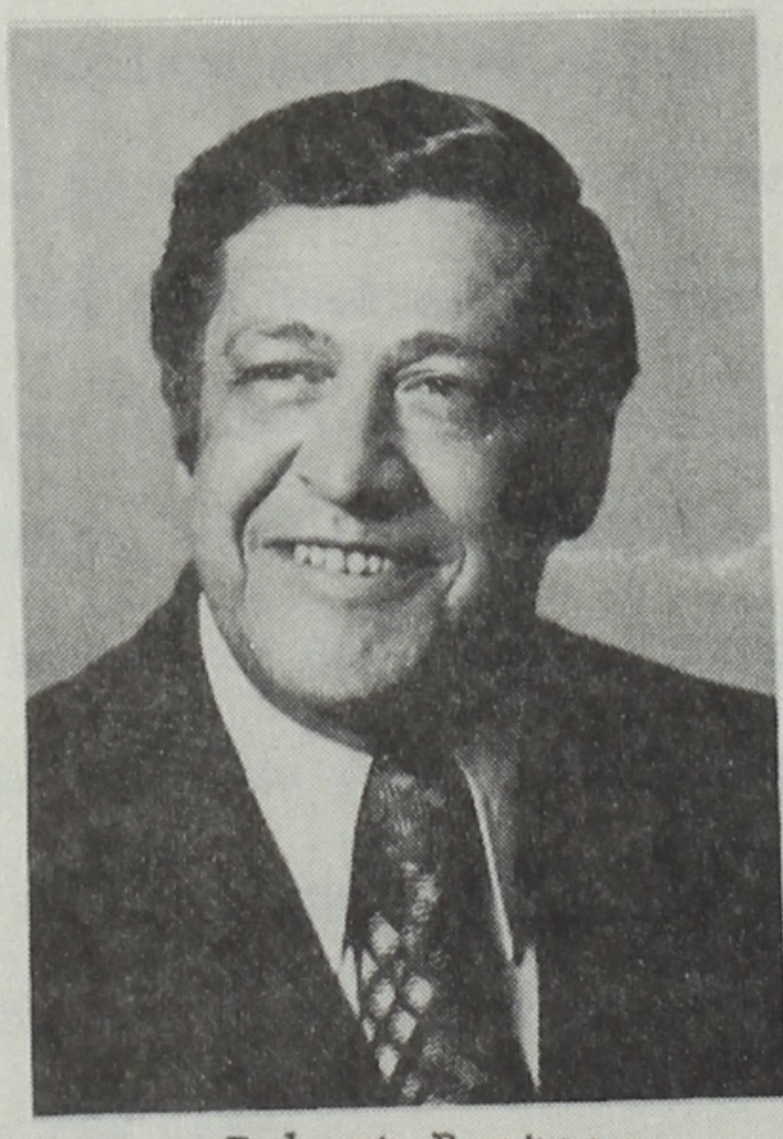
Paul F. Johnston



David H. Bechtel



John P. Kibbie



Robert Benton

Figure 4. Leaders in the community college movement

6. What were some of the forces inhibiting the initiation of a statewide system of community colleges? The private colleges were fearful that the community colleges would absorb a great percentage of the undergraduate students in the state, causing a drop in their enrollment. A great deal of lobbying went on with the legislature and at the county level to limit the curriculum of the new two-year institutions to vocational and adult education. The sentiment was also expressed that the state already had enough colleges and that finances would not be adequate to share with another layer of education. The vocational educators were fearful that vocational education would suffer in a community college, and the existing junior college educators were concerned that vocational education was not sufficiently academic to be taught in a college and to be called higher education. The concern expressed by the vocational and junior college educators was primarily due to a lack of knowledge of a comprehensive community college. By 1965, the junior colleges of Mason City, Ellsworth, Burlington, Fort Dodge, and Marshalltown had reached enrollments in excess of 800 credit students. By comparison with enrollments in previous years, 800 was a large junior college enrollment in Iowa. Most of the deans felt insecure about their own positions and about the colleges they had worked so hard to build over the years.

Conclusions

The following conclusions are based on the findings of this investigation:

1. The comprehensive community colleges, with a broad and diverse curriculum under local control with state coordination, were readily accepted in Iowa. An adequate funding plan with major state participation, access to higher education by greater numbers at low costs, the diversity of curricular offerings account for the growth to 48,000 full-time equivalent students and a headcount of almost 500,000 during 1980.
2. The farm youth, no longer needed on the farm, now had the opportunity to learn a skill needed by business and industry without leaving his/her home.
3. Access to postsecondary education was expanded to include the adult who had never completed elementary or high school and desired a second chance. Many older adults returned to school to obtain a high school diploma, which they used as a springboard to additional education. Many attended school on a part-time basis to take a variety of enrichment courses not available before. Opportunities to learn a skill or become a paraprofessional were made available in more than 175 programs encompassing many more job titles. More than 250,000 adults took advantage of the opportunity to improve their skills in their present job during 1980 alone.
4. Greater numbers were given access to postsecondary education

without adversely affecting the state universities or the private colleges. Growth of college parallel enrollment in the community colleges was minor, while growth in vocational and adult education grew from near zero to almost 40,000 full-time equivalent students in 1980.

5. The quality private colleges and proprietary schools lost some of their fear of competition from the community colleges.
6. The community colleges have the flexibility and the know-how to provide the skilled manpower needed by new and expanding industries.
7. By 1980, the community colleges had reached a degree of maturity and credibility that their place on the ladder of educational opportunity in Iowa was well-accepted.
8. Graduates are well-accepted by business and industry, and those who desire to continue their education are well-accepted by both public and private colleges and universities across the nation.

Limitations

1. The historical method of research lends itself to the subjective judgments and biases of persons being interviewed, and of the researcher as he analyzes and interprets the sometimes unverifiable and incomplete data.
2. Many persons interviewed were reluctant to discuss the controversial issues in detail when the participants were still alive.

3. No attempt was made to make a detailed analysis of the faculty in each of the community colleges or of the faculty in all of the colleges as a group.
4. No detailed analysis was made of the community college graduates from the 15 colleges who transferred to a four-year college.
5. Many persons, organizations and groups that made valuable contributions to the development and growth of the community colleges were not recognized because the researcher did not know about their contribution, or due to lack of space.
6. The scope of the study was too broad to make a detailed analysis of every facet of the operation of the colleges.

Discussion

While the Discussion section and the Recommendations for Practice section are an outgrowth of the study, some of the discussion and recommendations may reflect the experience and thinking of the researcher. The researcher was president of the largest of the community colleges in the state from its beginning in 1966 through 1980.

Even though the state system of community colleges in Iowa has been successful beyond the wildest expectations of most, 15 years of operation have revealed some problems. In the rush to establish the geographic boundaries of the 15 districts during the first year, before the legislature could restrict the number, some hasty decisions were made. As a percentage of the state's population, district size ranges from 3.6 percent in District VI (Marshalltown) to more than 19 percent in District

XI (Des Moines).

The minimum guidelines of assessed property valuation, general population, and high school population forced the size of the college districts in the sparsely populated areas of the state to be so large geographically that many students were beyond reasonable commuting distance of the campus. This condition forced the student to obtain private housing near the campus or forego the opportunities offered in the new colleges. During the 15-year period, some schools found the population and financial base inadequate to support an effective and efficient comprehensive community college program. High program costs due to small class size and low enrollment in general result in greater support from general state aid allocations. Districts XIV (Creston), District VI (Marshalltown), and District III (Estherville), required approximately $300 per FTEE from state aid above the state average support of $971 in 1980. If it is the political decision that all of the colleges remain open, then the legislature should develop a funding formula that takes into account the disparity in costs due to some districts having a low population and property assessment base. The method of allocating funding during the 15-year period usually was that each year a percentage was added to the operating cost of the previous year regardless of the number of students enrolled. Eventually this procedure will have an adverse effect upon efficiency and effectiveness within the various colleges.

