

ANALYSIS OF INSTITUTIONAL OBJECTIVES IN
MICHIGAN COMMUNITY COLLEGES

Thesis for the Degree of Ed. D.
MICHIGAN STATE UNIVERSITY

John Robert Kimball

1960

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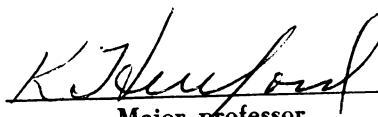


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ABSTRACT

ANALYSIS OF INSTITUTIONAL OBJECTIVES IN MICHIGAN COMMUNITY COLLEGES

by John Robert Kimball

It was the purpose of this study to conduct an analysis of the objectives of the community colleges of Michigan and to determine relationships existing between the perceptions of teachers and administrators of selected community colleges as to appropriate objectives. An analysis of community college bulletins and of the literature in the field led to the conclusion that the general, broad objectives for the community college could be defined in five areas. These were: (1) To provide programs of general education; (2) To provide college parallel and transfer credit courses; (3) To provide terminal programs; (4) To provide programs in adult education and community service; (5) To provide programs in guidance.

Operational hypotheses for the study were established in the null form from the following general hypothesis: "No significant differences will be found within or between administrative and teaching groups in the community colleges of Michigan as to their perceptions of objectives for the community college."

The methodology for testing the hypotheses consisted of three steps: (1) An analysis of the programs of all the

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community colleges in Michigan whose programs had been in operation for three years prior to 1959, in order to divide the colleges into two groups, those offering a comprehensive program in terms of the five defined objectives and those offering a limited program in terms of the objectives.

(2) The administration of a questionnaire to five selected community college faculties, two from the colleges with comprehensive programs and three from colleges with limited programs. This questionnaire purported to determine the perceptions of the community college administrators and teachers as to purposes for the community college as an institution. (3) Statistical analysis of the data to determine if significant differences existed between and within the groups studied.

Data were collected on 143 individuals from the five colleges surveyed. Hoyt's Test of Reliability was applied and it was determined that the instrument was reliable. The F test was applied to determine homogeneity of variance between the groups tested and the results were satisfactory at the 5% level. The Student's t Test was used to determine the significance of differences between the responses of all the groups sampled. This test indicated that no general, significant differences existed within or between the groups.

Further analysis was conducted on questionnaire items where the mean of responses for the various groups was widely varied. Individual items were found to receive different

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types of response from administrators and teachers in some areas of the questionnaires. The analysis of the items also indicated some differences of perception between the two general types of college surveyed. A final analysis was conducted on responses concerned with perceptions of the completeness of the programs, perceptions of strongest and weakest programs, and perceptions of barriers to the achievement of comprehensive programs.

It was concluded from this study that while no general differences in response to the questionnaire could be attributed to institutional type or to the fact that the respondent was an administrator or teacher, differences in response to certain items were evident. The responses of the administrators tended to follow the pattern of established objectives for the community college more closely than did the responses of the teachers. Differences in responses between the two groups were also noted in the areas of admission standards for the community college and of general control. The study provided implications for curriculum development and for administration in the community colleges.



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by

John Robert Kimball

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF EDUCATION

College of Education

1960

ACKNOWLEDGMENTS

Grateful acknowledgment is made to Dr. Karl T. Hereford, my major advisor, for his assistance, patience, and ideas throughout the study.

To Dr. Max Smith for his assistance and encouragement.

To Dr. Charles Adrian for his suggestions and encouragement.

To the community college administrators and teachers who cooperated in the study.

And especially to my wife, Jean, and my family, whose understanding and consideration made the completion of the study possible.

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CHAPTER I

DEFINITION OF THE PROBLEM

Introduction

No single type of educational institution in the United States today has evidenced more growth, both in numbers of institutions and in enrollments, than has the community college in the past fifty years. It is estimated that in the 1960-1961 academic year, one out of every four persons enrolled in institutions of higher education will be attending such an institution. Basic to the study of the problem of this thesis is an analysis of the history, growth, and philosophical bases of the community college.

Importance of the Community College in the United States and in Michigan

While there were many two year institutions of higher education in operation in the United States prior to 1900, they generally performed the function of normal schools rather than that of the comprehensive community college. The general establishment of community colleges started after 1900. The first public community college was established at Joliet, Illinois, in 1902. By 1958, 652 community colleges were in existence. Enrollments increased from an estimated 100 students

in 1900 to an estimated 869,720 students in 1958.¹ Long range predictions indicate that this growth will continue at an even more accelerated pace in future years.²

The state of Michigan has experienced a growth pattern which is similar to the national pattern of community college development. The first community college in Michigan was established in Grand Rapids in 1914. At the present time (1960) sixteen community colleges have been established and are operating in the state. Enrollments have risen from 4,022 students in 1951 to 22,784 in 1958. The 1951 figure represented 4.6% of the total college enrollment of the state at that time and the 1958 figure represented 18% of the state's total collegiate enrollment.³ A recent survey of higher education in the state of Michigan indicated a need for twenty-three additional community colleges, one of which has been instituted since the completion of the study.⁴ In this same survey it was also estimated that the potential enrollment of the community colleges of Michigan would be in excess of 80,000 students by 1970.⁵

¹The Junior College Director (Washington, D. C.: American Association of Junior Colleges, 1958), p. 58.

²S. V. Martorana, The Community College in Michigan, Staff Study No. 1 (Lansing, Michigan: Michigan Legislative Study Committee on Higher Education, 1957), p. 61.

³Michigan Council of Community College Administrators, "Your Community Colleges," 1959, pp. 1-2.

⁴Martorana, op. cit., pp. 94-131.

⁵Ibid., p. 34.

Michigan law is permissive in respect to the establishment of community colleges. The basic action consists of a vote by the qualified electors of the proposed community college district. General control and supervision for the establishment of the community college is exercised by the state through the Department of Public Instruction. The Department asks that a community considering the establishment of a community college apply four criteria: (1) The expressed interest of the community in the establishment of such an institution; (2) Conduct a community survey; (3) Provide evidence of sufficient population to produce a minimum enrollment of 200 students after three years of operation; (4) Provide evidence of sufficient financial resources to finance the college at a minimum acceptable level. The law also provides for three possible types of control at the local level: (1) Control by one local Board of Education; (2) Control by a county district Board; (3) Control by a Board representing more than one county or district.⁶

Several cultural, social, and economic forces in the United States have led to the increased enrollment in the community college. Among these factors are the general increase in numbers of students seeking higher education in the United States, the increasing percentage of college-age

⁶Michigan Department of Public Instruction, "Policy of the Superintendent of Public Instruction Regarding Community Colleges in Michigan," 1956. (Mimeographed.)

young people in the population, the rising standards of admission in many colleges and universities and the increasing costs of residence at a college or university. The late Jesse Bogue, an authority on the community college and for many years the Executive Secretary of the American Association of Junior Colleges, has stated,

It is a well known fact that young men and women are going to college in much larger numbers than ever before, that these numbers will increase year by year just from the expanding population, and that the percentage of college-age youth who will seek higher education is also increasing. Paralleling these facts are the advancing costs of attending higher educational institutions away from home, the rising costs for tuition and other fees at both independent and public institutions, the raising of admission and retention standards in large numbers of colleges and universities, and the further fact that many well established colleges and universities will not be able to build fast enough to care for an approximate doubling of enrollments in the next ten years. The situation sketched above is one of the driving forces behind the rapidly expanding junior and community college movement.⁷

Martorana has stated,

The current widespread public interest in the community college arises chiefly because this kind of institution is coming to be recognized as the most ready and reasonable means of meeting certain educational needs that are felt at present in most states.⁸

Purposes of the Community College

The purposes and philosophical assumptions underlying the programs of the community college have been defined by

⁷Edmund Gleazer, Jr., (ed.), American Junior Colleges (Washington, D. C.: American Council on Education, 1960), p. 8.

⁸Martorana, op. cit., p. 53.

such writers as Bogue, Martorana, Hillway, Ellis, Smith, Ward, and by such study commissions as the Legislative Study Commission on Higher Education in Michigan, the National Society for the Study of Education, the American Association of Junior Colleges, and others.

A survey of the literature indicates that there is general agreement among most writers as to the objectives of the community college as an institution. In the fifty-fifth yearbook of the National Society for the Study of Education, The Public Junior College, the yearbook committee states,

Valid purposes of the public junior college can emerge only from the characteristics of society and the needs of individuals. . . . In the light of the foregoing consideration, the four major purposes of the public junior college can be identified as (a) preparation for advanced study, (b) vocational education, (c) general education, and (d) community service. Although these objectives are widely recognized and generally accepted, it is clear that each college has a responsibility for determining its own specific objectives.⁹

In a study to determine the role of the junior college in California,¹⁰ the committee reported,

It is therefore recommended that the junior colleges concentrate on the following purposes:

1. Technical--vocational education.
2. General education.
3. Lower division pre-transfer education.
4. Community service education of post-high school grade, within the range agreed upon for the junior college.
5. Guidance.

⁹Nelson Henry (ed.), The Public Junior College, The Fifty-fifth Yearbook of the National Society for the Study of Education (Chicago: University of Chicago Press, 1956), pp. 68-69

¹⁰California State Board of Education, A Restudy of the Needs of California in Higher Education (Sacramento: State Board of Education, 1955), pp. 52-53.

After an analysis of the officially stated objectives of the community colleges of Michigan, Martorana states,

Beyond the general and usually accepted purpose of all educational institutions, to help individuals to lead a better and richer life as citizens in a democracy, the Michigan community colleges seem to agree strongly on three purposes. Variouslly stated, these are: (1) the provision of courses for students who plan to go on to further collegiate study and a baccalaureate degree; (2) the offering of courses of a terminal occupational nature for persons seeking employment in business, industry, and some other fields immediately after leaving the community colleges; and (3) the provision of a broad and flexible program of continuing and adult education for out of school youth and adults in the community. These, together with several other of the stated objectives such as, "contributing to the cultural enrichment of the locality," "assisting students to make up high school deficiencies," and "providing extensive guidance and counseling aids to the students in the institution," are educational objectives consistent with the service concept held by the community colleges and usually accepted by them.¹¹

The final report of the Michigan Junior and Community College Study Committee, issued in 1958, lists the same general objectives,¹² as does Hillway's book, The American Two Year College.¹³ Such authorities as Bogue, Ells, Ward, and Smith have indicated similar objectives for the community college. A summary of the statements of institutional objectives for all the community colleges in Michigan is included in the Appendix.

¹¹Martorana, op. cit., p. 23.

¹²Michigan Junior and Community College Study Committee, "Final Report to the Governor," 1956. (Mimeographed.)

¹³Tyrus Hillway, The American Two-Year Colleges (New York: Harper and Brothers, 1958), pp. 77-83.

A synthesis of the commonly accepted objectives would be:

1. To provide a program of general education for all students enrolled.
2. To provide college parallel and transfer courses in the general areas of pre-professional courses and in the liberal arts.
3. To provide technical programs which are terminal with the community college and which will equip the student with job skills upon completion of the course of study in the community college.
4. To provide adult education and community service programs.
5. To provide a full program of guidance services.

Relationships Between Official and Perceived Organizational Objectives

The relationships of individuals in organizations to the objectives of the organizations has long been a matter of study.

Sociologists, political scientists, educators, and others interested in the science of administration have all investigated the general area of organizational objectives and their realization. That organizational objectives are necessary has long been accepted. Gulick has stated, "A clear statement of purpose universally understood is the outstanding guarantee of effective administration."¹⁴ The general

¹⁴Luther Gulick, Administrative Reflections from World War II (Tuscaloosa: University of Alabama Press, 1948), p. 77.

objectives for the community college as an institution have been documented previously in this study and the specific goals of the community colleges of Michigan have been listed.

While it is difficult to determine objectively the role of teachers and administrators in the establishment of institutional objectives, such writers as Pritzkau, Sharp, Alberty, and Benne and Muntyan have theorized that the attitudes and perceptions of faculty members do play an important part in determining the curriculum and, hence, the operational objectives of any educational organization.

Sharp has stated,

The teacher is the key figure in the process of guiding children in their experiences for it is he who has direct and prolonged contact with them. . . . This, of course is not the whole story in so far as curriculum development is concerned. Many other factors have to be taken into account, such as adequate financing, state requirements, the social prestige of traditional subjects, the attitudes of the administration and the community, and similar considerations of importance. However, while the development of teachers' personalities is not the only factor to be considered in curriculum development, it is the thesis here that it is the crucial factor.¹⁵

He further states,

The modern concept of the curriculum demands much more initiative and decision making on the part of teachers. They have a considerable say in deciding not only what is to be taught but also how it is to be taught.¹⁶

¹⁵George Sharp, Curriculum Development as Re-education of the Teacher (New York: Bureau of Publications, Teachers College, Columbia University, 1951), p. 2.

¹⁶Ibid., p. 48.

Alberty points out the importance of staff acceptance of goals if programs are to achieve goals: "The staff may decide to accept, perhaps with slight modification, a statement worked out by someone else that 'sounds well'. This, of course, means little more than verbal acceptance that will not influence practice."¹⁷ He has further stated,

The philosophy of education of a school should be the product of the common understandings of all the professional personnel of the school arrived at by rigorous application of the method of intelligence, rather than the expression of the administrative staff, or of a few people chosen by it.¹⁸

It appears reasonable to assume that the community college teacher and administrator could be viewed as similar in their organizational roles to other teachers and administrators in other types of educational organizations. Hence, their perceptions of goals will be important to the organization.

The acceptance of organizational objectives by the members of an organization becomes of exceeding importance if the organization is to meet its goals. Simon, et al., in the book, Public Administration, state,

Organizational behavior is such an obvious part of everyday experience that we are seldom conscious of the psychological reasons for its successes and failures. We sometimes forget that an organization is a group of people behaving. . . . Their behavior is subject to a whole range of influences extending

¹⁷ Harold Alberty, Reorganizing the High School Curriculum (New York: The MacMillan Company, 1948), p. 433.

¹⁸ Ibid., p. 435.

back to their births (and before, many psychologists believe) and impinging upon them from all directions at every moment. Their behavior in organizations is a resultant of all these influences.¹⁹

The survival and success of any organization depend upon its ability to get employees and other participants to behave in terms of organizational values to a sufficient extent.²⁰

The authors go on to point out that although all individuals in organizations are subject to a variety of forces, their behavior in terms of the organization, is somewhat controlled by the organization.