Generally speaking, adequate funding was available to the colleges during the 15 years to practice the "open door-open access" concept to

all who might benefit. The task remaining is to provide equal opportunity for each person to develop to his/her maximum potential from whatever level of ability or achievement he/she has attained. There was concern that the sense of mission had worn thin and that those students in the greatest need of help would be left out again as the faculty and colleges slipped into a more elitist attitude.

Many of the superintendents of the colleges have argued that revenue bonding, and permitting the acquisition of student housing, is the best way to assure equal access to all students in each college district. District XI (Des Moines) has found that approximately 1,400 students each year, including 400 from other districts, locate private housing near the college or in Des Moines in order to be able to work either part or full-time while attending college. Employment probably was not available in the small towns and rural areas of their home college district. Student housing should be available at selected sites as a solution to the problem of equal access than for each college to acquire student housing on campus.

There exists a danger of complacency on the part of all colleges. Much has been accomplished and everyone feels good about the record being made by students upon graduation. There is reliable feedback from the three state universities where arts and science graduates of the community colleges in Iowa must compete with graduates of community colleges in other states and with native students, in and out of state. With the exception of a very few graduates from limited programs in private trade schools, there is little basis for comparison of the performance of the

graduates of the vocational-technical programs in Iowa's community colleges. Care must be exercised to ensure that the programs maintain quality.

There is a shortage of programs in the community colleges in Iowa that require the depth of study in math and science to produce engineering technicians as opposed to skilled craftsmen, mechanics, operators, and service workers. True, most of the graduates obtained employment but not always at the level needed by modern industry.

Recommendations for Practice

Other researchers will find in this study a record and an analysis of the events of the transition period from the locally-owned academic junior colleges to a statewide system of comprehensive community colleges. A rather detailed account of the first 15 years of operation will also be available. Perhaps some of the lessons learned during the period of the study can be used to advantage in the future.

Contrary to the expressions of some of the college presidents, the leadership role of the personnel of the State Department of Public Instruction should be stronger. It should not be necessary that 100 percent consensus be obtained before taking positive and progressive action on a given issue.

More specific recommendations are:

1. Provide greater access to the vocational-technical programs in the community colleges for junior and senior high school students.

2. Initiate a greater number of alternative methods of delivering instruction, including the telenetwork.
3. Provide an opportunity for greater "open entry," or access to portions of a vocational-technical program without the student being classed a "drop-out" when the total program is not completed in successive terms.
4. Provide student housing at sufficient sites to permit access by any student in the state to the vocational- technical programs offered by the community colleges.
5. Provide opportunities for participation in physical education and competitive sports on an intramural and intercollegiate basis, but limit participation in the intercollegiate sports to Iowa residents.
6. Initiate a positive public relations program at the state level and employ a full-time positive manager for it.
7. Intensify the inservice training of all personnel in all of the colleges.
8. Institute some programs of sufficient rigor and high standards that will meet the needs of the industries of the state for technicians.
9. Determine from industries in the leading technologies what their needs are and develop programs to train personnel that will attract and hold modern industry in Iowa.
10. Break down the barriers that prevent graduates ready access to jobs in the larger industries that need the skills of the

graduates.

11. Merge districts or portions of districts when, due to low enrollment, the educational program and related services become inadequate or excessively expensive. District XIV (Creston, with 869 FTEE in a comprehensive community college, is considerably below the size recommended for an effective operation. District III (Estherville), District VI (Marshalltown), and District XVI (Burlington) are marginal for multicampus districts.

Recommendations for Research

Based upon this study, the following recommendations for research concerning the community colleges are presented for consideration:

1. Follow-up study of graduates from the college parallel division of each of the community colleges in Iowa who transfer to a public or private four-year college or university within Iowa. The study should compare the grade point average earned in the community college, the grade point after one term in the four-year college, and the grade point average with the native four-year college student through the baccalaureate program.
2. A study, using a structured personal interview technique, to determine the knowledges and skills needed by technicians and skilled workers in those industries in the state using the more advanced applications of technology. This study would provide indications of new programs needed and give direction concerning the content of existing programs.

BIBLIOGRAPHY

1. American Association of Community Junior Colleges. Facts, American Community-Junior Colleges 1979-1980. Washington, D.C.: Author, 1980.

2. American Association of Community Junior Colleges. 1981 Community, Junior and Technical College Directory. Washington, D.C.: Author, 1981.

3. American Association of Junior Colleges. A Guide to State Legislation for Community Colleges. Washington, D.C.: Author, 1960.

4. American Association of Junior Colleges. 1967 Community, Junior and Technical College Directory. Washington, D.C.: Author, 1967.

5. Armistead, Blenda Woodward. The Virginia Community College System: An Examination after Its First Decade. Ph.D. dissertation, Florida State University, 1977.

6. Baumback, Clifford M. "Approaches to Industrial Development in Iowa." Iowa Business Digest, Bureau of Business and Economic Research. Iowa City, Iowa: State University of Iowa, 1963.

7. Bechtel, David H. "Iowa's Pattern for Area Vocational and Community College Education." Journal on State School Systems Development 1, No. 3 (Fall 1967): 145-62.

8. Bell, Daniel. "The Post-Industrial Society." Views From the Socially Sensitive Seventies. New York: American Telephone and Telegraph Company, 1973.

9. Bogue, Jesse P. The Community College. New York: McGraw-Hill Book Company, Inc., 1950.

10. Carnegie Commission on Higher Education. Reform on Campus. New York: McGraw-Hill Book Company, 1969.

11. Casey, John Wesley. An Appraisal of Public Community Colleges in Iowa. Ph.D. dissertation, Iowa State University, 1963.

12. Chambers, M. M. Higher Education in the Fifty States. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1970.

13. Clark, Burton R. The Open Door College: A Case Study. New York: McGraw-Hill Book Co., 1960.

14. Cole, Thommie Joe. The Historical Development of Junior Colleges in Arkansas. Ph.D. dissertation, University of Arkansas, 1955.

15. Collins, Charles C. Junior College Student Personnel Programs: What They Are and What They Should Be. Washington, D.C.: American Association of Junior Colleges, 1967.

16. Conant, James B. Slums and Suburbs. New York: McGraw-Hill Book Co , Inc., 1961.

17. Cramer, Dean Wesley. Factors Affecting Transfer of Students Entering the Arts and Sciences Division of Iowa Central Community College During the Years 1963, 1964, and 1965. Ph.D. dissertation, Iowa State University, 1971.

18. Crawford, Allan Price. The Junior College Movement in Washington State from 1915-1955 with Proposals for Further Development. Ed.D. dissertation, University of Denver, 1959.

19. Cross, Patricia K. Beyond the Open Door. San Francisco: Jossey-Bass Limited, 1976.

20. Eells, Walter C. The Junior College. New York: Houghton Mifflin Co., 1931.

21. Fields, Ralph R. The Community College Movement. New York: McGraw-Hill, 1962.

22. Flint, Jack M.; Kerr, F. Floyd; and Heinrich, Carl L. The Kansas Junior College. Topeka: Kansas State Department of Public Instruction, 1968.

23. Gibson, Raymond C. Resources and Needs for Higher Education in Iowa, 1960-1970. Des Moines, Iowa: Legislative Research Bureau, 1961.

24. Granade, Charles J. A Study of the Public Junior College Movement in Georgia with Emphasis upon Trends. Ed.D. dissertation, Alabama Polytechnic Institute, 1958.

25. Greaber, Boyd H. "The Area School." Midland Schools 81, No. 4, (March-April 1967): 34-56.

26. Higher Education Facilities Commission. Data Digest on Iowa Post-secondary Institutions. Des Moines, Iowa: Author, 1971.