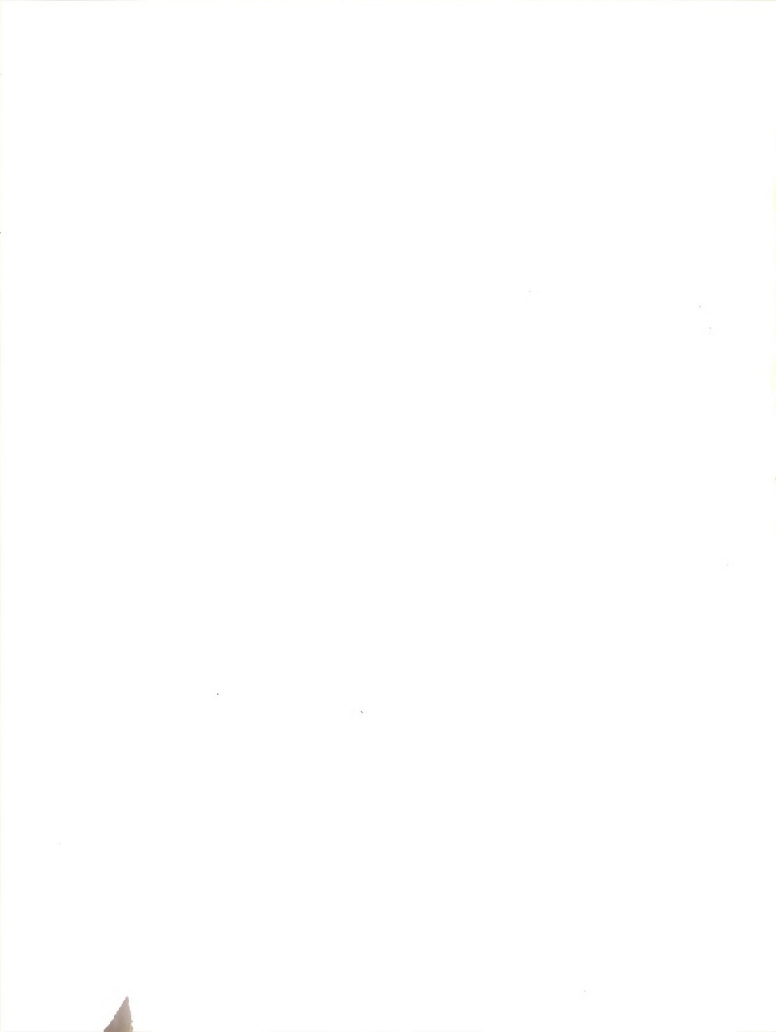
If these outside influences completely determined behavior, people would behave in organizations just as they did everywhere. . . . But in fact, individuals placed in organizational situations do behave differently than they would if they were outside organizations, or if they were in different organizational situations. The organizational system itself to bear upon them strong influences that modify and redirect their behavior tendencies.²¹

Research bears out the contentions of the above mentioned authors, as they concern the role of the individual in the organization. The study of behavior of individuals within an organization as reported by Leighton in the book, The Governing of Men, points up the many conflicting value systems which influence group and individual action. The studies by Lewin and his book, Group Decision and Social Change, cover

¹⁹Herbert Simon, Donald Smithburg, and Victor Thompson, Public Administration (New York: Alfred Knopf, 1958), p. 55.

²⁰Ibid., p. 61.

²¹Ibid., p. 79.



many of the broad areas of group action. Roethlisberger and Dickenson in the book, Management and the Worker, Stouffer, et al., The American Soldier, and Mayo, Social Problems of an Industrial Civilization, further document this area.

Since the perceptions of individuals appear to be of great importance to an organization as it seeks to achieve its organizational goals it is necessary to determine a general theory of perception. Bills has stated, "What we do is consistent with our beliefs about the world in which we live."²² Leighton has stated, "Man acts in terms of what he perceives, and what he perceives must pass not only through his eyes, ears and other special senses to reach his consciousness, but also through the dark and iridescent water of his belief."²³ The research of Lewin,²⁴ Bills,²⁵ Combs,²⁶ and other psychologists have established that the actions of individuals are consistent with their beliefs about reality. Beliefs are formed by many factors, the senses, socio-economic backgrounds, individual, family, and group value premises.

²²Robert Bills, About People and Teaching (Lexington: University of Kentucky, 1955), p. 11.

²³Alexander Leighton, The Governing of Men (Princeton: The Princeton University Press, 1946), p. 288.

²⁴Kurt Lewin, Group Decision and Social Change in Readings in Social Psychology, T. M. Newcomb and E. J. Hartley, eds. (New York: Henry Holt and Company, 1947).

²⁵Bills, op. cit.

²⁶Arthur Combs, "Seeing Is Behaving," Educational Leadership, October, 1958.

Since all these factors, and others, influence our perceptions, and since perceptions are slow to change,²⁷ it seems safe to assume that in any educational organization, including the community college, there will be a tremendous variety of perceptions and beliefs about the appropriate objectives for the organization. It appears unlikely that the establishment of a formal statement of institutional objectives would influence the perceptions of all individuals within the institution to accept the same general set of objectives.

A further dimension of the matter, then, involves the matter of conflict of perception within the organization as to goals. Especially important will be the relationships existing between groups within the organization who serve administrative functions and those in non-administrative positions. March and Simon point out that conflict is always present within organizations and that the degree and direction of conflict may enhance or retard movement toward organizational goals.²⁸ Simon, et al., state,

We should also warn the reader not to regard conflict as necessarily or inherently bad.²⁹

Since professed, official, objectives and functional or actual objectives of the community college are very likely to be present, conflict concerning goals may be resolved toward

²⁷Bills, op. cit., pp. 14-19.

²⁸James March and Herbert Simon, Organizations (New York: John Wiley and Sons, 1958), pp. 112-135.

²⁹Simon, et al., op. cit., p. 311.

acceptance of existing goals or formation of new goals.

Put a little differently, the consequence of the continued coexistence of incompatible or conflicting patterns will be, in the milder cases, tendencies toward change of state and low levels of integration, and at the extreme, dissolution of the system. We therefore assume, that the incorporation of a new pattern in conflict with some pattern already present in the system--including of course the development of emotional investments in both--will set up tendencies to resolution of the conflict.³⁰

It would appear then, that the growth of the community college and its importance as an educational institution in Michigan are well established. The general goals of the institution as a type appear to be included with the official statements of objectives by the Michigan colleges. But it has been pointed out that institutional objectives may be well established and still not be accepted by members of an organization. If the official purposes of these organizations are not generally accepted by members of the organizations or if conflict within the organization makes the objectives functionally inoperative, then a question could be raised as to whether the community college as an organization would provide programs to meet the idealized objectives. The purpose of this study, therefore, was to determine, the relationships existing between the administrative and teaching groups in selected Michigan community colleges, as to their perceptions of various objectives for the community college.

³⁰ Talcott Parsons, Robert Bales, and Edward Shils, Working Papers in the Theory of Action (Glencoe: The Free Press, 1953), p. 165.

Statement of the Problem

The problem of this study was to determine the significance of differences between the administrators and teachers of selected Michigan community colleges in their perceptions for this type of institution as determined by responses on a questionnaire.

Sub Problem I: To determine if significant differences exist between the responses of administrators from different institutions.

Sub Problem II: To determine if significant differences exist between the responses of teachers from different institutions.

Sub Problem III: To determine relationships between the responses of the teaching and administrative groups and the institutional type.

Sub Problem IV: To determine the relative congruence of response between the administrators as a group and the teachers as a group.

Assumptions and Hypotheses

The following general hypothesis was established from the statement of the problem:

"No significant variance will exist in the perceptions of administrators and teachers of selected Michigan community colleges as to their perceptions of appropriate objectives for such institutions."

Since there is no adequate theoretical basis for predicting

the status of the acceptance of objectives among Michigan community colleges, all hypotheses were stated in the null form.

Operational hypotheses were established as follows:

1. Administrators in community colleges offering more comprehensive programs will not vary significantly from administrators in community colleges offering limited programs in their perceptions of appropriate objectives for this type of institution.

2. Faculty members in community colleges offering more comprehensive programs will not vary significantly from teachers in community colleges offering limited programs in their perceptions of appropriate objectives for this type of institution.

3. Administrators in community colleges offering more comprehensive programs will not vary significantly from teachers in the same type of institution in their perceptions of appropriate objectives for this type of institution.

4. Administrators in institutions offering limited programs will not vary significantly from teachers in the same type of institution in their perceptions of appropriate objectives for this type of institution.

5. Administrators in institutions offering more comprehensive programs will not vary significantly from teachers in community colleges offering limited programs in their perceptions of appropriate objectives for this type of institution.

6. Administrators in community colleges offering limited programs will not vary significantly from teachers in institutions offering more comprehensive programs in their perceptions of appropriate objectives for this type of institution.

7. All administrators will not vary significantly from all teachers in their perceptions of appropriate objectives for the community college.

The following alternatives to hypotheses 1-7 were possible and could be accepted, should the analysis of the data show them to be correct:

1. The two groups of administrators will vary significantly in their perceptions.
2. The two groups of teachers will vary significantly in their perceptions.
3. The administrators will vary significantly from the teachers.
4. The administrators will vary significantly from the teachers and will have lower mean scores.
5. The administrators will vary significantly from the teachers and will have lower mean scores.
6. The administrators will vary from teachers.
7. The administrators will vary from teachers and their mean score will be lower.

The cell structure of the hypotheses would be shown as:

	Comprehensive Programs 1	Limited Programs 2
Administrators A		
Teachers B		

Hypotheses

$A_1 = A_2$

$B_1 = B_2$

$A_1 = B_1$

$A_2 = B_2$

$A_1 = B_2$

$A_2 = B_1$

$A = B$

Alternatives

$A_1 \neq A_2$

$B_1 \neq B_2$

$A_1 \neq B_1$

$A_2 < B_2$

$A_1 < B_2$

$A_2 \neq B_1$

$A < B$

Theoretical Assumptions

The following theoretical assumptions underly the study:

1. It was assumed that it is possible to determine an institutional type on the basis of objective criteria.
2. It was assumed that the objective criteria selected for this study in the determination of institutional type will be sufficient to determine discrete differences between institutions in terms of objectives.

3. It was assumed that the five general objectives selected as appropriate for the community college are generally accepted by persons involved in this type of educational institution.
4. It was assumed that perceptual instrumentation has been sufficiently validated as to be acceptable as a research technique.
5. It was assumed that persons responding to the questionnaire are reasonably familiar with the purported general purposes of the community college.

Interest of the Writer

The interest of the writer grew from a general interest in higher education, in the community college, and from the following additional factors:

1. While the objectives of the community college as a type of educational institution have been defined, both in the literature and in official college publications, it is the belief of the writer that within institutions of this type significant differences are to be found in the perceptions of persons involved in the programs and the officially stated objectives of such institutions.

2. It appears that there is evidence to indicate that the perceptions of persons directly involved in educational programs as to appropriate objectives for the institutions may be more significant in determining the quality and direction of the program than will other factors such as official

statements of objectives, finance, community perceptions, et cetera.

3. It was the belief of the writer that relationships between, and perceptions of, groups within organizations such as the community college may be quantitatively defined in terms of the actual institutional program.

4. The community college in Michigan presents an institution undergoing rapid growth. If this institution is to function in terms of established patterns for community colleges in general, it was the belief of the writer that the degree of acceptance of institutional objectives by persons within such institutions will be of importance.

Definition of Terms

Community College

The community college will be defined for purposes of this study, as a public institution within the state of Michigan offering two years of post-high school education and officially recognized by the Department of Public Instruction as a community college. Colleges called junior colleges will be included as community colleges. The study will be limited to publically controlled institutions which have operated for three years or longer.

Objective Criteria

The term objective criteria will be used to designate the specific verifiable criteria established by the writer for the selection of institutions for the study.

Teacher

The term teacher will designate those persons indicating teaching as their principle responsibility on the questionnaire.

Administrator

The term administrator will designate those persons indicating administration as their major responsibility on the questionnaire.

College Parallel Programs

College parallel programs will be defined as those credits transferable to a four year college or university.

Terminal Programs

Terminal programs will refer to programs completed within the community college and which lead to direct vocational preparation.

General Education

General education programs will refer to those programs established for the upgrading of the student. In most cases the credits will not transfer to other institutions and do not apply directly to vocational preparation.

Type A Institutions

Type A institutions are defined as those which do not offer comprehensive programs in all of the five general program areas appropriate to the community college.

Type B Institutions

Type B institutions are defined as those which offer comprehensive programs in all of the five general program areas appropriate to the community college.

Comprehensive Programs

Comprehensive programs will be those of community colleges offering programs in all five areas of the general community college program. More than three general courses of study must be offered in the college parallel, terminal, and general programs and evidence must be presented in official publications of programs in adult education and guidance and community service.

Limited Program

A limited program will be defined as any community college program not offering courses and programs to meet the definition of a comprehensive program.

Official Objectives

Official objectives are defined as those listed in the official publications of the community college.

Limitations of the Study

1. All community colleges in the state of Michigan were not surveyed.
2. No follow up of respondents is possible since respondents were unidentified.
3. The study is exploratory and descriptive in nature.

An Overview of the Study

The community college is a rapidly growing institution of higher education. The general objectives of the institution have been established. The problem of this study was to determine the relationships existing between the administrative and teaching groups of selected community colleges as to their perceptions of institutional objectives. It was theorized that the perceptions of the persons involved in a community college, as a type of organization, will be an important determinant of the operational objectives of the institution.



CHAPTER II

DESIGN OF THE STUDY

Classification of the Colleges

The colleges included in the study were those community colleges in Michigan which had established programs for three years prior to the 1959-1960 school year. Fourteen community colleges met this criteria. These were Alpena, Bay City, Benton Harbor, Flint, Gogebic, Grand Rapids, Henry Ford, Highland Park, Jackson, Kellogg (Battle Creek), Muskegon, Northwestern, Port Huron, and South Macomb.

The colleges were classified on the basis of criteria designed to compare the diversity of programs in terms of the five general objectives of the community college and on the basis of criteria pertaining to community type and geographic distribution.

The criteria pertaining to diversity of program were:

1. Number of students. a. Full time. b. Head Count.
2. Full time faculty.
3. Volumes in library.
4. Volumes per student. (Full time)
5. Number of full time librarians.
6. Total income for operation.
7. Per pupil expenditure.



8. Number of guidance persons.
9. Areas of course work in:
 - a. Liberal Arts/ College parallel.
 - b. Terminal programs.
 - c. General education.
 - d. Adult education.
10. Availability of guidance services for the total community.
11. Evidence of community service programs.
12. Estimated percentage of students enrolled in:
 - a. Liberal Arts/ College parallel areas.
 - b. General education
 - c. Terminal programs
 - d. Adult education

Table 2a exhibits the results of the application of these criteria.