27. Hillway, Tyrus. The American Two-Year College. New York: Harper and Row, 1958.

28. Hoffman, Warren. Standards for the Establishment of Public Junior Colleges in Iowa as Determined by the Implications of a Historical Survey and Other Criteria. Ed.D. dissertation, University of Colorado, 1963.

29. Howe, Trevor G. "Progress on Iowa's Area Vocational Schools and Area Community Colleges." Midland Schools 80, No. 5 (May-June 1966): 20-26.

30. Iowa College Aid Commission. Data Digest on Iowa Postsecondary Institutions 1980-1981. Des Moines, Iowa: Author, 1981.

31. Iowa Cooperative Study of Post High School Education. Proposal for Progress. Des Moines, Iowa: Iowa Department of Public Instruction, 1967.

32. Iowa Council of Area School Boards. Minutes of Meetings. Des Moines, Iowa: Author, October 1966.

33. Iowa Department of Public Instruction. Annual Financial Reports 1967 through 1980. Des Moines, Iowa: Author, 1980.

34. Iowa Department of Public Instruction. Area School Valuations, Levy and Yield for General and Plant Fund. Des Moines, Iowa: Author, 1980.

35. Iowa Department of Public Instruction. Career Education Needs Information System Cycle IV Report. Des Moines, Iowa: Author, 1981.

36. Iowa Department of Public Instruction. Education Beyond High School Age The Community College. Des Moines, Iowa: Author, 1962.

37. Iowa Department of Public Instruction. Follow-up Study of 1978 Career Education Graduates One Year After. Des Moines, Iowa: Iowa Guidance Services, 1979.

38. Iowa Department of Public Instruction. Opportunities in Iowa's Area Schools. Des Moines, Iowa: Author, 1967-68 through 1979-80.

39. Iowa Department of Public Instruction. Progress Report on Iowa's Area Schools. Des Moines, Iowa: Author, 1969.

40. Iowa Employment Security Commission. Manpower Needs for Iowa, 1970-75. Des Moines, Iowa: Author, 1970.

41. Iowa General Assembly. Acts and Joint Resolutions. 1927, 1931, 1946, 1949, 1957, 1959, 1965, 1967, 1969, 1970, 1971, 1975, 1976, 1977, 1978, 1979.

42. Iowa General Assembly. Journal of the House, Resolution 6, 1961.

43. Iowa Legislative Advisory Committee. Higher Education Study. Mimeographed. Des Moines, Iowa: Author, 1961.

44. Iowa State Board of Public Instruction. Minutes of Meetings. Des Moines, Iowa: Author, September 1965, June 1955, 1958, 1962, and December 1973.

45. Johnson, Max R. A History of the Public Two-Year College Movement in Iowa: 1918-1965. Ed.D. dissertation, Colorado State College, 1967.

46. Kenyon, Bertel Segner, III. A History of the Community College Movement in North Carolina, 1927-1963. Kenansville, N.C.: James Sprunt Press, 1974.

47. Koos, Leonard V. The Junior College Movement. New York: AMS Press, 1970.

48. Lagomarcino, Virgil S. An Appraisal of the Public Junior Colleges in Iowa. Ph.D. dissertation, Iowa State University, 1955.

49. Lawson, John B. "Vocational Preparedness." American Vocational Journal 38 (September 1963): 17-25.

50. Lombardi, John. "The Surge of Occupational Education." Community College Review 5, No. 3 (Winter 1978): 55-64.

51. Love, Malcolm A. The Iowa Public Junior College: Its Academic, Social, and Vocational Effectiveness. Ph.D. dissertation, University of Iowa, 1938.

52. Lynch, James H., Jr. Born of Necessity: The Two-Year College in New Jersey. Ph.D. dissertation, Syracuse University, 1970.

53. Marland, Sidney P., Jr., gen. ed. Essays on Career Education. Washington, D.C.: U.S. Office of Education, 1973.

54. McConnell, T. R. A General Pattern for American Public Higher Education. New York: McGraw-Hill Book Co., 1962.

55. Medsker, Leland L. The Junior College: Progress and Prospect. New York: McGraw-Hill Book Co., 1960.

56. Meisterheim, Matthew J. A History of the Public Junior College in Illinois, 1900-1965. Ed.D. dissertation, Northern Illinois University, 1974.

57. Meyer, Roy Francis. A History of the Two-Year Public and Private Junior Colleges of Minnesota. Ph.D. dissertation, University of Minnesota, 1956.

58. Mobley, M. D. "A Review of Federal Vocational Education Legislation 1862-1963." Theory into Practice III, No. 5 (1964): 167-71.

59. Monroe, Charles R. Profile of the Community College. San Francisco, California: Jossey-Bass, Inc., 1972.

60. Morris, Smith Hale, Jr. A History of Florida Junior Colleges. Ed.D. dissertation, George Peabody College for Teachers, 1966.

61. Newsham, Louis Robert. Selected Characteristics and Achievements of Reverse Transfer Students in the Iowa Area Community Colleges and Vocational-Technical Schools. Ph.D. dissertation, Iowa State University, 1975.

62. Page, Donald J. Changes in Selected Demographic Characteristics of Students in Iowa's Community Colleges 1970-1974. Ph.D. dissertation, University of Iowa, 1975.

63. Pearce, Donald. The Development of the Junior College in Virginia. Ed.D. dissertation, George Peabody College for Teachers, 1957.

64. Pesci, Frank. The Junior College Movement in Maryland: 1939-1963. Ed.D. dissertation, Catholic University of America, 1963.

65. Reid, Alban Elwell. A History of the California Public Junior College Movement. Ed.D. dissertation, University of Southern California, 1966.

66. Schultz, Richard H. A Study of Fifteen Public Post-High School Vocational and Technical Schools in Iowa During the 1964-65 School Year. M.A thesis, University of Iowa, 1966.

67. Shanahan, John J. Statewide Community College Services. Ph.D. dissertation, University of Michigan, 1977.

68. Shepard, Delbert Austin. Staff Development Needs of Full-time Instructional Staff in Arts and Science/General Education and Career Education/Vocational-Technical Education Programs of Iowa's Community Colleges. Ph.D. dissertation, Iowa State University, 1979.

69. Smith, Gerald W. Illinois Junior-Community College Development 1946-1980. Illinois: Community College Board, Springfield, 1980.

70. Starrak, James A.; and Hughes, Raymond M. The Community College in the United States. Ames: The Iowa State University Press, 1954.

71. Stinchcomb, James B. "The Community College and Its Impact." Police Chiefs' Magazine 30, No. 8 (August 1966): 16-19.

72. Taylor, William F. A Survey of the Development and Current Status of Junior and Community College Education in Kentucky. Ph.D. dissertation, University of Kentucky, 1965.

73. Thornton, James W., Jr. The Community Junior College. New York: John Wiley and Sons, Inc., 1966.

74. U.S. Department of Health, Education, and Welfare. Procedures for the Establishment of Public Two-Year Colleges. US DHEW Bulletin No. 14, 1966.

75. U.S. Department of Labor. Manpower Report of the President and a Report on Manpower Requirements, Resources, Utilization and Training. Washington, D.C.: U.S. Government Printing Office, 1967.

76. U.S. Office of Education. The Federal Government in Education: OE 100. Washington, D.C.: Government Printing Office, 1967.

77. Venn, Grant. Man, Education, and Work. Washington, D.C.: American Council on Education, 1964.

78. Weller, L. David, Jr. A History of Professional Teacher Education at Iowa State University. Ph.D. dissertation, Iowa State University, 1974.

79. Witt, Henry Frederick. An Interpersonal Profile of Area School Instructors. Ph.D. dissertation, Iowa State University, 1971.

ACKNOWLEDGMENTS

The author expresses appreciation to the Des Moines Area Community College for its sabbatical leave policy which permitted him time from normal duties to pursue the study on a full-time basis.

A special appreciation is extended to the writer's advisor, Professor Richard P. Manatt, and to the members of the dissertation committee, Professors Richard Herrnstadt, Roy Hickman, Trevor Howe, Rex Thomas, and William Wolansky for their assistance, patience, and encouragement.

Mr. Charles Moench and David Bechtel of the Iowa Department of Public Instruction were most helpful in providing records and information from memory for the study.

Mrs. Sarah Ronchetto's willingness and availability to do the original typing and the expertise of Mrs. Gwen Ethington in the final typing were indispensable.

Lastly, the writer expresses deep appreciation to his wife, Hilja, for her encouragement, patience, and assistance during the writing phase of the study.

APPENDIX A: SENATE FILE 550

SENATE FILE 550

AN ACT

TO PROVIDE FOR ESTABLISHMENT AND OPERATION OF AREA VOCATIONAL SCHOOLS AND AREA VOCATIONAL SCHOOLS AND AREA COMMUNITY COLLEGES, ESTABLISH A DIVISION OF COMMUNITY AND JUNIOR COLLEGES WITHIN THE STATE DEPARTMENT OF PUBLIC INSTRUCTION AND AN ADVISORY COMMITTEE TO THE STATE BOARD OF PUBLIC INSTRUCTION ON COMMUNITY AND JUNIOR COLLEGES, AND TO REQUIRE ESTABLISHMENT AND ENFORCEMENT OF APPROVAL STANDARDS FOR PUBLIC AND AREA COMMUNITY AND JUNIOR COLLEGES AND AREA VOCATIONAL SCHOOLS.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

Section 1. It is hereby declared to be the policy of the state of Iowa and the purpose of this Act to provide for the establishment of not more than twenty (20) areas which shall include all of the area of the state and which may operate either area vocational schools or area community colleges offering to the greatest extent possible, educational opportunities and services in each of the following, when applicable, but not necessarily limited to:

1. The first two (2) years of college work including pre-professional education.

2. Vocational and technical training.

3. Programs for in-service training and retraining of workers.

4. Programs for high school completion for students of post-high school age.

5. Programs for all students of high school age who may best serve themselves by enrolling for vocational and technical training while also enrolled in a local high school, public or private.

6. Student personnel services.

7. Community services.

8. Vocational education for persons who have academic, socio-economic, or other handicaps which prevent succeeding in regular vocational education programs.

9. Training, retraining, and all necessary preparation for productive employment of all citizens.

Sec. 2. When used in this Act, unless the context otherwise requires:

1. "Vocational school" means a publicly supported school which offers as its curriculum or part of its curriculum vocational or technical education, training, or retraining available to persons who have completed or left high school and are preparing to enter the labor market; persons who are attending high school who will benefit from such education or training but who do not have the necessary facilities available in the local high schools; persons who have entered the labor market but are in need of upgrading or learning skills; and persons who due to academic, socio-economic, or other handicaps are prevented from succeeding in regular vocational or technical education programs.

2. "Junior college" means a publicly supported school which offers as its curriculum or part of its curriculum two (2) years of liberal arts, pre-professional, or other instruction partially fulfilling the

requirements for a baccalaureate degree but which does not confer any baccalaureate degree.

3. "Community college" means a publicly supported school which meets the curriculum requirements of a junior college and which offers in whole or in part the curriculum of a vocational school.

4. "Merged area" means an area where two (2) or more county school systems or parts thereof merge resources to establish and operate a vocational school or a community college in the manner provided in this Act.

5. "Area vocational school" means a vocational school established and operated by a merged area.

6. "Area community college" means a community college established and operated by a merged area.

7. "State board" means the state board of public instruction.

8. "State superintendent" means the state superintendent of public instruction.

9. "Planning board" means any county board of education which is a party to a plan for establishment of an area vocational school or area community college.

Sec.3. Boards of education of two (2) or more counties are hereby authorized to plan for the merger of county school systems, or parts thereof, for the purpose of providing an area vocational school or area community college. Such plans shall be effectuated only upon approval by the state board and by subsequent concurrent action of the county boards of education at special meetings, called for that purpose, or at

the regular July meetings of the county boards. No area which has less than four thousand (4,000) public and private pupils in grades nine (9) through twelve (12) shall be approved by the state board as a merged area.

Sec. 4. Upon recommendation of the county board of education and approval by the state board in an area plan, a county school system may be divided to permit parts of the system to merge with one (1) or more merged areas in establishing an area vocational school or area community college. When division is permitted, the county school system shall be divided along local school district boundaries. No local school district shall be a part of more than one (1) merged area. The county board of education shall be the planning board for any portion of the county school system which is to become a part of a merged area.

Sec. 5. Plans formulated for a merged area when submitted to the state board shall include the following:

1. A description of the geographic limits of the proposed area.

2. Total population, population trends, population density, and projected population density of the area.

3. Total school enrollments in grades one (1) through eight (8) within the area.

4. Total school enrollments in grades nine (9) through twelve (12) within the area.

5. Projections of school enrollments within the area.

6. A description of the types of educational offerings and capacities of educational facilities beyond high school existing within the area, or within fifty (50) miles of the center of the area, at the time

of submission of plans.

7. Identification of educational programs needed within the area.

8. An evaluation of local interest in and attitude toward establishment of the proposed area vocational school or area community college.

9. An evaluation of the ability of the area to contribute to the financial support of the establishment and operation of the proposed area vocational school or area community college.

10. Estimated number of students within the area who are eligible to attend the proposed area vocational school or area community college.

11. The curriculum intended to be offered in the proposed area vocational school or area community college and assurances that adequate and qualified personnel will be provided to carry on the proposed curriculum and any necessary related services.

12. The location or locations where the proposed area vocational school or area community college is to be constructed or established if such location or locations have been agreed upon. The site or sites of any proposed area vocational school or area community college shall be of sufficient size to provide for adequate future expansion.

13. The boundaries of director districts which shall number not less than five (5) or more than nine (9) if such districts have been agreed upon. Director districts shall be of approximately equal population.

14. When it is intended that one (1) or more existing vocational schools, community colleges, or public junior colleges are to become an integrated part of an area vocational school or area community college, specific information regarding arrangements agreed upon for compensating

the local school district or districts which operate or operated any existing school or college.

15. Such additional information as the state board may by administrative rule require.

Sec. 6. County boards of educationa may expend public funds for the purpose of formulating plans for a merged area and may arrive at an equitable distribution of cost, subject to approval of the state board, to be paid by each participating board.

Sec. 7. Upon receipt of any plan submitted, the state board shall cause the plan to be examined, conduct further investigation of and hearings on the plan if deemed necessary, and evaluate the plan in relation to all vocational schools, community colleges, and junior colleges existing, proposed, or needed throughout the state. The state board may approve or disapprove the plan or may return the plan to the planning boards for modification and resubmission.

Sec. 8. When a plan is approved, the state board shall issue an order of the approval, a copy of which shall be sent to each of the respective planning boards. The order shall:

1. Officially designate and classify the area school to be established as an area vocational school or area community college.

2. Describe all territory included in the county school systems which is to be a part of the approved area.

3. Officially designate the location or locations of the area vocational school or area community college. If the plan did not specify a location, the state board shall so determine.

4. Officially designate the boundaries of director districts. If the plan did not specify such boundaries, the state board shall so determine.