On the basis of these criteria the fourteen colleges were divided into Type A and Type B institutions. The Type B institutions were defined as those offering a limited program in terms of the five general objectives of the community college and the Type A institutions were defined as those offering a more comprehensive program in terms of the five general objectives. No attention was given in this division to such factors as lack of community support, lack of facilities, et cetera, in determining why some programs appeared to be more complete than others.

TABLE 2a

CHARACTERISTICS OF COMMUNITY COLLEGES SURVEYED¹

Institu- tion	Full Time Students	Head Count	Faculty Members	Volumes in Library	Volumes per Student	Number Libraria	Total Oper- ating Income in Dollars	Income Per Full Time Student
1	260	321	16	3,400	13	1	\$ 45,538	175.
2	1,132	2,158	65	2,000	1.8	1.5	534,885	472.
3	483	781	39.5	6,628	13.7	3	253,011	524.
4	1,764	3,667	172	23,000	13	4	1,799,430	1020.
5	179	214	10	11,994	66	.5	86,929	485.
6	1,438	2,127	67	19,500	13.5	2	795,000	552.
7	1,145	5,348	142	16,708	14.5	3	1,458,084	1273.
8	1,760	2,502	54	10,213	5.8	1	575,500	327.
9	609	990	45	7,254	11.9	1.5	251,256	412.
10	487	819	23	4,660	9.7	1	212,614	416.
11	721	1,676	40	*		2	382,500	530.
12	384	680	23	6,977	18	1.5	226,314	588.
13	685	2,968	37	6,015	9	1	333,917	487.
14	746	1,233	40	1,657	2	1	419,331	200.

*Uses general community library.

¹All data pertains to the 1958 academic year. The data was obtained from the Michigan Department of Public Service.

TABLE 2a--Continued

Institu- tion	Guidance Persons	Liberal Arts Areas Offered	Terminal Areas	General Education Courses	Adult Education	Guidance for Community	Community Service
1	1 part time	11 areas	6 areas	Yes	47 courses	Yes	Yes
2	4	37 areas	20 areas	Yes	Full program	Yes	Yes
3	2	17 areas	7 areas	Yes	Full program	Yes	Yes
4	4	27 areas	16 areas	Yes	Full program	Yes	Yes
5	1 part time	6 areas	3 areas	Yes	Limited	No	Limited
6	3	39 areas	13 areas	Yes	Full program	Yes	Yes
7	4	20 areas	18 areas	Yes	Full program	Yes	Yes
8	3	12 areas	6 areas	Yes	Limited	Limited	Limited
9	2	19 areas	10 areas	Yes	Limited	Limited	Yes
10	1 part time	14 areas	5 areas	Yes	Limited	No	Limited
11	1 part time	19 areas	3 areas	Yes	Yes	Limited	Yes
12	0	7 areas	3 areas	Yes	No	No	Limited
13	2	16 areas	6 areas	Yes	Full program	Yes	Yes
14	0	20 areas	3 areas	Yes	No	No	Limited

Institutions classified on this basis as Type B were:
(see Table 2a)

Number 1
Number 5
Number 10
Number 11
Number 12
Number 14

Institutions classified as Type A were:

Number 2
Number 3
Number 4
Number 6
Number 7
Number 8
Number 9
Number 13

After the initial division on the basis of the above mentioned criteria, further division was made on the basis of criteria including: (1) community size, and (2) geographic location.

Type B institutions selected for study were numbers 11, 12, and 14. College number 10 was selected in the original group but returned an inadequate number of instruments for study. College number 1 was eliminated as being very similar to number 12 in community size and location. Number 5 was eliminated because of the small size of the institution and its location in the Upper Peninsular. The three institutions selected gave a spread in community size and are located in widely separated areas of the state.

Type A institutions selected for study included numbers 3, 4, 6, and 13. Numbers 7 and 8 were not selected as number 6

represented a college very similar to numbers 7 and 8. Number 9 appeared to be very similar to number 13 and was eliminated. Colleges 3 and 4 declined to participate in the study since other, intensive surveys had been conducted recently in the institutions and the administrators indicated that further surveying at the present was unwise.

Following the selection and typing of the institutions, conferences were held with two recognized experts on the community college in Michigan to determine if their perceptions as to institutional type were in accord with the division made for the study. Neither wished to be identified in connection with the typing of the institutions, however, both informally concurred with the selections.

Population for the Study

The basic design of the study centered on the comparison of the perceptions of teachers and administrators of the community colleges studied in terms of objectives for this type of institution. Perceptions were compared in the following ways: Teachers x Administrators among and between Type A and Type B institutions. Administrators x Administrators among and between Type A and Type B institutions. Administrators x Teachers among and between Type A and Type B institutions.

The general population for the study consisted of full time faculty members and administrators of the selected community colleges. The individuals responding to the questionnaire identified themselves on the instrument as to whether

they were in the faculty group or the administrative group. Respondents to the instrument were asked to remain anonymous so no further check was made as to the validity of the response of the individual as to their role in the institution. Each respondent identified himself additionally as to sex, age, highest educational degree achieved, and number of years in education at the community college level.

A more complete description of the population which responded to the questionnaire is given in Chapter III of this study.

Construction and Administration of the Instrument

The purpose of the questionnaire instrument was to determine the perceptions of the faculty members of the selected community colleges concerning the general area of objectives of the community college program and such areas as appropriate methods of control, financing, and administration. A large number of questions were constructed concerning these general areas and were gradually reduced to seventy-five selected for use. Of those selected, fifty dealt with the matter of objectives of the community college and twenty-five dealt with other general matters pertaining to the community college. The fifty questions pertaining to the objectives of the community college were divided into five groups of ten questions each pertaining to the five general areas of community college program. Eight of the ten questions were constructed so that

they were roughly paired into four pairs of questions which would represent conflicting points-of-view. For example, one question might generally state that adult education is an important part of the community college program while its opposite would state that adult education is only of little importance. The twenty-five other questions generally were not paired for conflicting views.

A five point rating scale was used to answer the questions. The scale was set up as: (1) strongly agree, (2) tend to agree, (3) no opinion, (4) tend to disagree, (5) strongly disagree. A check list was used for listing the opinions of the respondent. Identification was used to determine the general characteristics of the respondent and a check list was added to determine perceptions of the respondents as to strengths and weaknesses of their institutional programs and their perceptions of barriers to a more complete program. No institutional or personal identification was used in order to avoid embarrassment in this matter. This omission made follow-up on persons not responding virtually impossible.

In order to determine face validity of the instrument and the adequacy of composition, a duplicated copy of the instrument was distributed to ten college faculty members. Five of the persons selected were teachers and five administrators. The persons selected would have been expected, because of factors in their backgrounds or in their

subject matter areas to be reasonably familiar with the community college and its function.

The results of this trial run are displayed in Table 2b. Several questions were noted for errors in composition or for ambiguity. In general, the discriminating items, that is those which were contradictory and should have been so marked, tended to discriminate. The questionnaire was then printed in the form displayed in the Appendix.

The writer again contacted Dr. Max Smith of Michigan State University and asked his assistance in contacting the chief administrative officer of the selected institutions to ask for their cooperation. The letter from Dr. Smith was followed by a letter from the writer, giving a general outline of the study and asking permission to conduct the study. The letter was followed by a telephone call to each institution to confirm permission to conduct the study. Permission was given with the exceptions already noted. (See Appendix for copies of the letters.)

Junior--Community College Questionnaire

The questionnaire covers six general areas:

- Area I -- Liberal Arts and College Parallel areas
- Area II -- General Education
- Area III -- Trade and Technical Programs
- Area IV -- Adult Education and Community Service
- Area V -- Guidance and Counseling Services
- Area VI -- General Control, Administration and Organization.

TABLE 2b

MEAN SCORES FOR ADMINISTRATORS AND TEACHERS
ON TRIAL RUN OF QUESTIONNAIRE

Item	Adminis- trators	Teachers	Item	Adminis- trators	Teachers
1	2.6	3.0	39	3.8	3.2
2	4.6	3.6	40	2.4	1.4
3	3.2	3.1	41	3.8	2.6
4	1.2	1.8	42	1.2	2.2
5	1.4	2.0	43	2.6	3.0
6	2.8	2.8	44	4.2	4.0
7	4.0	2.8	45	1.6	1.6
8	1.6	2.2	46	3.4	2.4
9	3.0	2.1	47	2.2	2.0
10	2.8	2.4	48	3.6	3.0
11	3.2	2.6	49	2.6	2.0
12	2.2	2.8	50	3.4	3.2
13	3.6	3.2	51	1.8	1.8
14	3.0	2.6	52	3.8	3.4
15	3.8	3.8	53	3.4	1.8
16	4.2	4.2	54	4.2	3.8
17	1.6	2.0	55	2.6	3.2
18	2.8	2.0	56	3.8	3.8
19	2.2	1.8	57	2.2	2.2
20	1.4	1.8	58	3.4	3.2
21	2.4	2.6	59	4.0	3.8
22	3.6	3.0	60	3.6	3.0
23	2.0	2.2	61	2.8	2.6
24	3.2	3.4	62	3.6	2.8
25	2.8	2.6	63	2.4	2.2
26	2.2	2.4	64	2.0	2.8
27	2.2	1.4	65	3.2	3.4
28	3.0	2.2	66	3.6	2.8
29	1.6	1.6	67	1.8	3.0
30	3.4	3.0	68	2.4	1.8
31	3.6	2.8	69	1.8	1.6
32	2.4	2.4	70	2.6	2.2
33	2.6	2.2	71	2.2	2.8
34	2.0	2.6	72	2.4	2.4
35	3.2	3.6	73	4.4	3.0
36	3.2	2.8	74	3.6	4.0
37	2.8	3.0	75	3.2	2.4
38	3.0	3.0			

The questionnaire was so constructed that the areas are covered by the following questions:

Area I -- Items 1, 11, 19, 26, 33, 39, 46, 54, 62, and 69.

Area II -- Items 3, 13, 20, 28, 34, 40, 47, 58, 63, and 70.

Area III -- Items 5, 15, 21, 29, 35, 41, 49, 56, 65, and 72.

Area IV -- Items 7, 16, 23, 30, 37, 43, 51, 59, 66, and 73.

Area V -- Items 9, 17, 24, 31, 38, 44, 52, 60, 68, and 75.

Area VI -- Items 2, 4, 6, 8, 10, 12, 14, 18, 22, 25, 27,
32, 42, 45, 48, 50, 53, 55, 57, 61, 64,
67, 71, and 74.

The questionnaire was so constructed that some of the items present opposing or conflicting points-of-view. Therefore, a person answering one item in the agree area should answer its opposite in the disagree area. The matched items are:

3--63, 5--41, 7--37, 11--54, 13--34, 15--49, 16--23,
1--19, 17--24, 26--39, 31--75, 29--56, and 60--68.

Key items in the questionnaire for each area in terms of analysis of answers for agreement or disagreement were:

Area I -- 1, 11, 19, 26, 39, 54.

Area II -- 3, 13, 34, 63.

Area III -- 5, 15, 29, 56, 41, 49.

Area IV -- 7, 16, 23, 37, 43, 73.

Area V -- 17, 24, 31, 60, 75, 68.

The questionnaires were mailed to two of the selected institutions and were delivered personally to the other

institutions. The questionnaires were collected approximately two weeks after they were delivered.

Analysis of the Data

Tabulation

Tabulation of the data collected on the questionnaires was accomplished by placing the results of each questionnaire on International Business Machine (IBM) cards. The cards were punched and verified according to the following schedule: (Since more space was needed than was available on one card, two decks of cards were used.)

Deck 1

Column 1 Institutional Identification

- 1. Number 6 2. Number 13 3. Number 14
- 4. Number 12 5. Number 14

Column 2 & 3 Questionnaire Number

Column 4 Position of Respondent 1. Administrator
2. Teacher

Column 5 Age of Respondent 1. 20-30; 2. 31-40;
3. 41-50; 4. 51-60;
5. Over 60

Column 6 Sex of Respondent 1. Male; 2. Female

Column 7 Degree of Respondent 1. Bachelors 2. Masters
3. Doctors

Column 8 Years of Educational Experience 1. 0-5
2. 6-10 3. 11-15 4. 16-20 5. 21-25
6. 26-30 7. Over 30

Columns 9-48 First 40 questionnaire items

Deck 2

Columns 1-8 Repeat of Deck 1

Columns 9-43 Items 41 through 75 of questionnaire

Column 44 Item I 1. Adequate 2. Inadequate

Column 45 Item II Left Column 1. Liberal Arts

2. General Education 3. Technical

4. Adult Education 5. Guidance

Column 46 Item II Right Column Repeat of Column
45 system

Column 47 Item III 1. Lack of Funds 2. Lack of
facilities 3. Lack of community support
4. Lack of faculty interest 5. Lack
of administrative interest

Column 48 Item IV 1. State 2. Local Tax
3. Students

The cards were key punched, verified, sorted, and tabulated according to the following schedule. Each column was subtotaled.

Statistical Methods

Three statistical techniques were applied to test the hypotheses:

1. Hoyt's estimation of test reliability for unrestricted item scoring methods to determine reliability of the instrument.
2. An F test to determine homogeneity of variance.
3. The T test for significance of difference.

Hoyt's Test for Reliability

The Hoyt method of estimating the reliability of the instrumentation was used. Other methods are generally adapted to instrumentation which gives a weighing of either 1 or 0 in scoring an individual test. The instrument used in this study did not yield this kind of data but was weighted on a five point scale. The Hoyt method provides a formula for estimating the reliability coefficient and the standard error of measurement when item scores are not restricted to 1 or 0. The Hoyt method assumes that the instrument items are independent and that the results are additive. These assumptions are met by the instrumentation. It was assumed that a reliability coefficient of greater than .70 for each section of the instrument for both administrators and teachers would be sufficient to establish the assumption of validity for the instrument.

F Test for Homogeneity of Variance

The F test was applied to determine whether the variance within the four general groups is significant. The four groups are: Administrators from Type A and from Type B institutions and faculty members from Type A and Type B institutions.

The F test assumes a random sample of a normal population and assumes that the populations have the same variance but not necessarily the same mean. The mathematical model for this test is:

	Type A 1	Type B 2
Administrators A		
Faculty B		

Since the F test formula is:

$$F = \frac{\text{Mean square between groups}}{\text{Mean square within groups}}$$

the hypothesis becomes:

$$A_1^2 = A_2^2$$

$$B_1^2 = B_2^2$$

$$A_1^2 = B_1^2$$

$$A_2^2 = B_2^2$$

A .05 level of significance was established.