Sec. 9. When a plan is disapproved, a statement of the reasons for such disapproval shall be forwarded to each of the planning boards. Within fifteen (15) calendar days from the date of receiving such statement, the planning boards or their authorized representative may request a hearing by the state board on the disapproved plan. The state board shall grant the hearing within thirty (30) calendar days after receipt of the request. Upon receiving all evidence and arguments presented by the planning boards or their representative, the state board may reaffirm or reconsider its previous action with respect to the disapproved plan or may request the planning boards to modify and resubmit the plan.

Sec. 10. When a plan proposing formation of a merged area is approved by the state board, each county board of education which is a planning board with respect to the approved plan shall:

1. Within thirty (30) calendar days after approval of the plan by the state board, order published, in all official newspapers of the county, notice of intent to form the proposed merged area. The state board shall prescribe by administrative rule the form and content of such published notices.

2. Within seventy (70) calendar days after approval of the plan by the state board hold a meeting to accept or reject the merger plan. In the event no decision has been made by a county board of education within seventy (70) days, the county board shall be deemed to have approved the

merger plan. The secretaries of the respective boards shall immediately notify the state board of the action taken at the meetings.

Sec. 11. Upon receiving notice that all planning boards have given final approval to the proposal to form a merged area, the state board shall:

1. Officially designate all territory included in the plan approved by the county school systems as a merged area.

2. Direct the county superintendent of the county in which the physical plant facilities of the area vocational school or area community college are to be located to call and conduct a special election to choose the members of the initial governing board of the merged area. If physical plant facilities are to be located in more than one (1) county, the county superintendent of the county in which the school or college administrative offices are to be located shall be responsible for calling and conducting the special election.

Sec. 12. The governing board of a merged area shall be a board of directors composed of one (1) member elected from each director district in the area by the electors of the respective district. Members of the board shall be residents of the district from which elected. Successors shall be chosen at the annual school elections for members whose terms expire on the first (1st) Monday in October following such elections. Terms of members of the board of directors shall be three (3) years except that members of the initial board of directors elected at the special election shall determine their respective terms by lot so that the terms of one-third (1/3) of the members, as nearly as may be, shall expire on

the first (1st) Monday in October of each succeeding year. Vacancies on the board which occur more than ninety (90) days prior to the next annual school election shall be filled at the next regular meeting of the board by appointment by the remaining members of the board. The member so chosen shall be a resident of the district in which the vacancy occurred and shall serve until the next annual school election, at which election a member shall be elected to fill the vacancy for the balance of the unexpired term. A vacancy shall be defined as in section two hundred seventy-seven point twenty-nine (277.29) of the Code. No member shall serve on the board of directors who is a member of a board of directors of a local school district or a member of a county board of education.

Sec. 13. In each merged area, the initial board of directors elected at the special election shall organize within fifteen (15) days following the election and may thereafter proceed with the establishment of the designated area vocational school or area community college. The board of directors shall thereafter organize on the first (1st) Monday in October of each year. Organization of the board shall be effected by the election of a president and such other officers from the board membership as board members so determine. The board of directors shall appoint a secretary and a treasurer who shall each give bond as prescribed in section two hundred ninety-one point two (291.2) of the Code and who shall each receive such salary as shall be determined by the board. The secretary and treasurer shall perform such duties as are prescribed in chapter two hundred ninety-one (291) of the Code and such additional duties as the board of directors may deem necessary. The frequency of meetings other

than organizational meetings shall be as determined by the board of directors but the president or a majority of the members may call a special meeting at any time.

Sec. 14. All expenses incurred in electing the initial board of a merged area shall be prorated among the several county school systems included in the area, in the proportion that the value of taxable property in each county school system, or any portion thereof which is part of the merged area, bears to the total value of taxable property in the area. The superintendent responsible for calling and conducting the election shall certify to each county board of education the amount which each board owes.

Sec. 15. The nomination of candidates, preparation of ballots, and canvass for all elections of members of the board of directors of an area vocational school or an area community college, except as otherwise directed, shall be conducted in the manner provided in sections two hundred seventy-three point five (273.5), two hundred seventy-three point six (273.6), and two hundred seventy-three point seven (273.7) of the Code for members of county boards of education. Nomination papers in behalf of a candidate shall be filed with the secretary of the board of the merged area. Each candidate shall be nominated by a petition signed by not less than fifty (50) qualified electors of the district from which the member is to be elected. The board of directors of each respective merged area shall be responsible for causing the printing of election ballots and the printing of necessary forms used by judges and clerks of election and by secretaries of local school districts in making election

returns. The votes cast in the election shall be returned to the respective boards of directors of the merged areas who shall canvass the vote and issue certificates of election as prescribed in section two hundred seventy-three point seven (273.7), of the Code. Members elected to the board of directors of a merged area shall qualify by taking the oath of office prescribed in section two hundred seventy-seven point twenty-eight (277.28) of the Code.

Sec. 16. A merged area formed under the provisions of this Act shall be a body politic as a school corporation for the purpose of exercising powers granted under this Act, and as such may sue and be sued, hold property, and exercise all the powers granted by law and such other powers as are incident to public corporations of like character and are not inconsistent with the laws of the state.

Sec. 17. The board of directors of each merged area shall prepare an annual budget designating the proposed expenditures for operation of the area vocational school or area community college. The board shall further designate the amounts which are to be raised by local taxation and the amounts which are to be raised by other sources of revenue for such operation. The board of directors shall prorate the amount to be raised by local taxation among the respective county school systems, or parts thereof, in the proportion that the value of taxable property in each system, or part thereof, bears to the total value of taxable property in the area. The board of directors shall certify the amount so determined to the respective county auditors and the boards of supervisors shall levy a tax sufficient to raise the amount. No tax in excess of

three-fourths (3/4ths) mill shall be levied on taxable property in a merged area for the operation of an area vocational school or area community college. Taxes collected pursuant to such levy shall be paid by the respective county treasurers to the treasurer of the merged area in the same manner that other school taxes are paid to local school districts.

Sec. 18. In addition to revenue derived by tax levy, a board of directors of a merged area shall be authorized to receive and expend:

1. Federal funds made available and administered by the state board, for such purposes as may be provided by federal laws, rules, and regulations.

2. Other federal funds for such purposes as may be provided by federal law, subject to the approval of the state board.

3. Tuition for instruction received by persons who reside outside the area, or by persons twenty-one (21) years of age or over or who are high school graduates residing within the area, to be charged and collected in accordance with the rules adopted by the state board.

4. State aid to be paid in accordance with the statutes which provide such aid.

5. State funds for sites and facilities made available and administered by the state board.

6. Donations and gifts which may be accepted by the governing board and expended in accordance with the terms of the gift without compliance with the local budget law.

Sec. 19. Boards of directors of merged areas may acquire sites and

erect and equip buildings for use by area vocational schools or area community colleges and may contract indebtedness and issue bonds to raise funds for such purposes.

Sec. 20. Taxes for the payment of bonds issued under section nineteen (19) of this Act shall be levied in accordance with chapter seventy-six (76) of the Code. The bonds shall be payable from a fund created from the proceeds of such taxes in not more than twenty (20) years and bear interest at a rate not exceeding five (5) percent per annum, and shall be of such form as the board issuing the bonds shall by resolution provide. Any indebtedness incurred shall not be considered an indebtedness incurred for general and ordinary purposes as prescribed under section four hundred seven point one (407.1) of the Code.

Sec. 21. No indebtedness shall be incurred under section nineteen (19) of this Act until authorized by an election. A proposition to incur indebtedness and issue bonds for area vocational school or area community college purposes shall be deemed carried in a merged area if approved by a sixty (60) percent majority of all voters voting on the proposition in the area.