T Test for Significance of Difference

It should be noted that the mathematical model for the hypotheses of this study was:

	Type A 1	Type B 2
Administration A		
Faculty B		

The hypotheses to be tested for significance were:

$$\begin{array}{lll} \bar{A}_1 = \bar{A}_2 & \bar{A}_2 = \bar{B}_2 & \bar{A} = \bar{B} \\ \bar{B}_1 = \bar{B}_2 & \bar{A}_1 = \bar{B}_2 & \\ \bar{A}_1 = \bar{B}_1 & \bar{A}_2 = \bar{B}_1 & \end{array}$$

Since the data collected in the study was tabulated as mean scores, since the data is additive, the population was assumed to be normal, to have homogeneity of variance and to have made independent answers to items, the t Test for significance of difference was selected as the appropriate statistical method. Significance was assumed at the .05 level. In the cases $\bar{A}_1 = \bar{A}_2$, $\bar{B}_1 = \bar{B}_2$, $\bar{A}_1 = \bar{B}_1$, $\bar{A} = \bar{B}$, the two-tailed t Test is employed since the alternative hypotheses are that in each case A will not be equal to B. In cases $\bar{A}_2 = \bar{B}_2$, $\bar{A}_1 = \bar{B}_2$, and $\bar{A} = \bar{B}$, the alternative hypotheses would predict that if A is not equal to B, that it will be greater than B so a one-tailed t Test is employed. Again a .50 level of significance was established.

Summary

The design for the study involved the division of the community colleges selected for study into two groups, those offering comprehensive programs in the areas of liberal arts, terminal programs, adult education, guidance, and community service, and those offering less comprehensive programs. Typical institutions from each group were then selected for study. A perceptual questionnaire to determine the perceptions of administrators and faculty members in the selected institutions was constructed and administered. The data returned on the questionnaires was recorded on IBM cards for further analysis. The Hoyt test for reliability of unrestricted item

scoring was applied to determine instrument reliability with a reliability of more than .7 demanded. Homogeneity of variance to determine that results of the questionnaire were more significant than those which would have been achieved by chance was determined by the F test with a .05 level of significance demanded. Significance of difference between the various groups was determined by the t Test for significance of difference with a .05 level of significance demanded.

CHAPTER III

CHARACTERISTICS OF THE POPULATION

The population of this study was drawn from teachers and administrators of the five community colleges surveyed. It has been established that the colleges were comparable except in the area of program. A total of 210 teachers and administrators were employed by the five institutions. Of this total 18 were classified as administrators and 192 as teachers. Administrators were classified as Directors, Deans, Presidents, Assistant Directors, and Directors of Counseling and Guidance. Teachers were considered to be those persons whose major activity in the institution was classroom teaching. The directors of each institution surveyed were instructed verbally as to how the questionnaire should be distributed. Since individuals were not identified in answering the questionnaire, it was assumed that their indications of position were compatible with the criteria.

Thirteen of the 18 administrators responded to the questionnaire for a 72% response. One hundred thirty of the 190 teachers responded for a response of 67.7%. Responses by institution are given in Table 3a. In no case did less than 62% of the total staff respond. Since the questionnaires

TABLE 3a
RESPONSES TO QUESTIONNAIRE BY INSTITUTIONS

Institu- tion	Total Faculty	Returned Question- naires	% Return	Adminis- trators	Teachers
A	65	51	78	3	48
B	37	24	65	4	20
C	35	22	63	2	20
D	23	15	65	3	12
E	50	31	62	1	30
TOTALS	210	143	68%	13	130

were unidentified, a retest on those individuals not responding was not possible. A check was made in each case before the instruments were collected and the director of each institution was asked to urge faculty members to respond to the instrument. It is assumed, therefore, that the responses indicate a reasonable sampling of the opinions of individuals in each institution. In the identification items of age, sex, education degrees attained, and years of experience, each institution includes a variety of responses which may indicate that the responses are a representative sampling of the total staff. The question may be reasonably raised as to whether the 68% sample of the total population is typical of the 32% which did not respond. Since the instrument was administered

in such a way as to preclude follow-up, it must be assumed that the 68% response is typical of the total group. In drawing any conclusions, however, it is necessary to draw conclusions in terms of the sample and not of the total population.

Thirteen administrators responded to the questionnaire. All of the administrators responding were male. Three of the administrators were from Grand Rapids, four from Port Huron, two from Muskegon, three from Northwestern, and one from South Macomb. Two of the respondents were in the 20-30 age group, three in the 31-40 age group, four in the 41-50 age group, and two were in the 51-60 age group. Two did not respond to this item. One of the administrators had a bachelor's degree, one the doctorate, and ten the master's degree with one administrator not responding. Five of the administrators had between 0 and 5 years educational experience in the community college, six had between 6 and 10 years experience, one had between 11 and 15 years experience in the community college, and one did not respond to the item.

Two respondents did not indicate whether they were teachers or administrators. These individuals were arbitrarily classified as teachers.

Thirty-two of the teachers responding were female, ninety-one were male, and seven did not respond to this item. Sixteen of the teachers were in the 20-30 age group, forty-four were in the 31-40 age group, twenty-seven were in the

51-60 age group, and nine were in the group over 60. Thirteen teachers did not respond to this item. Twelve of the teachers listed the bachelor's degree as the highest degree achieved, one hundred two listed the masters degree, thirteen listed the doctorate, and three did not respond to this item. In the category of educational experience, seventy-three of the teachers indicated between 0-5 years, twenty-three indicated 6-10 years, fifteen indicated 11-15 years, five indicated 16-20 years, five indicated 21-25 years, one indicated 26-30 years, and four had over 30 years experience. Five teachers did not respond to this category. A summary of the responses is listed in Table 3b.

TABLE 3b
CHARACTERISTICS OF THE TEACHERS AND
ADMINISTRATORS SURVEYED

Characteristic		Administrators	Teachers
Sex	Male	13	32
	Female	0	91
	No Response	0	7
Age	20-30	2	16
	31-40	3	44
	41-50	4	27
	51-60	2	21
	Over 60	0	9
	No Response	2	13
Highest Educa- tional Degree	Bachelors	1	12
	Masters	10	102
	Doctors	1	13
	No Response	1	3
Years of Experience in Community College	0 - 5	5	73
	6 - 10	6	23
	11 - 15	1	15
	16 - 20	0	5
	21 - 25	0	5
	26 - 30	0	1
	Over 30	0	4
	No Response	1	5

CHAPTER IV

ANALYSIS OF THE DATA

The statistical analysis of the data was conducted according to the design as established in Chapter II. The data were tabulated on IBM cards and also on work sheets. The general data were further sub-divided into the six general areas covered by the instrument: Area I, Transfer and Liberal Arts; Area II, Technical and Terminal Programs; Area III, General Education; Area IV, Adult Education; Area V, Counseling and Guidance; and Area VI, General Control.

Statistical Analysis

Reliability of the Data

The reliability of the data was established by the use of Hoyt's Test for reliability for unrestricted item scoring instruments. The results of this test are recorded in the r column of Table 4a. It was assumed that an r score of .70 or more indicated reliability. The scores for the administrative group indicated a high degree of reliability in all areas. All areas for the teaching group were more than .70 with the exception of Area V which was .62. Since the data for Area V of the teaching group did not meet the

TABLE 4a
HOYT'S TEST FOR RELIABILITY

Area	A	B	T	C	A'	B'	C'	r*
Administrators								
I	92.0	27.6	270.2	150.6	10.2	2.3	1.40	.86
II	161.6	23.9	288.3	102.8	13.5	2.6	0.95	.93
III	92.9	19.3	235.8	123.6	7.7	2.1	1.10	.85
IV	222.8	13.3	311.0	74.0	18.5	1.5	0.69	.96
V	152.1	21.6	280.0	106.3	14.6	2.4	0.98	.93
VI	332.1	18.1	664.6	314.4	27.6	0.75	1.10	.96
Teachers								
I	113.6	30.2	48.2	338.2	4.6	3.3	1.4	.71
II	147.5	45.8	510.5	317.2	5.9	5.1	1.4	.76
III	97.2	74.3	398.4	226.9	3.9	8.2	1.0	.74
IV	202.8	35.3	499.0	260.9	8.1	3.9	2.2	.73
V	112.5	46.6	398.9	239.8	4.5	5.1	1.7	.62
VI	474.9	51.9	1274.0	747.5	18.9	2.1	1.2	.93

*r greater than .70 indicates reliability of items.

standard set for reliability, the results of this area should be considered as unreliable and a limitation of the study.

Since error in measurement effects the mean scores of individuals and groups, the standard error of measurement for the administrative and teaching groups was calculated in each area. This data is recorded in Table 4b along with the calculation of the mean for each group in each area and the standard deviation for each group in each area. Since the standard error of measurement was under 5.0 for the first five areas of the study and was only slightly over 5.0 for Area VI it was assumed that measurement error would not effect the mean scores in a significant manner.¹

Analysis of Differences

A comparison of the total mean scores for all groups in all areas with the standard deviations for all groups in all areas (Table 4b) indicated that the responses were not normal in distribution but were slightly skewed. After consultation with statisticians at the Bureau of Educational Research, Michigan State University, it was determined that the Student's "t" Test would still be the appropriate method for determining significance of differences between the groups studied. While the Student's "t" Test assumes normality of population, it may be used in cases where the population is skewed if equal deviation occurs between the groups tested.

¹Helen Walker and Joseph Lev, Statistical Inference (New York: Henry Holt and Company, 1953), pp. 294-296.

TABLE 4b
 STANDARD ERROR OF MEASUREMENT
 STANDARD DEVIATION
 MEAN OF TOTAL RESPONSE BY AREA

Area	Administrators		Teachers
I	S.E.M.	- 3.74	3.74
	s	17.70	26.60
	$\bar{X}$	- 15.50	12.10
II	S.E.M.	- 3.08	3.74
	s	- 19.90	17.10
	$\bar{X}$	- 20.70	18.20
III	S.E.M.	- 3.31	3.16
	S	- 17.90	17.30
	$\bar{X}$	- 18.60	18.30
IV	S.E.M.	- 2.62	4.69
	s	- 19.00	18.90
	$\bar{X}$	- 19.90	20.10
V	S.E.M.	- 3.13	4.12
	s	- 19.10	18.70
	$\bar{X}$	- 20.00	19.70
VI	S.E.M.	- 5.23	5.47
	s	- 43.40	42.30
	$\bar{X}$	- 43.10	42.90

The results of the F Test described below indicated this quality.²

The F ratio test was applied to the data from the various groups to determine homogeneity of variance. The F ratio test indicates that variations in mean scores of the various groups did not occur due to chance but were a function of the instrument. The results of the F test are recorded in Table 4c. In all cases the observed F ratio was less than the F table at the .05% level. This indicated equality of variance between all groups which were compared and validated the use of the Student's "t" Test for significance of difference. In Table 4c, and in all other tables in this chapter the groups are represented by the following symbols:

- A 1 -- Administrators from Type A colleges
- A 2 -- Administrators from Type B colleges
- B 1 -- Teachers from Type A colleges
- B 2 -- Teachers from Type B colleges

The next step in the analysis of the data was the application of the Student's "t" Test for significance of differences in the responses of the various groups. The formula for the "t" test, as applied in this study was:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S_p^2 \left(\frac{1}{N_1} + \frac{1}{N_2} \right)}} \quad S_p^2 = \frac{\sum X_1^2 - \frac{(\sum X_1)^2}{N_1} + \sum X_2^2 - \frac{(\sum X_2)^2}{N_2}}{N_1 + N_2 - 2}$$

$$df = N_1 + N_2 - 2$$

²Wilfred Dixon and Frank Massey, Introduction to Statistical Analysis (New York: McGraw-Hill Book Co., 1947), pp. 251-254, 280-281.

TABLE 4c
F RATIO TEST

Groups	F Table Figure	Area I	Area II	Area III	Area IV	Area V	Area VI
A1-A2	4.95	.70	.89	1.10	.67	.39	.69
B1-B2	2.79	1.08	.86	.83	1.21	.84	.80
A1-B1	2.92	1.36	1.62	1.28	.70	.88	1.02
A2-B2	3.20	2.94	1.56	.95	1.26	1.86	1.18
A2-B1	3.02	2.71	1.81	1.13	1.04	2.21	1.47
A1-B2	3.09	1.48	1.39	1.07	.85	.74	.82
$\bar{A} - \bar{B}$	2.15	.44	1.36	1.07	1.00	1.05	1.05

The "t" Test was applied to the following groups to compare their responses in each of the six areas of the instrument:

A 1 x A 2

A 1 x B 2

A 1 x B 2

A 2 x B 2

A 2 x B 1

A 1 x B 2

All A x All B

The results of the "t" Test as applied to the various groups, are listed in Table 4d. In order for the "t" Test

TABLE 4d
STUDENT'S "t" TABLE

Groups	"t" Table Score	Area I	Area II	Area III	Area IV	Area V	Area VI
A1-A2	1.80	.53	.02	.11	.23	.47	.28
B1-B2	1.71	.07	.08	.22	.05	.21	.26
A1-B1	1.73	.06	.23	.21	.18	.18	.05
A2-B2	1.75	.74	.32	.15	.13	.18	.07
A2-B1	1.73	1.40	.30	.04	.09	.39	.29
A1-B2	1.74	.30	.26	.11	.13	.35	.26
A -B	1.68	.47	.39	.04	.03	.04	.01

to show significant differences in the responses of the various groups, the computed "t" should have exceeded the "t" figure taken from the distribution table at the .95 level, reading this figure at the appropriate level of degrees of freedom for the n's involved. In no case does the computed "t" meet this criterion. Hence, the results of this test indicate that no significant differences existed between the responses of the various groups as they responded to the questionnaire. The results of this test substantiated the null hypotheses which stated that no significance would be demonstrated between the groups in their responses to the questions concerning objectives for the community college as

an institution. While the results substantiated the hypotheses, they were not compatible with the theory developed in Chapter I concerning the development of institutional objectives in relation to faculty perceptions.

Analysis of Item Differences

Statistical treatment of differences in mean scores on each item is not possible. The Hoyt r applies only to areas and not to individual items. Apparent differences in individual items may be determined by inspection. The analysis of item differences is limited to this method and the results are necessarily qualified.

In conducting the analysis of responses to items in the questionnaire, the first step was to determine the mean responses for each item for the administrators as a group, for the teachers as a group, for the A 1 administrators, the A 2 administrators, for the B 1 teachers, and for the B 2 teachers. This data is recorded in Table 4e.