Sec. 22. In addition to the tax authorized under section seventeen (17) of this Act, the voters in any merged area may at the annual school election vote a tax not exceeding three-fourths (3/4ths) mill on the dollar in any one (1) year for a period not to exceed five (5) years for the purchase of grounds, construction of buildings, payment of debts contracted for the construction of buildings, purchase of buildings and equipment for buildings, and the acquisition of libraries, and for the

purpose of maintaining, remodeling, improving, or expanding the area vocational school or area community college of the merged area.

Sec. 23. The board of directors of each area vocational school or area community college shall:

1. Determine the curriculum to be offered in such school or college subject to approval of the state board.

2. Change boundaries of director districts in merged areas after each decennial census or change in boundaries of the merged area to compensate for changes in population if such population changes have taken place.

3. Have authority to determine tuition rates for instruction as authorized under section eighteen (18), subsection three (3) of this Act.

4. Have the powers and duties with respect to such schools and colleges, not otherwise provided in this Act, which are prescribed for boards of directors of local school districts by chapter two hundred seventy-nine (279) of the Code.

5. Have the power to enter into contracts and take other necessary action to insure a sufficient curriculum and efficient operation and management of the school or college and maintain and protect the physical plant, equipment, and other property of the school or college.

6. Establish policy and make rules, not inconsistent with law and administrative rules, regulations, and policies of the state board, for its own government and that of the administrative, teaching, and other personnel, and the students of the school or college, and aid in the enforcement of such laws, rules, and regulations.

7. Have authority to sell any article resulting from any vocational program or course offered at an area vocational school or area community college. Governmental agencies and governmental subdivision of the state within the merged areas shall be given preference in the purchase of such articles. All revenue received from the sale of any article shall be credited to the funds of the board of the merged area.

8. With the consent of the inventor, and in the discretion of the board, secure letters patent or copyright on inventions of students, instructors, and officials of any vocational school or community college of the merged area, or take assignment of such letters patent or copyright and make all necessary expenditures in regard thereto. Letters patent or copyright on inventions when so secured shall be the property of the board of the merged area and the royalties and earnings thereon shall be credited to the funds of the board.

Sec. 24. The board of directors of a merged area initially organized for the establishment of, and which is operating, an area vocational school may with the approval of the state board expand the curriculum of the school to qualify as an area community college. The state board shall upon approval officially classify the school as an area community college.

Sec. 25. The state board shall:

1. Have authority to designate any vocational school or community college as an "area vocational education school" within the meaning of, and for the purpose of administering, the Act of Congress designated the "Vocational Education Act of 1963." No vocational school or community

college shall be so designated by the board for the expenditure of funds under section thirty-five c (35c), subsection (2), paragraph five (5), Title twenty (20), U.SC., which has not been designated and classified as an area vocational school or area community college by the state board.

2. Change boundaries of director districts in any merged area when the board of directors of the area fails to change boundaries as required under section twenty-three (23), subsection two (2), of this Act.

3. Change boundaries of merged areas to take into account mergers of local school districts and changes in boundaries of local school districts, when necessary to maintain the policy of this Act that no local school district shall be a part of more than one (1) merged area. The state board may also make other changes in boundaries of merged areas with the approval of the board of directors of each merged area affected by the change. At any time when the boundaries of a merged area are so changed, the state board may authorize the board of directors of the merged area to levy additional taxes upon the property within the merged area, or any part thereof, and distribute the same so that all parts of the merged area are paying their share toward the support of the school or college.

4. Administer, allocate, and disburse any federal or state funds made available to pay any portion of the cost of acquiring sites for and constructing, acquiring, or remodeling facilities for area vocational schools or area community colleges, and establish priorities for the use of such funds.

5. Administer, allocate, and disburse any federal or state funds available to pay any portion of the operating costs of area vocational schools or area community colleges.

6. Approve, in such manner as it may prescribe, sites and buildings to be acquired, erected, or remodeled for use by area vocational schools or area community colleges.

7. Have authority to adopt such administrative rules and regulations as it deems necessary to carry out the provisions of this Act.

8. Have the power to enter into contracts with local school boards within the area that have and maintain a technical or vocational high school and with private schools or colleges in the cooperative or merged areas to provide courses or programs of study in addition to or as a part of the curriculum made available in the community college or area vocational schools.

Sec. 26. Any local school district which operated a community or junior college for any period between September 1, 1964 and the effective date of this Act may continue to operate such college. Existing public community or junior colleges may be converted into area vocational schools or area community colleges in the manner provided in this Act. In addition, an existing public community or junior college may be converted into an area vocational school or area community college by agreement between the board of directors of the local school district operating the community or junior college and the board of directors of the merged area. Such agreement shall be effective only if approved by the state board of public instruction. Such agreement shall provide for

reasonable compensation to such local school district.

Where the board of any local school district operating a community or junior college and the board of directors of the merged areas are not in agreement on the reasonable value of any public community or junior college which is to be converted, the matters of disagreement shall be decided by three (3) disinterested arbitrators; one (1) selected by the local board, one (1) by the board of the merged area, and one (1) by the two (2) arbitrators so selected. The decision of the arbitrators shall be made in writing and a copy of the decision shall be filed with the secretary of the board of the merged area and the secretary of the local board. Any party to the proceedings may appeal therefrom to the district court by serving notice thereof within twenty (20) days after the decision is filed. Such appeal shall be tried in equity and a decree entered determining the entire matter. The decree so entered shall be final.

Sec. 27. There is hereby established within the state department of public instruction a division of community and junior colleges. The division shall, under the supervision of the state superintendent, exercise the powers and perform the duties with respect to area and public community and junior colleges imposed by law upon the department.

Sec. 28. The state superintendent, with the approval of the state board, shall appoint a full-time director of the division of community and junior colleges and may employ such other qualified personnel as shall be necessary. The director shall be a person with teaching or administrative experience in the field of community and junior colleges or higher education and shall meet such qualifications in the area of

vocational education as the state board deems necessary.

Sec. 29. There is further established a state advisory committee on community and junior colleges which shall consist of nine (9) members. Members of the committee shall be appointed by the governor and shall include:

1. A member of the state board of regents.

2. A member of the state advisory committee for vocational education.

3. A member to represent private universities and colleges.

4. A member to represent public and private junior and community colleges.

5. A member to represent associations which have been established for the purpose of furthering the education and training of individuals with academic, socio-economic, and other handicaps.

6. A member to represent local school districts which offer programs of vocational education.

7. Three (3) members to represent the general public.

Sec. 30. The members of the state advisory committee shall serve for terms of four (4) years but the nine (9) initial appointees shall serve as follows: Four (4) members shall serve from the date of appointment until June 30, 1967 and five (5) members shall serve from the date of the appointment until June 30, 1969. Any vacancy on the committee shall be filled for the unexpired term of the vacancy in the same manner as the original appointment. Members of the committee shall serve without compensation but shall be allowed actual and necessary expenses while

engaged in official duties.

Sec. 31. Prior to August 1 of each year, the advisory committee shall meet and organize. The committee shall annually elect a chairman and such other officers as committee members deem necessary. The chairman of the committee shall be responsible for calling meetings of the advisory committee. Advisory committee members shall meet at least four (4) times a year and at such other times as chairman or the state superintendent deems necessary.

Sec. 32. The advisory committee shall advise the state board on the establishment of area community colleges, on the adoption of standards for area and public community and junior colleges, and other matters relating to area and public community and junior colleges under the jurisdiction of the state board and state superintendent.

Sec. 33. Approval standards for area and public community and junior colleges shall be established by the state board of public instruction and the state board of regents, acting jointly, with the advice of the state advisory committee on community and junior colleges. Such standards shall be issued and enforced by the state department of public instruction which shall certify as approved any area or public community or junior college meeting such standards. Approval standards for area and public community and junior colleges shall include standards for administration, certification and assignment of personnel, curriculum, facilities and sites, requirements for the awarding of diplomas and other evidence of educational achievement, guidance and counseling, instruction or instructional materials, maintenance, school library, and staff.