An examination of Table 4e shows that the responses of administrators as a group differed from the responses of teachers as a group on 16 of the items and the two groups agreed on 59 of the items. In determining agreement and disagreement, all responses of less than 3 were counted as agreement and all responses of more than 3 were counted as disagreement. For example in question number 2, the administrators, as a group, disagreed with the item while the

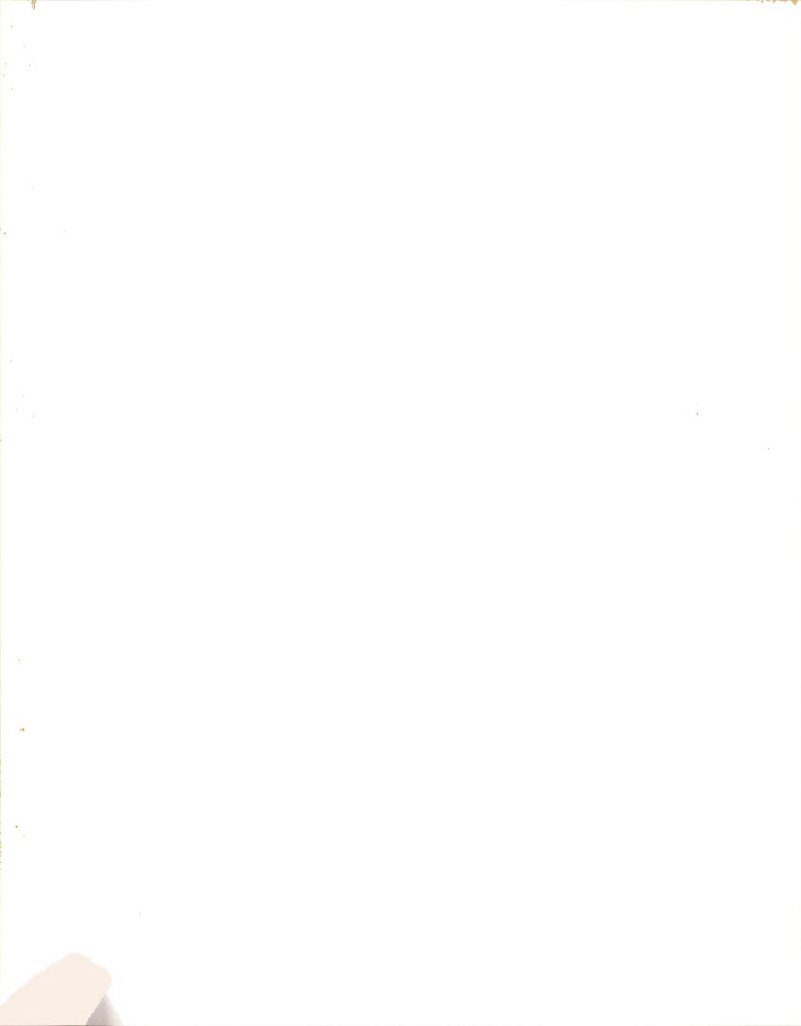


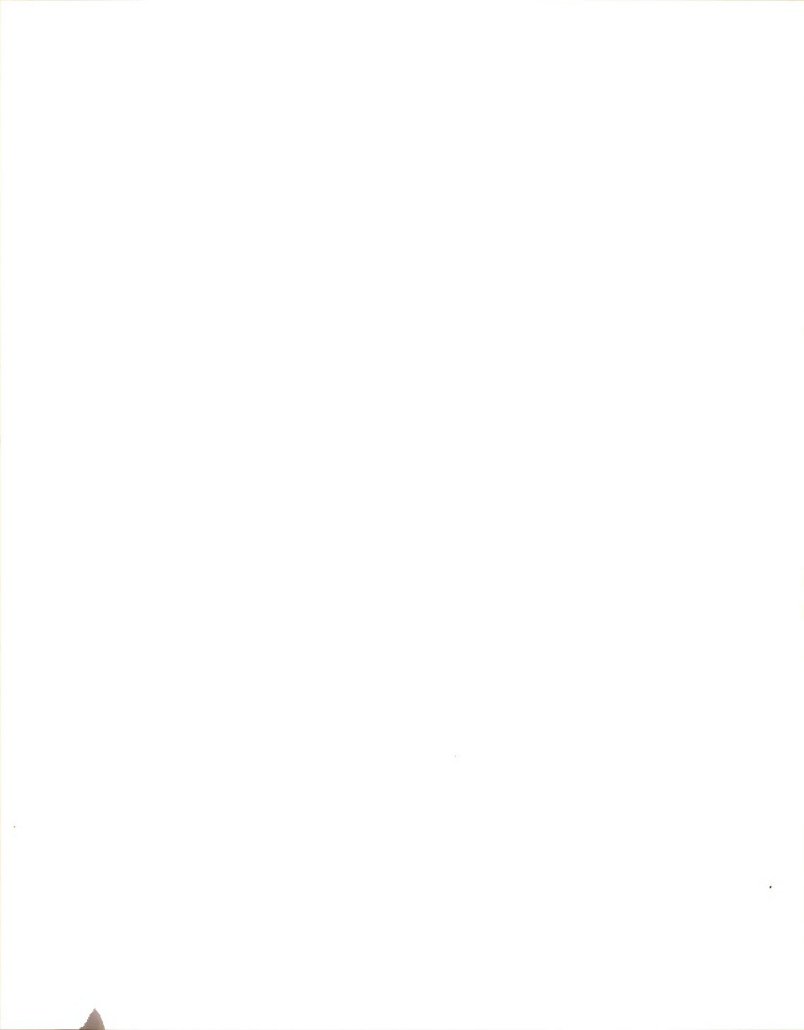
TABLE 4e

MEAN OF RESPONSES OF ALL GROUPS ON ALL ITEMS

Questionnaire Item	All Admin- istrators	All Teachers	A1	A2	B1	B2
1	1.7	1.7	1.9	3.6	1.7	1.6
2	4.1	2.4	4.1	4.1	2.7	1.6
3	3.1	2.4	2.1	4.0	2.2	2.6
4	1.3	1.5	1.1	1.5	1.5	1.6
5	1.2	1.8	1.0	1.5	1.5	2.1
6	2.1	2.1	2.5	1.6	2.2	2.0
7	4.4	3.3	4.0	5.0	3.7	2.9
8	1.7	1.4	1.8	1.5	1.4	1.4
9	1.4	2.1	1.2	1.5	2.1	2.2
10	2.7	3.1	2.8	2.6	2.7	3.5
11	3.1	2.3	2.8	3.3	2.7	1.9
12	2.6	2.7	2.7	2.2	2.7	2.6
13	3.6	2.5	3.5	3.5	2.9	2.1
14	2.7	3.4	2.1	3.1	3.2	3.5
15	3.9	3.4	3.5	4.1	3.5	3.3
16	4.8	4.4	4.7	5.0	4.1	4.7
17	1.9	2.6	1.4	2.5	2.5	2.7
18	1.4	2.8	1.4	1.5	2.7	2.8
19	1.1	1.8	1.0	1.3	2.0	1.5
20	1.4	2.1	1.4	1.5	2.2	2.1
21	1.8	2.4	2.0	1.6	2.7	2.1
22	2.1	1.8	2.5	1.5	1.7	1.8
23	1.3	1.7	1.2	1.3	1.8	1.5
24	4.1	3.0	4.3	4.0	2.5	3.5
25	4.4	3.6	4.0	4.6	3.4	3.8
26	2.1	1.5	2.1	2.0	1.5	1.5
27	2.5	2.3	2.2	2.9	2.1	2.5
28	4.0	4.1	4.1	3.7	4.4	3.7
29	2.4	2.4	2.1	2.8	2.3	2.5
30	2.1	1.9	1.8	2.3	3.5	2.2
31	4.3	4.1	4.3	4.3	4.0	4.1
32	3.8	3.7	3.4	4.3	3.7	3.7
33	3.1	1.6	2.7	3.5	1.4	1.7
34	1.6	2.1	1.5	1.6	2.1	2.1
35	3.2	2.9	3.5	2.6	3.1	2.7
36	2.2	3.3	2.1	2.3	3.1	3.4
37	1.5	2.5	1.7	1.3	2.2	2.8
38	1.8	2.8	2.7	3.0	2.8	2.7
39	4.4	4.5	4.1	4.9	4.5	4.4
40	4.4	4.6	4.2	4.6	4.6	4.5
41	3.6	3.1	4.0	3.1	3.3	2.9

TABLE 4e--Continued

Questionnaire Item	All Admin- istrators	All Teachers	A1	A2	B1	B2
42	1.4	1.9	1.5	1.3	1.7	2.0
43	2.0	3.1	1.8	2.1	2.7	3.5
44	4.2	3.5	3.8	4.6	3.2	3.7
45	1.6	1.9	1.7	1.6	1.7	2.1
46	1.9	1.6	2.0	1.8	1.8	1.4
47	1.5	1.9	1.4	1.6	2.5	1.3
48	3.3	2.5	1.4	4.6	2.4	2.6
49	2.1	2.7	1.8	2.3	2.2	3.1
50	4.1	3.6	3.5	4.8	3.5	3.7
51	1.7	1.7	1.5	1.8	1.8	1.6
52	4.0	4.0	4.0	4.1	3.9	4.0
53	1.9	1.8	1.4	2.5	1.8	1.8
54	2.7	2.8	2.4	3.0	2.4	3.1
55	3.1	3.0	2.1	4.1	3.0	3.0
56	3.4	3.2	3.7	3.3	3.0	3.4
57	2.8	2.6	2.7	3.1	2.3	2.8
58	4.1	2.8	4.2	4.0	2.5	3.1
59	3.8	3.5	3.4	4.3	3.2	3.8
60	2.8	2.9	2.1	3.6	3.0	2.8
61	3.0	3.1	3.2	2.6	3.3	2.9
62	2.1	2.5	2.1	2.1	2.5	2.5
63	2.7	2.7	3.0	2.5	2.7	2.8
64	1.4	1.3	1.4	1.5	1.2	1.5
65	3.7	3.2	4.0	3.3	3.1	3.3
66	4.1	3.5	4.1	4.0	3.8	3.1
67	4.3	4.3	4.2	4.3	4.2	4.5
68	1.5	1.6	1.2	1.8	1.4	1.8
69	2.2	1.6	2.1	2.3	1.5	1.7
70	4.1	3.1	4.2	3.8	3.1	3.2
71	2.4	2.3	2.4	2.3	2.3	2.5
72	3.0	3.0	3.1	2.9	2.7	3.3
73	4.1	3.8	4.1	4.0	4.0	3.6
74	4.5	4.1	4.1	4.8	4.7	3.5
75	2.7	1.7	2.7	2.9	2.4	3.0



teachers, as a group, agreed with the item. Further analysis showed that the two groups of administrators differed on 15 of the items and agreed on 60 items, in terms of a comparison of the total response. The two groups of teachers disagreed in total response on 14 of the items and agreed in response on 61 of the items. The items which produced responses of disagreement between the various groups are listed in Table 4f. A total listing of all items which tended to discriminate between the groups is given in Table 4g. The actual items are listed in Table 4h.

TABLE 4f

QUESTIONNAIRE ITEMS UPON WHICH GROUPS DISAGREED

I.	Items of disagreement between all administrators, as a group, and all teachers, as a group.
	Items: 2 - 3 - 10 - 11 - 13 - 14 - 24 - 33 - 35 - 36 43 - 48 - 55 - 58 - 61 - 72
II.	Items of disagreement between the A1 administrative group and the A2 group.
	Items: 1 - 3 - 11 - 14 - 33 - 35 - 38 - 48 - 54 - 55 57 - 60 - 61 - 63 - 73
III.	Items of disagreement between the B1 teaching group and the B2 teaching group.
	Items: 7 - 10 - 24 - 30 - 35 - 41 - 43 - 54 - 56 - 58 60 - 61 - 72 - 75

TABLE 4g

ALL ITEMS WHICH DISCRIMINATED BETWEEN GROUPS

Items:	2 - 3 - 7 - 10 - 11 - 13 - 14 - 24 - 30 - 33 - 35 36 - 38 - 41 - 43 - 54 - 55 - 56 - 57 - 58 - 60 61 - 63 - 72 - 75
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TABLE 4h

DISCRIMINATING ITEMS

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2. The Junior-Community College should continually attempt to improve its program so that it may eventually expand to a full four year college.
 3. The liberal arts courses of the JuniorCommunity College will provide adequate programs of higher education for most students who enroll in this type of institution.
 7. So called Adult Education programs should not be a part of the Junior-Community College program but should be established as separate programs.
 10. A general, state level controlling agency is necessary to insure a uniform Junior-Community College program.
 11. Admission standards comparable to those of the four year colleges and universities should determine a students acceptance to the liberal arts courses of the Junior-Community College.
 13. Post high school education should be limited to those who clearly show the ability to succeed in programs of higher education.
 14. Since the local community shares the cost of the Junior-Community College, it should determine the program of the institution.
 24. Any guidance and counseling programs in the Junior-Community College should be limited to students enrolled for credit.
 30. The Junior-Community College should serve the community by acting as a coordinating agency for other educational and civic groups.
 33. Retention standards based on grade point averages the same as the four year colleges should be followed by the Junior-Community Colleges.
 35. One reason why most Junior-Community Colleges do not offer complete programs in the trade and technical areas is a lack of interest on the part of the students.
 36. Admissions policies which allow all graduates of the district high schools to enter its Junior-Community College should be followed.
-

TABLE 4h--Continued

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38. The Junior-Community College in most communities offers the only educational opportunity for adequate counseling with adults in such areas as job retraining and vocational rehabilitation.
 41. Nationwide job analysis data should be used to determine the course offerings of the terminal and technical programs of the Junior-Community College.
 43. The adult education program of the Junior-Community College should enable adults to complete a high school education.
 48. The programs of any Junior-Community College should follow closely the general programs of all other such institutions in the state so that uniformity of offering may be achieved.
 54. Any student admitted to the Junior-Community College should be able to participate in the liberal arts program.
 55. The student should bear a larger share of the increasing costs of the Junior-Community College.
 56. The academic ability of students in the trade and technical programs of the Junior-Community College should be at a level with students in other programs.
 57. One measure of the quality of the teaching staff of the Junior-Community College will be the number of advanced degrees obtained by the staff.
 58. Students with very poor high school records should not be admitted to the Junior-Community College.
 60. Since the majority of Junior-Community College students live at home, the personnel programs of these institutions need not be developed to the point that they are in most four year colleges.
 61. The student should bear only a very small share of the cost of the program of the Junior-Community College.
 63. Course offerings in a program of general education will vary from those of a liberal arts or college parallel program.
-

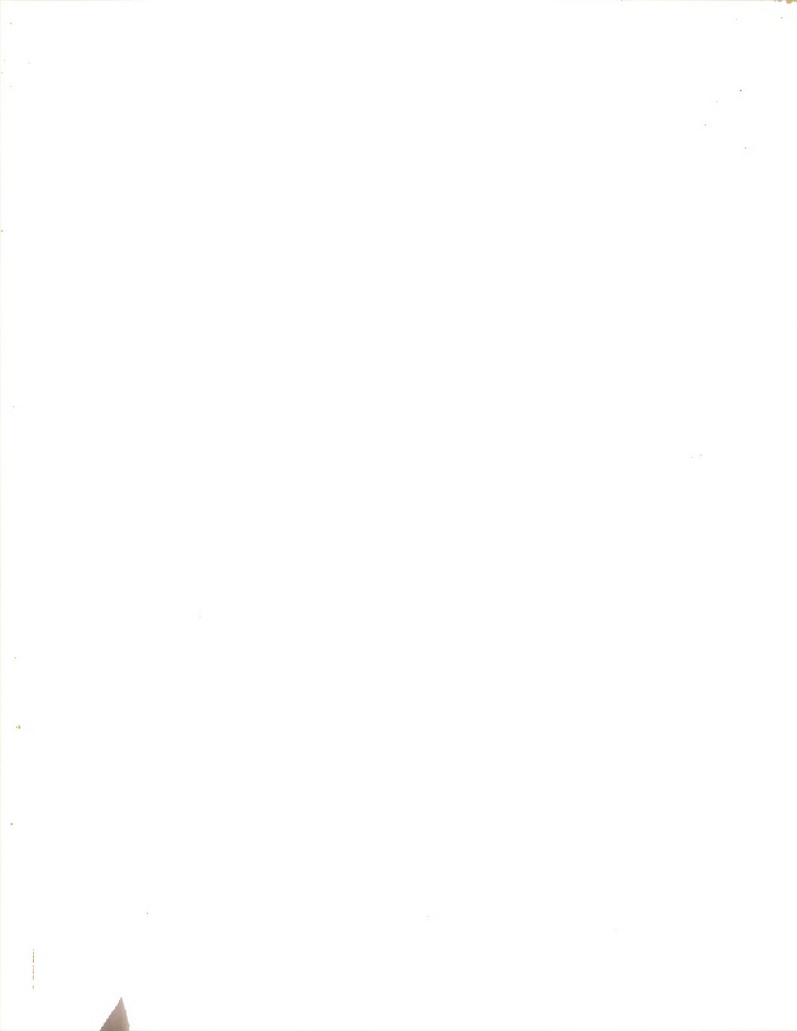


TABLE 4h--Continued

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- | | |
|-----|---|
| 72. | A lack of trained personnel hampers most Junior-Community Colleges from establishing trade and technical programs, even where great community need has been demonstrated. |
| 75. | Vocational counseling alone is an adequate justification for a strong guidance and counseling program in the Junior-Community College. |
-

An analysis of the items upon which administrators and teachers disagreed produced apparent patterns of response in several area. One such pattern centered around admissions practices and retention standards for the community college. (Items 11, 13, 24, 33, 36, and 58.) In general, the administrators as a group favored the concept of an "open door" admissions policy for the community college while the teachers favored restrictions on students for general admission to the college and for admission to the liberal arts curriculum. Item 11 presented an example of this tendency. This item stated that admissions policies comparable to those of the college and universities should determine the acceptance of a student into the liberal arts courses of the community college. The teachers agreed with this statement while administrators disagreed.

Another pattern of disagreement appeared around the liberal arts offerings of the community college. (Items 3, 11, 54, and 63.) Both groups indicated a tendency to value



the liberal arts area as a separate area from general education. In item 54, all groups indicated a willingness to have every student participate in the liberal arts program, a view at variance with response patterns in items 3 and 11.

Differences of opinion concerning the role of the college as a community center were apparent to a small extent in item 30. One group of teachers indicated disagreement with the statement that the college should serve as a community center. Further disagreement in the general area of community service centered around the area of adult education. This was evident in items 43 and 24 which were concerned with guidance and counseling for adults and with programs enabling adults to complete high school. The administrators favored more comprehensive programs for adults in these areas than did the teachers.

The responses to item 2, which dealt with the matter of the community college eventually becoming a four year institution, indicated a great difference of opinion between teachers and administrators with the teachers seeing the final role of the community college as a four year institution and with the administrators strongly disagreeing.

Items 10 and 14 were concerned with control of the community college program. A tendency was evident here for the administrators to see forces outside the college as being important in forming the program of the college while the teachers disagreed with this view. However, in item 48, the

teachers appeared to favor a uniform pattern of community college education on a statewide basis while the administrators disagreed.

Items 55 and 61 were contradictory statements concerning the share of programs costs to be carried by the students. The mean for these items clustered around "No Opinion" with different groups spread on both sides of the question.

A subjective analysis of the patterns presented by responses in the discriminating items, in fact, for all items in the questionnaire, appeared to show a pattern of the administrators verbalizing answers in keeping with most of the accepted objectives and philosophies for the community college as an institution, as these areas were defined in Chapter I of this study. Alternatively, the teachers did not always follow this pattern but on several items answered in such a way as to indicate a lack of acceptance for some of the commonly verbalized philosophical assumptions for such institutions-- "open door" admissions policies, local control, and the maintenance of a two year program, being specific examples.

In analysis of the items by areas, it was found that disagreement items did not pattern in any single area. In disagreement items between administrators and teachers, two items were found in Areas I, III, and IV, three items were in Area II, one in Area V, and six in Area VI. In the same analysis as applied to administrators, three items of disagreement were found in Area I, two in Areas II, III, and V, five in

Area VI, and no items in Area IV. Teachers differed on one item in Areas I and II, three items in Areas IV and V, four items in Area III, and two items in Area VI. As may be seen from Table 4f, only items 35, 54, 61, and 72 were common disagreement between the four groups. Obviously, the assignment of an item to a particular area did not preclude its implications to other areas.

Further analysis was conducted on items built into the instrument which were calculated to produce logical differences in response. For these paired items, an agree on one item should have produced a disagree on the matching item. Several items were included in each group. These items are listed with mean scores for each group in Table 4i. An analysis of Table 4i indicates that the administrators as a group or in the sub-groups reacted in the predicted way to all paired items while the teachers answered only six pairs of the items in discriminating fashion with eight pairs producing no discrimination. The specific paired items are listed in Table 4j.

Opinionaire Items

An analysis of the opinionaire items at the end of the instrument was completed for the total group.

Item I. The present scope of the program of this college is: Adequate in all areas. Inadequate in some areas. Of the group of 143 respondents, 10 did not answer this item.

TABLE 4i

MEAN GROUP SCORES ON MATCHED ITEMS

Area	Items	All Adminis- trators	All Teachers	A1	A2	B1	B2
I	1	1.7	1.7	1.9	3.6	1.7	1.6
	19	1.1	1.8	1.0	1.3	2.0	1.5
	11	3.1	2.3	2.8	3.3	2.7	1.9
	54	2.7	2.8	2.4	3.0	2.4	3.1
	36	2.1	1.5	2.1	2.0	1.5	1.5
	39	4.4	4.5	4.1	4.9	4.5	4.4
II	13	3.6	2.5	3.5	3.5	2.9	2.1
	34	1.6	2.1	1.5	1.6	2.1	2.1
	3	3.1	2.4	2.1	4.0	2.2	2.6
	63	2.7	2.7	3.0	2.5	2.7	2.8
III	5	1.2	1.8	1.0	1.5	1.5	1.6
	41	3.6	3.1	4.0	3.1	3.3	2.9
	15	3.9	3.4	3.5	4.1	3.5	3.3
	49	2.1	2.7	1.8	2.3	2.2	3.1
	29	2.4	2.4	2.1	2.8	2.3	2.5
	56	3.4	3.2	3.7	3.3	3.0	3.4
IV	7	4.4	3.3	4.0	5.0	3.7	2.9
	37	1.5	2.5	1.7	1.3	2.2	2.8
	16	4.8	4.4	4.7	5.0	4.1	4.7
	23	1.3	1.7	1.2	1.3	1.8	1.5
	43	2.0	3.1	1.8	2.1	2.7	3.5
	73	4.1	3.8	4.1	4.0	4.0	3.6
V	17	1.9	2.6	1.4	2.5	2.5	2.7
	24	4.1	3.0	4.3	4.0	2.5	3.5
	31	4.3	4.1	4.3	4.3	4.0	4.1
	75	2.7	1.7	2.7	2.9	2.4	3.0
	60	2.9	2.9	2.1	3.6	3.0	2.8
	68	1.5	1.6	1.2	1.8	1.4	1.8



TABLE 4j

PAIRED ITEMS

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-
1. The Junior-Community College should be sure that its college parallel courses are adequate before establishing other programs.
 19. The program of the Junior-Community College should meet the needs in higher education of all portions of the community rather than only meeting the needs of students wishing to transfer to four year colleges.
 11. Admissions standards comparable to those of the four year colleges and universities should determine a student's acceptance to the liberal arts courses of the Junior-Community College.
 54. Any student admitted to the Junior-Community College should be able to participate in the liberal arts program.
 26. The liberal arts courses of the Junior-Community College should be patterned after those of the four year colleges or the universities to which the students will transfer.
 39. The college parallel offerings of the Junior-Community College should generally be held at a somewhat lower level of difficulty than in the four year college since many of the students taking these courses in the Junior-Community College are only interested in a general education background.
 13. Post high school education should be limited to those who clearly show the ability to succeed in programs of higher education.
 34. The general education programs of the Junior-Community College should be available to all members of the community who wish to take them.
 3. The liberal arts courses of the Junior-Community College will provide adequate programs of higher education for most students who enroll in this type of institution.
 63. Course offerings in a program of general education will vary from those of a liberal arts or college parallel program.
 5. The technical and terminal programs of the Junior-Community College should reflect the needs of the local community.
 41. Nationwide job analysis should be used to determine the course offerings of the terminal and technical program. of the Junior-Community College.
-

TABLE 4j--Continued

-
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15. The cost of most technical and terminal programs prohibits their effective use in most Junior-Community Colleges.
 49. All urban communities can demonstrate a significant need for programs of a terminal nature at the Junior-Community College level.
 29. Students of limited academic ability should generally be encouraged to select courses in the trade and technical programs.
 56. The academic ability of students in the trade and technical programs of the Junior-Community College should be at a level with students in other areas.
 7. So-called Adult Education programs should not be a part of the Junior-Community College program but should be established as separate programs.
 37. The Junior-Community College should have as one of its central purposes the establishment of a comprehensive program in adult education.
 16. The program of the Junior-Community College is not the appropriate place to include offerings in cultural areas.
 23. One function of the Junior-Community College is to serve as the community cultural center.
 43. The adult education program of the Junior-Community College should enable adults to complete a high school education.
 73. Most needs for adult education in a community may be met by programs in general education, crafts and the like rather than in offerings in academic or trade areas.
 17. The Junior-Community College should provide a general guidance and counseling service for all members of its community.
 24. Any guidance and counseling programs of the Junior-Community College should be limited to students enrolled for credit.
 31. The guidance and counseling programs of the high schools are adequate to prepare the student for his vocational choice.
 75. Vocational counseling alone is an adequate justification for a strong guidance and counseling program in the Junior-Community College.
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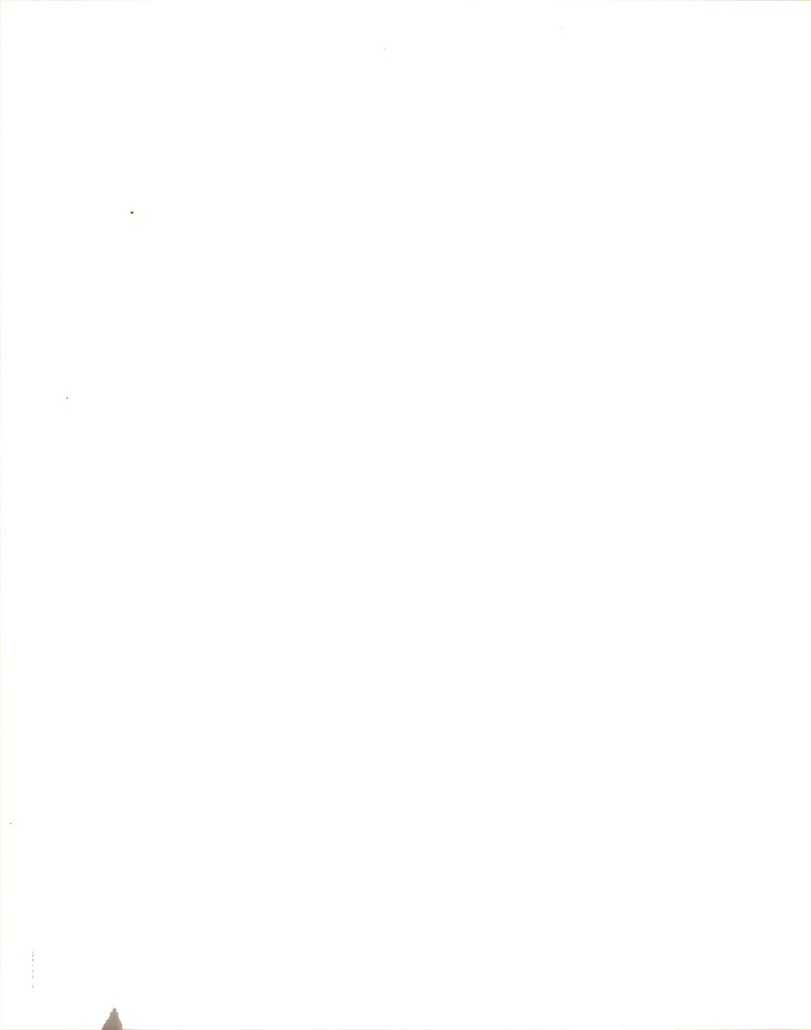
TABLE 4j--Continued

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|-----|--|
| 60. | Since the majority of the Junior-Community College students live at home, the personnel programs of these institutions need not be developed to the point that they are in most four year colleges. |
| 68. | An intensive guidance and counseling program should be conducted during the first year a student is enrolled at the Junior-Community College since nearly all students will spend only two years at the Institution. |
-

Of those answering, 27 indicated that their programs were adequate and 106 indicated that their programs were inadequate. Of the 75 individuals representing those institutions whose programs had been termed more comprehensive in this study, 24 individuals indicated that their institutions had adequate programs, 45 indicated inadequate programs and 6 did not answer. Of the institutions whose programs had been listed as limited in this study, only 3 individuals indicated that they believed the programs to be adequate while 56 indicated that their programs were inadequate; 4 individuals did not answer.