Sec. 34. Section two hundred fifty-eight point four (258.4), Code 1962, is hereby amended by inserting in line four (4) of subsection seven (7) of such section after the word "programs," the words "area vocational schools and programs".

Sec. 35. Section two hundred eighty point eighteen (280.18), Code 1962, is amended by striking all of lines thirty (30), thirty-one (31), and thirty-two (32).

Sec. 36. Section two hundred eighty-six A point three (286A.3), Code 1962, is hereby amended by striking lines four (4) through eighteen (18) and inserting in lieu thereof the following:

"Approval standards for public community and junior colleges shall be established and approved as prescribed in section thirty-three (33) of this Act, with said standards to be issued and enforced by the state department of public instruction. Eligibility for receipt of state aid for public community and junior colleges shall be determined by the state board of public instruction and the state board of regents. No aid shall be paid to a public community or junior college unless such college meets approval standards."

Sec. 37. Section two hundred eighty-six A point four (286A.4), Code 1962, as amended by chapter one hundred seventy-three (173), Acts of the Sixtieth General Assembly, is here by amended as follows:

1. By inserting in line three (3) of subsection three (3) after the word "the" the words "community or".

2. By adding the following to subsection three (3):

"Merged areas operating an area vocational school or area community

college shall be entitled to general school aid. The general school aid funds allocated to each merged area operating an area vocational school or area community college shall be determined by multiplying two (2) dollars and twenty-five (25) cents by the average daily enrollment of students who are residents of the state and who are attending the vocational school or community college and are carrying twelve (12) or more semester hours of work plus the full-time equivalent of students carrying less than twelve (12) semester hours of work. Multiply this product by the actual number of days the school or college was officially in session. The aid computation shall be made separately for each area vocational school or area community college."

Sec. 38. Section one (1) of chapter one hundred seventy-three (173), Acts 60th General Assembly is amended by striking from line seven (7) the words "one dollar and a half" and inserting in lieu thereof the and figures "two (2) dollars and twenty-five (25) cents".

ROBERT D. FULTON
President of the Senate

VINCENT B. STEFFEN
Speaker of the House

I hereby certify that this bill originated in the Senate and is known as Senate File 550, Sixty-first General Assembly.

_____
ROBERT G. MOORE
Secretary of the Senate

Approved _____, 1965.

_____
HAROLD E. HUGHES
Governor

APPENDIX B: IMPORTANT FACTUAL DATA ABOUT EACH OF THE FIFTEEN COMMUNITY COLLEGE DISTRICTS AS OF JULY 1, 1971

COMMUNITY COLLEGE DISTRICT I

Northeast Iowa Area Vocational-Technical School

Dr. Max R. Clark, Superintendent

Robert Evans, Board President

Major Counties:	Allamakee	Delaware	Howard
	Chickasaw	Dubuque	Winneshiek
	Clayton	Fayette	

Type of Approval:	Vocational School
Administrative Center:	Calmar
Campus Locations:	Calmar and Dubuque
Date Organized:	May 2, 1966
Size of District:	4,600 Square Miles
Number of Directors:	Nine
Assessed Valuation:	$480,850,395
Population of District:	213,278
Number of Public School Districts:	27
Site Acquired:	132.1 Acres
Term of Operation:	Quarter System
Status of Accreditation with North Central Association:	Correspondence

COMMUNITY COLLEGE DISTRICT II

North Iowa Area Community College

Dr. David Pierce, Superintendent

Dr. William McAllister, Board President

Major Counties:	Cerro Gordo	Hancock	Worth
	Floyd	Mitchell	
	Franklin	Winnebago	

Type of Approval:	Community College
Administrative Center:	Mason City
Campus Locations:	Mason City
Date Organized:	May 3, 1966
Size of District:	4,000 Square Miles
Number of Directors:	Seven
Assessed Valuation:	$442,620,296
Population of District:	141,000
Number of Public School Districts:	28
Site Acquired:	304 Acres
Term of Operation:	Semester System
Status of Accreditation with North Central Association:	Accredited

COMMUNITY COLLEGE DISTRICT III

Iowa Lakes Area Community College

Dr. Edwin H. Cramer, Superintendent — Jack Tatum, Board President

Major Counties:	Dickinson	Emmet
	Palo Alto	Clay
	Kossuth	
Type of Approval:		Community College
Administrative Center:		Estherville
Campus Locations:		Estherville and Emmetsburg
Date Organized:		January 12, 1967
Size of District:		3,228 Square Miles
Number of Directors:		Seven
Assessed Valuation:		$331,723,539
Population of District:		85,092
Number of Public School Districts:		27
Site Acquired:		120 Acres
Term of Operation:		Semester System
Status of Accreditation with North Central Association:		Correspondence

COMMUNITY COLLEGE DISTRICT IV

Northwest Iowa Area Vocational School

Dr. Daniel McPherson, Superintendent		Richard Schneider, Board President
Major Counties:	Lyon	Sioux
	O'Brien	Half of Cherokee
	Osceola	
Type of Approval:		Vocational School
Administrative Center:		Sheldon
Campus Location:		Sheldon
Date Organized:		April 27, 1966
Size of District:		2,462 Square Miles
Number of Directors:		Seven
Assessed Valuation:		$239,288,180
Population of District:		69,747
Number of Public School Districts:		21
Site Acquired:		147 Acres
Term of Operation:		Quarter System
Status of Accreditation with North Central Association:		No Application

COMMUNITY COLLEGE DISTRICT V

Iowa Central Community College

Dr. Edwin Barbour, Superintendent — John H. Mitchell, Board President

Major Counties:	Buena Vista	Hamilton	Sac
	Calhoun	Humboldt	Webster
	Greene	Pocahontas	Wright

Type of Approval:	Community College
Administrative Center:	Fort Dodge
Campus Locations:	Fort Dodge, Eagle Grove, Webster City
Date Organized:	April 25, 1966
Size of District:	5,049 Square Miles
Number of Public School Districts:	46
Site Acquired:	106 Acres
Term of Operation:	Semester System
Status of Accreditation with North Central Association:	Candidate for Accreditation

COMMUNITY COLLEGE DISTRICT VI

Merged Area VI Community College

Dr. Donald Skinner, Superintendent — Thomas R. Thompson, Board President

Major Counties:	Hardin	Tama
	Marshall	
	Poweshiek	
Type of Approval:	Community College	
Administrative Center:	Marshalltown	
Campus Locations:	Marshalltown and Ellsworth	
Date Organized:	July 7, 1966	
Size of District:	2,880 Square Miles	
Number of Directors:	Seven	
Assessed Valuation:	$327,935,589	
Population of District:	103,910	
Number of Public School Districts:	22	
Site Acquired:	206 Acres	
Term of Operation:	Semester for All College Parallel	
	Quarter for Vocational at Marshalltown	
Status of Accreditation with North Central Association:	Accredited	

COMMUNITY COLLEGE DISTRICT VII

Hawkeye Institute of Technology

Dr. Travis Martin, Superintendent — Harold L. Brock, Board President

Major Counties:	Black Hawk	Butler
	Bremer	Grundy
	Buchanan	Tama
Type of Approval:	Vocational School	
Administrative Center:	Waterloo	
Campus Location:	Waterloo	
Date Organized:	May 25, 1966	
Size of District:	2,555 Square Miles	
Number of Directors:	Nine	
Assessed Valuation:	$482,268,062	
Population of District:	208,829	
Number of Public School Districts:	26	
Site Acquired:	320 Acres	
Term of Operation:	Quarter System	
Status of Accreditation with North Central Association:	Correspondence	