Item II. Check the areas of the program which you feel to be the strongest and also check those which you feel are weakest: Liberal Arts; General Education; Trade, Terminal, and Technical; Adult Education and Community Service; Guidance and Counseling. (Two columns)

In listing perceptions of the strongest programs, 110 individuals listed the liberal arts program, 13 listed



general education, 7 listed terminal programs, 3 listed adult education and community service, none listed guidance and counseling, and 10 did not respond.

In listing perceptions of the weakest program, 69 individuals listed guidance and counseling, 14 listed general education, 11 listed terminal program, 8 listed adult education, 8 listed liberal arts, and 33 individuals did not respond.

Item III. Check the most important barrier to securing adequate programs: Lack of funds, lack of facilities, lack of community support, lack of faculty interest, lack of administrative interest.

In answering item III, 87 individuals listed lack of funds; 41 of these individuals represented institutions listed as offering comprehensive programs, 46 limited programs. Twenty-four individuals, 12 from each group perceived lack of facilities as the greatest barrier, 5 listed lack of community support (3-2), 6 lack of faculty interest (5-1), and 5 listed lack of administrative interest (5-0). Sixteen individuals did not answer this item.

Item IV. If lack of funds is an important barrier, more funds should come from: State, local taxes, students.

Ninety-three individuals indicated that the state should contribute more funds, 15 indicated more local tax, and 7 indicated more student charges; 28 individuals did not reply to this item. This data was summarized in Table 4k.

TABLE 4k

RESPONSES TO OPINIONNAIRE ITEMS

Item

I The present scope of the program of this college is:

Adequate in all areas -- 27
 Inadequate in some areas -- 106
 No answer -- 10

II Check the areas of the program which you feel to be the strongest and also check those which you feel are weakest:

	<u>Strongest</u>	<u>Weakest</u>
Liberal Arts	110	8
General Education	13	14
Trade, Terminal, and Technical	7	11
Adult Education and Community Service	3	8
Guidance and Counseling	0	69
No Answer	10	33

III Check the most important barrier to securing adequate programs:

Lack of funds -- 87
 Lack of facilities -- 24
 Lack of community support -- 5
 Lack of faculty interest -- 5
 Lack of administrative interest -- 5
 No answer -- 17

IV If lack of funds is an important barrier, more funds should come from:

State -- 93
 Local taxes -- 15
 Students -- 7
 No answer -- 28

CHAPTER V

SUMMARY AND IMPLICATIONS

Summary

The purpose of the study was to determine relationships existing between the perceptions of administrators and faculty members of selected Michigan community colleges as to objectives for this type of institution. Certain characteristics of all community colleges within the state, whose programs had been in operation for more than three years at the beginning of the 1959-1960 academic year, were tabulated. Included were data on enrollments, course offerings, support, library facilities, and the general scope of the programs. An examination of the official publications of the institutions and of the literature in the general field of community college programs served to establish a list of five generally accepted objectives for the community college. These were: (1) Liberal Arts and transfer courses, (2) General Education, (3) Terminal and Technical programs, (4) Adult Education and Community Service, and (5) Guidance and Counseling. Each of the institutions included in the study included these general objectives in statements of institutional policy.

The colleges were divided into two groups on the basis of comprehensiveness or lack of comprehensiveness of their programs

in terms of the five general objectives. A questionnaire was developed, pre-tested, and administered to teachers and administrators in five selected institutions. Three of the institutions had been classified as having limited programs and two had been classified as having comprehensive programs. This questionnaire purported to test differences of opinion between teachers and administrators and also, differences between institutions, as to institutional objectives. Sixty-seven per cent of the questionnaires were returned.

The data were analyzed as follows:

1. The Hoyt test for determination of reliability of the instrument was applied and the instrument was found to be reliable with the exception of area V, as answered by the teaching group.

2. The standard error of measurement and the standard deviation was calculated for each section of the questionnaire and for the teaching and administrative groups to determine if the data were usable in terms of further statistical analysis.

3. Homogeneity of variance for responses to the questionnaire was calculated for each group in each area by applying the F Ratio test.

4. The Student's "t" Test for significance of differences between groups was applied to compare the following groups on all areas of the instrument:

Type 1 administrators	x	Type 2 administrators
Type 1 teachers	x	Type 2 teachers
Type 1 administrators	x	Type 1 teachers
Type 2 administrators	x	Type 2 teachers
Type 1 administrators	x	Type 2 teachers
Type 2 administrators	x	Type 1 teachers
All administrators	x	All teachers

5. The mean response scores of all groups were compared on all items. All areas of disagreement between groups were analyzed.

6. The mean scores of all groups on matched conflicting items were analyzed.

7. The four opinionnaire items included in the questionnaire were tabulated and analyzed.

Conclusions of the Study

1. The statistical analysis established no significant differences between the administrative and teaching groups which could be related to the classification of the institutions by type of program. No pattern of response was found which could be related to comprehensiveness or lack of comprehensiveness of the programs of the institutions studied.

2. The study did not support the theory that differences in the programs offered by the institutions studied were related directly to differences of perceptions of institutional objectives held by faculty members. No institutional



type could be established in terms of the pattern of responses of faculty members to the questionnaire.

3. More differences in the patterns of responses were found between the administrative and teaching groups than between the institutions as types. Patterns of disagreement between teachers and administrators were developed around several areas.

4. Few of the persons questioned (20%) indicated satisfaction with present programs. However, of the 69 individuals from those institutions which had been classified as offering more comprehensive programs, 35% indicated that they perceived the program as being complete while only .05% of those from institutions classified as having limited programs perceived of their programs as being comprehensive. It was concluded that: (a) these data gave support for the original classification of the institutions, and (b) the faculty members were aware of the general characteristics of a comprehensive offering for the community college and perceived that their programs were either comprehensive or less than comprehensive.

5. Eight-two per cent of the individuals responding to the questionnaire perceived the liberal arts program as being the strongest area of the community college program. An analysis of program offerings and of the responses of the faculty groups concerning the importance of the liberal

arts offering of the colleges also indicates an emphasis on the liberal arts program in the colleges studied. It was concluded that liberal arts programs are highly valued and emphasized in the colleges studied which may account for some of the weaknesses of other program offerings.

6. The majority of the faculty members responding (62%) indicated that the program in counseling and guidance was the weakest area of the program. Responses to questionnaire items concerned with guidance and counseling indicated that this area was considered to be of great importance. It was concluded that in the perceptions of the faculty members questioned in this study, the programs of counseling and guidance in the institutions studied, were not functioning at a level *with* aspirations of the faculty members for this portion of the program.

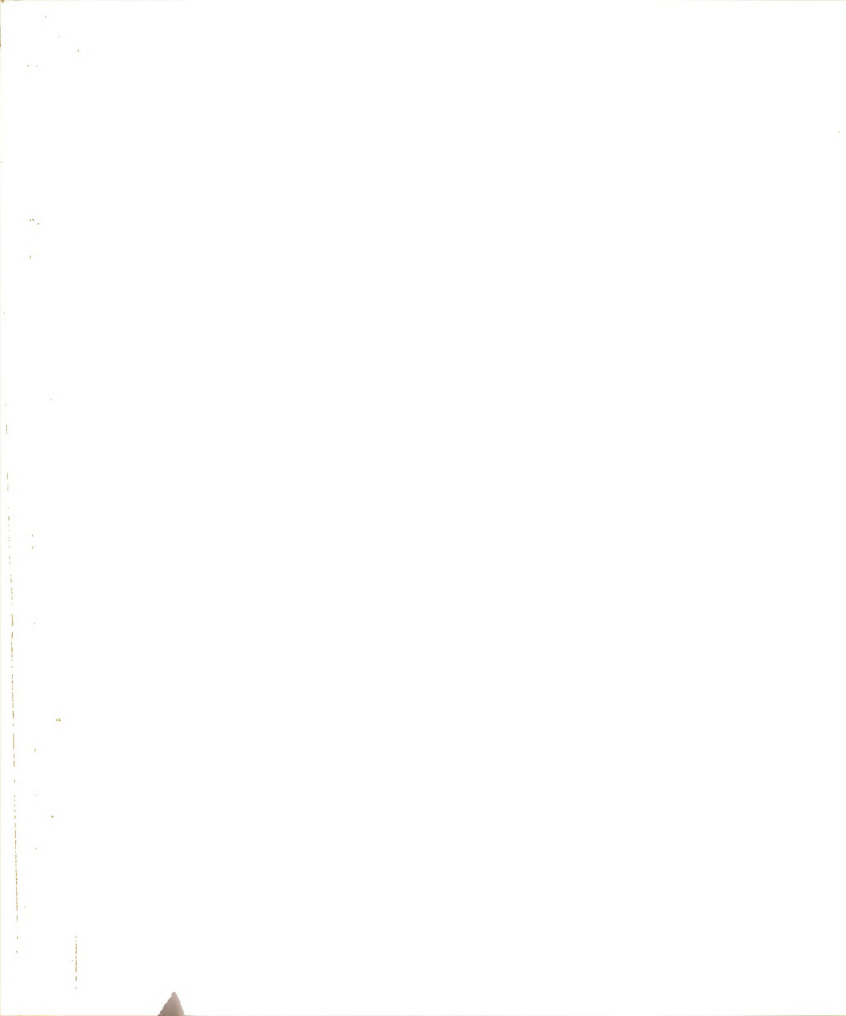
7. The general perception of lack of money as the most important barrier to program implementation had no relation to actual income per student in the institutions studied. In some institutions classified as having complete programs, income per student was less than in those having incomplete programs. It was concluded that lack of money is not the sole barrier to program development even though it was commonly perceived to be the most important barrier.

8. While the state was listed as being the source of added income by most of the persons who perceived money as the most important barrier, an examination of income sources

for the institutions studied indicated that each received the same amount of money per student for operation. Differences in income rest in differences due to variations in tuition and individual tax effort of the communities. Added state aid could produce more comprehensive programs in communities with limited local resources.

9. It was concluded that administrators of the colleges surveyed were more sophisticated in verbalizing institutional objectives in a manner compatible with the established objectives for the community college as an institution. Hence, the questionnaire demonstrated more validity with the administrative group than with the teaching group.

10. Since it has been concluded that the major differences in the responses of administrators and teachers center around such areas as admissions policies, the development of the community college into a four year institution, the degree of emphasis on the liberal arts program of the college, and the role of the college as a community institution, it was concluded that this study points up the necessity for administrative leadership at the community college level to place proper emphasis on the dual responsibility of the community college. This responsibility is concerned with the general responsibility of the institution in the statewide pattern of higher education in Michigan and, secondly with responsibility to the local community to meet local educational needs.



The administrators consistently responded to items in a manner more compatible with established objectives for the community college. While it has been pointed out in the preceding section that this may have been due to mere verbalization, the consistency of the pattern and the consistency of response noted for the administrative group in answering the matched questionnaire items, led to the conclusion that the administrative group was familiar with the total areas of responsibility for the community college and it was tentatively concluded from this study that the administrative group could exert leadership in achieving established community college objectives, through appropriate institutional self study.

Implications for Further Study

The evaluation of institutional programs in terms of their objectives is a matter of concern of all educational institutions. The first chapter of this study developed a theory concerning curricula of educational institutions which indicated that faculty involvement in the development and implementation of the curriculum was of great importance if an educational institution was to establish a program which would achieve the stated institutional objectives. This study has documented the fact that the general objectives for the programs of community colleges are centered around the general areas of the liberal arts and transfer credit programs, general education programs, terminal and



technical programs, adult education and community service, and guidance and counseling. These general programs have all been accepted by the community colleges of Michigan and statements supporting these programs are included in the statements of institutional objectives for all the institutions surveyed in this study.

In the analysis of the perceptions of persons employed as teachers and administrators in the community colleges surveyed, however, it was established that many of the persons surveyed did not perceive the objectives of the community college as covering the complete range of objectives. If community college teachers and administrators do not accept the general objectives for the institution and do not accept the statements of objectives for the institutions in which they are employed, then it is reasonable to conclude that the actual programs of the institutions will function in a different fashion than would be the case if the objectives were accepted. Since each community college in Michigan has the power to set its own objectives, it would certainly be reasonable to assume that each could have somewhat different objectives for the program. However, if the community college is to serve as a unique type of higher education in the state some conformity of offerings will be necessary.

Implications for further study are centered around three major areas:

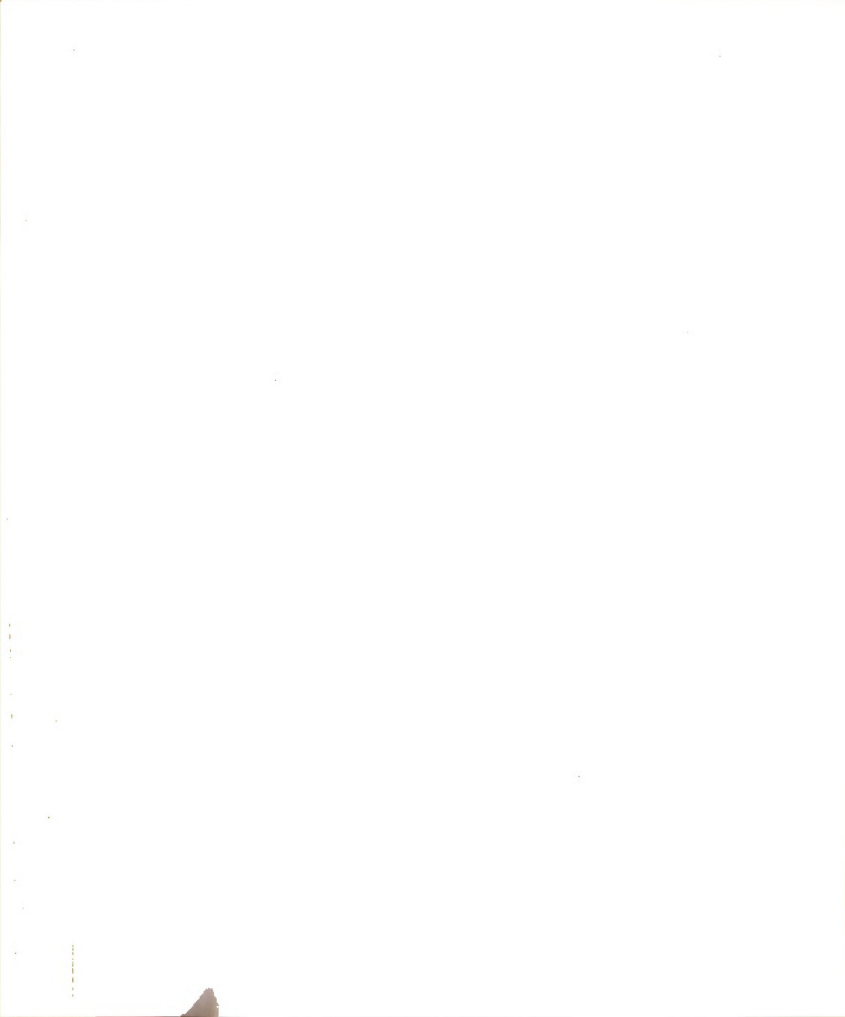


1. Curriculum development
2. Administration
3. Institutional research

Curriculum Development

While the lawmaking bodies of the state of Michigan have not established a program of higher education of the state, the results of the Legislative Study of Higher Education in Michigan, of the Governor's Committee on the Junior and Community College and of policies of the Department of Public Instruction, all indicate that the community college occupies a position in the state where program emphasis should be placed around the five general areas already defined. Also, the institution is established as a two year program with no pattern developed for enlarging the program to four years. The growth of the community college in Michigan, and in other states, may serve as one evidence that this organization and program meet a need of our present society. If this program organization is appropriate for the community college as an institution, it would appear that curriculum development should reflect concern with all portions of the program.