COMMUNITY COLLEGE DISTRICT IX

Eastern Iowa Community College

Dr. Orville Cornahan, Superintendent William Zaiser, Board President

Major Counties:	Clinton	Muscatine
	Jackson	Scott
Type of Approval:	Community College	
Administrative Center:	Davenport	
Campus Locations:	Davenport, Clinton, Muscatine	
Date Organized:	March 18, 1966	
Size of District:	2,000 Square Miles	
Number of Directors:	Nine	
Assessed Valuation:	$642,674,189	
Population of District:	255,461	
Number of Public School Districts:	24	
Site Acquired	209 Acres	
Term of Operation:	Clinton on Semester System Davenport and Muscatine on Quarter System	
Status of Accreditation with North Central Association:	Muscatine is Accredited Clinton is Candidate Davenport has Correspondence	

COMMUNITY COLLEGE DISTRICT X

Kirkwood Community College

Dr. Selby Ballantyne, Superintendent — B. A. Jenson, Board President

Major Counties:	Benton	Johnson	Washington
	Cedar	Jones	
	Iowa	Linn	

Type of Approval:	Community College
Administrative Center:	Cedar Rapids
Campus Location:	Cedar Rapids
Date Organized:	May 18, 1966
Size of District:	4,460 Square Miles
Number of Directors	Nine
Assessed Valuation:	$760,163,667
Population of District:	331,362
Number of Public School Districts:	39
Site Acquired:	315 Acres
Term of Operation:	Quarter System
Status of Accreditation with North Central Association:	Accredited

COMMUNITY COLLEGE DISTRICT XI

Des Moines Area Community College

Paul Lowery, Superintendent

Rolland E. Grefe, Board President

Major Counties:	Audubon	Dallas	Madison	Story
	Boone	Guthrie	Marion	Warren
	Carroll	Jasper	Polk	

Type of Approval:	Community College
Administrative Center:	Ankeny
Campus Locations:	Ankeny, Boone, Des Moines
Date Organized:	April 23, 1966
Size of District:	6,436 Square Miles
Number of Directors:	Nine
Assessed Valuation:	$1,206,696,342
Population of District:	539,342
Number of Public School Districts:	63
Site Acquired:	240 Acres
Term of Operation:	Quarter System
Status of Accreditation with North Central Association:	Correspondence

COMMUNITY COLLEGE DISTRICT XII

Western Iowa Area Vocational School

Dr. Robert Kiser, Superintendent — Gaylord Smith, Board President

Major Counties:	Crawford	Plymouth
	Ida	Woodbury
	Monona	One Half of Cherokee
Type of Approval:		Vocational School
Administrative Center:		Sioux City
Campus Locations:		Sioux City
Date Organized:		December 8, 1966
Size of District:		3,566 Square Miles
Number of Directors:		Nine
Assessed Valuation:		$412,806,305
Population of District:		173,509
Number of Public School Districts:		30
Site Acquired:		139 Acres
Term of Operation:		Quarter System
Status of Accreditation with North Central Association:		Application

COMMUNITY COLLEGE DISTRICT XIII

Iowa Western Community College

Dr. Robert D. Looft, Superintendent		W. D. Baer, Board President	
Major Counties:	Cass	Mills	Shelby
	Fremont	Page	
	Harrison	Pottawattamie	
Type of Approval:		Community College	
Administrative Center:		Council Bluffs	
Campus Locations:		Council Bluffs and Clarinda	
Date Organized:		May 26, 1966	
Size of District:		4,263 Square Miles	
Number of Directors:		Nine	
Assessed Valuation:		$456,055,905	
Population of District:		238,686	
Number of Public School Districts:		33	
Site Acquired:		282 Acres	
Term of Operation:		Quarter System	
Status of Accreditation with North Central Association		Correspondence	

COMMUNITY COLLEGE DISTRICT XIV

Southwestern Area Community College

Dr. William Pierce, Jr., Superintendent — Dr. Harold Coudit, Board President

Major Counties:	Adair	Decatur	Taylor
	Adams	Montgomery	Union
	Clarke	Ringgold	

Type of Approval:	Community College
Administrative Center:	Creston
Campus Location:	Creston
Date Organized:	April 24, 1966
Size of District:	4,910 Square Miles
Number of Directors:	Eight
Assessed Valuation:	$208,922,987
Population of District:	81,354
Number of Public School Districts:	22
Site Acquired:	406 Acres
Term of Operation:	Semester System
Status of Accreditation with North Central Association:	Correspondence

COMMUNITY COLLEGE DISTRICT XV

Indian Hills Community College

Dr. Mel Everingham, Superintendent — Stephen Gerard, Board President

Major Counties:	Appanoose	Keokuk	Monroe	Wapello
	Davis	Lucas	Van Buren	
	Jefferson	Mahaska	Wayne	

Type of Approval:	Community College
Administrative Center:	Ottumwa
Campus Locations:	Ottumwa and Centerville
Date Organized:	April 22, 1966
Size of District:	4,986 Square Miles
Number of Directors:	Nine
Assessed Valuation:	$346,356,516
Population of District:	156,213
Number of Public School Districts:	26
Site Acquired:	287 Acres
Term of Operation:	Quarter System
Status of Accreditation with North Central Association	No Application

COMMUNITY COLLEGE DISTRICT XVI

Southeastern Iowa Area Community College

C. W. Callison, Superintendent — William Dickinson, Board President

Major Counties:	Des Moines, Henry, Lee, Louisa
Type of Approval:	Community College
Administrative Center:	Burlington
Campus Locations:	Burlington and Keokuk
Date Organized:	July 29, 1966
Size of District:	1,581 Square Miles
Number of Directors:	Five
Assessed Valuation:	$268,519,582
Population of District:	111,500
Number of Public School Districts:	13
Site Acquired:	161 Acres
Term of Operation:	Quarter System
Status of Accreditation with North Central Association:	No Application

APPENDIX C: PERSONAL INTERVIEWS AND LETTERS

Personal Interviews and Letters

Interviews

Anderson, Duane, Professor of Higher Education and Director of Community College Affairs University of Iowa 1964 - Present.

Baley, William M., Associate Superintendent, Area Schools and Career Education Branch 1967 - Present.

Bechtel, David H., Administrative Assistant to the Iowa Superintendent of Public Instruction 1959 - Present. Chairman of the Committee on the Community College Legislative Proposal 1962.

Benton, Robert D., State Superintendent and Executive Officer of the State Board of Public Instruction 1972 - Present.

Greefe, Mary Mrs., Member, Board of Education City of Des Moines 1962 - 1970.

Holmes, Glen, Retired, Professor, Adult Education, Iowa State University 1956 - 1976.

Johnson, Paul F., Retired, Iowa Superintendent of Public Instruction 1961 - 1972.

Johnston, C. J., Director, Adult Education, State Department of Public Instruction 1963 - 1972.

Kibbie, John, Chairperson, Senate Education Committee 1965 - 1967.

Maggert, James, Aide to Governor Erbe 1961 - 1963.

Moench, Charles R., Director, Area School Division.

Moorhead, David L., President, Iowa Association of County Superintendents; Member, State Committee on Public Area Community Colleges 1961 - 1962; Superintendent, Ames Public Schools 1962 - Present.

Newsham, Louis R., Consultant, Community Colleges and Continuing Education, Iowa Department of Public Instruction 1962 - 1964; Dean, Academic Affairs Fort Dodge Community College 1962 - Present.

Presidents, Iowa Community Colleges 1966 - 1980.

Letters

Boyd, William, Dr., President, University of Iowa 1967 - 1981.

Bryan, Ray, R., Retired, Head, Department of Education Iowa State University until 1968; Head of Department of Professional Studies 1968 - 1975.

Hughes, Harold, Governor of Iowa 1963 - 1968.

STATE LIBRARY OF IOWA
3 1723 02097 0950