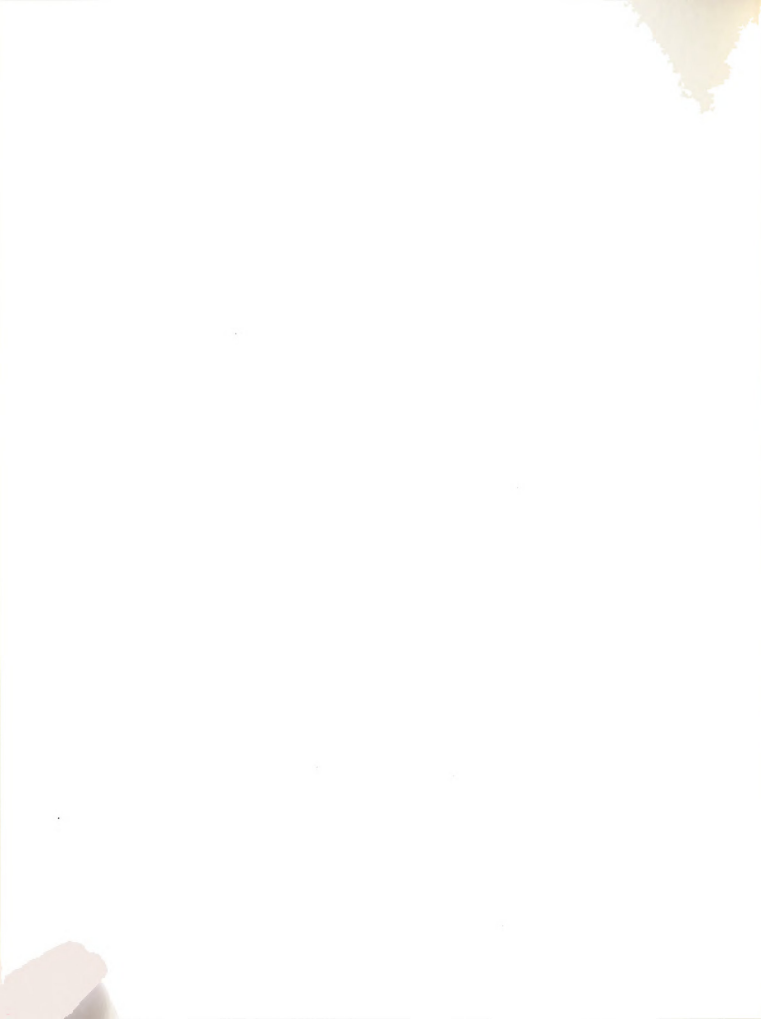
The analysis of the program content conducted in this study and the responses of teachers and administrators on the questionnaire indicate that many of the colleges offer programs centering around the liberal arts, transfer credit areas. Offerings in terminal education, adult education, and



guidance have not been developed to any great extent in some of the institutions. If the community demonstrates a need for these programs and if the community college accepts them as a reasonable objective, then the curriculum should reflect growth and development in these programs. If, however, the college and the community do not accept these programs as part of the curriculum, then they should be excluded from statements of objectives and referred to other educational programs of the community.

This current study made the conclusion that the teachers of the community colleges surveyed appeared to be much less accepting of the general objectives of the institution than did the administrators. If this is generally true in all community colleges, it would imply that some further training of community college teachers in the general philosophy of the institution may be in order. Again, the point has been made that the program of the institution will depend in large part on the perceptions and philosophies of the teachers and administrators. If it is the desire of the community to have a community college program covering the five general areas outlined, then some general acceptance of this philosophy should be evident in the faculty.

It should not be concluded that because the administrators surveyed in this study appeared to verbalize a philosophy more nearly like that found in the literature about the

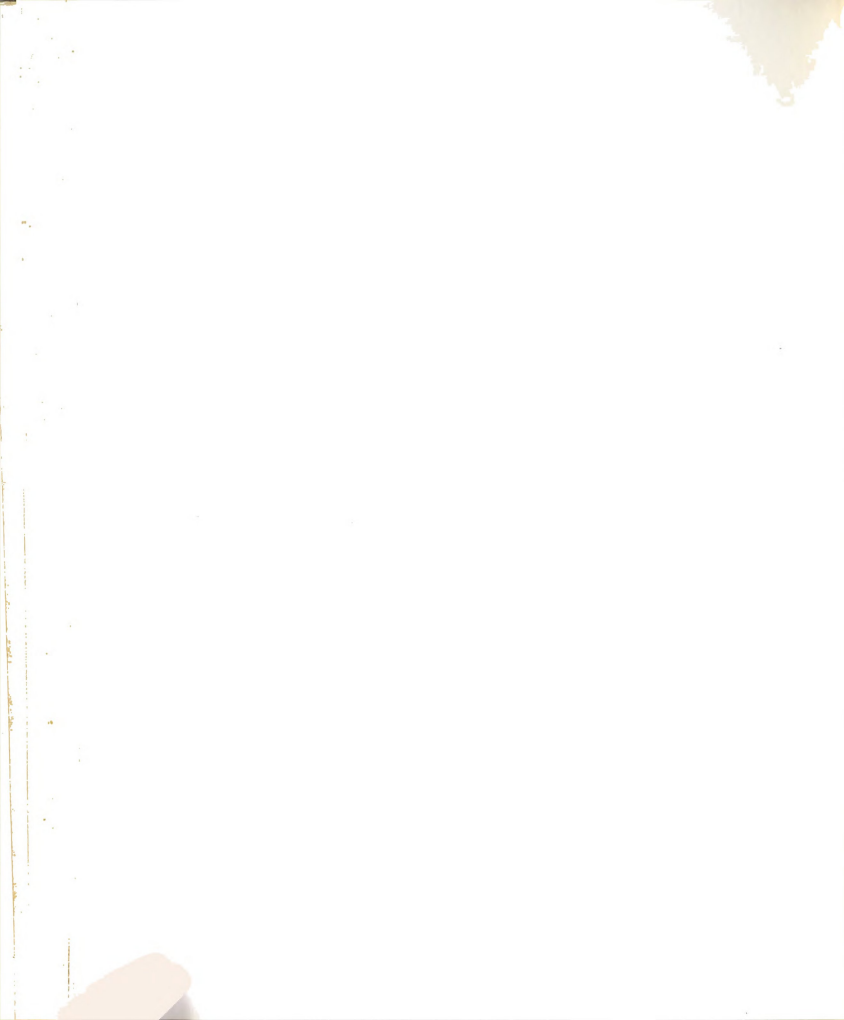


community college, they accept this philosophy and make it a part of program development. The acceptance of the general philosophy does not always include a commitment for implementation.

Finally, it is necessary to remember that the teachers and administrators are not entirely responsible for program development in the community college. The board, the community, and other forces act in curriculum development. Actual programs may be limited by many factors, money, facilities, staff, and other factors, and may not reflect the idealized program of any group connected with the institution. It would be reasonable to assume that the acceptance of objectives for the community college, as an institution, should place some burden on the college staff and the community to seek to establish a curriculum to meet the objectives.

Administration

Many of the implications for curriculum development would apply equally well to administrators as to teachers. In addition, many features of the control of community colleges have implications pertaining more to administrators than to teachers. Several areas of control were mentioned in the analysis of the questionnaires. These have implications for further analysis and study as they pertain to general administration of community colleges.



1. Admissions policies. Several items on the questionnaire covered the matter of requirements for admission to the community college. The community college, as an institutional type, has long followed an "open door" admission policy. There is some evidence in this study that both the teachers and administrators may question this policy. If the pressures of increased student numbers continue in Michigan, the community college administrators and teachers will need to study carefully the matter of admissions standards as they apply to the community college.

2. General control. The analysis of items pertaining to control of community college documented the fact that the teachers and administrators surveyed in this study perceived that some general state control of the community college program is desirable. At the present time, state control of educational programs in Michigan follows the policy of local control. The development of institutional objectives for the community college rests with the local community, the board of control, and the faculty. A trend toward a state pattern of education for the community college would certainly involve general involvement and study by local administrators, communities, and teachers. Several responses to items in the questionnaire indicated disagreement with the philosophy of strict local control for the community college. One alternative would be a state level agency supervising program.



3. Recruitment and training of teachers. At the present time community college teachers are certified by the state of Michigan. No specific training programs have been established in institutions of higher education for the training of community college teachers. The present certification standards, which simply require a masters degree in the subject matter area taught, are unrealistic from two standpoints. First, the possession of the masters degree may not mean that the teacher is qualified philosophically for the role of the community college teacher. It may mean that the person perceives the college as offering a position of higher status than the high school. And second, the lack of a masters degree, particularly in areas of technical education, may exclude many worthy persons from community college teaching. The limited offering of technical education in some of the community colleges may be due, in part, to the lack of certified teachers in that area of the program.

Institutional Research

Any implementation of the conclusions drawn from this study or the implication for further study, must occur through institutional self study by individual community colleges. It has been indicated in the conclusions that the administrators of the community colleges should bear major responsibility for leadership in institutional study of relationships between goals and programs.



The role of the community college in Michigan has been defined as that of a unique institution offering two year programs in the liberal arts, terminal and technical programs, general education, adult education and community service, and in guidance. This institution should occupy a significant position in the developing system of higher education in Michigan and in the United States. The report of the Legislative Study Committee on Higher Education in Michigan, the report of the Governor's Study Committee, and other similar surveys, support the general conclusions of this study. If general agreement has been reached on the objectives which should be common for all community colleges in Michigan, it is reasonable to assume that each institution will need to be continually involved in self study to establish a program to achieve the institutional objectives.



BIBLIOGRAPHY

- Alberty, Harold. Reorganizing the High School Curriculum.
New York: The MacMillan Co., 1948.
- Bogue, Jesse (ed.). American Junior Colleges. 4th ed.
Washington, D. C.: The American Council on Education,
1956.
- _____. The Community College. New York: McGraw-Hill Book
Company, 1950.
- Bills, Robert. About People and Teaching. Bulletin of the
Bureau of School Service, XXVIII, No. 7. Lexington,
Kentucky: College of Education, University of
Kentucky, December, 1955.
- California State Board of Education. A Restudy of the Needs
of California in Higher Education. Sacramento: State
Board of Education, 1955.
- Combs, Arthur. "Seeing Is Behaving," Educational Leadership,
October, 1958.
- Diekhoff, John. Democracy's College. New York: Harper and
Brothers, 1950.
- Dixon, Wilfred, and Massey, Frank. Introduction to Statistical
Analysis. New York: McGraw-Hill Book Company, 1957.
- Educational Policies Commission. Education for All American
Youth: A Further Look. Washington, D. C.: Educational
Policies Commission, 1952.
- _____. Higher Education in a Decade of Decision. Washington,
D. C.: Educational Policies Commission, 1957.
- Edwards, Allen. Statistical Methods for the Behavioral
Sciences. New York: Rinehart and Company, 1957.
- Ells, Walter. The Junior College. Boston: Houghton-Mifflin,
Company, 1931.
- _____. Why Junior College Terminal Education. Washington:
American Association of Junior Colleges, 1951.



- Fretwell, Elbert. Founding Public Junior Colleges. New York: Bureau of Publications, Teachers College, Columbia University, 1954.
- Gleazer, Edmund (ed.). American Junior Colleges. Washington, D. C.: American Council on Education, 1960.
- Gulick, Luther. Administrative Reflections from World War II. Tuscalosa: University of Alabama Press, 1948.
- Hagood, Margaret, and Price, Daniel. Statistics for Sociologists. New York: Henry Holt and Company, 1952.
- Henry, Nelson (ed.). The Public Junior College. The Fifty-fifth Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 1956.
- Hillway, Tyrus. The American Two-Year College. New York: Harper and Brothers, 1958.
- Koos, Leonard. The Junior College. Minneapolis: University of Minnesota Press, 1924.
- Leighton, Alexander. The Governing of Men. Princeton: Princeton University Press, 1946.
- Lewin, Kurt. Group Decision and Social Change. In Readings in Social Psychology. T. M. Newcomb and E. J. Hartley, eds. New York: Henry Holt and Company, 1947.
- March, James, and Simon, Herbert. Organizations. New York: John Wiley and Sons, 1958.
- Martorana, S. V. The Community College in Michigan. Staff Study No. 1. Lansing, Michigan: Michigan Legislative Study Committee on Higher Education, 1957.
- Mayo, Elton. Social Problems of An Industrial Civilization. Cambridge: The Harvard University Press, 1945.
- Michigan Commission to the Governor. "Final Report of the Junior and Community College Study Commission to the Governor of Michigan," 1956. (Mimeographed.)
- Michigan Council of Community College Administrators. "Your Community Colleges." 1959.
- Michigan Department of Public Instruction. "Policy of the Superintendent of Public Instruction Regarding Community Colleges in Michigan," 1956. (Mimeographed.)



- Newman, William. Administrative Action. New York: Prentice-Hall, Inc., 1951.
- Parsons, Talcott, Bales, Robert, and Shils, Edward. Working Papers in the Theory of Action. Glencoe: The Free Press, 1953.
- Roethlisberger, Fritz, and Dickenson, William. Management and the Worker. Cambridge: The Harvard University Press, 1939.
- Sexton, John, and Harbeson, John. The New American College. New York: Harper and Brothers, 1947.
- Sharp, George. Curriculum Development as Re-education of the Teacher. New York: Bureau of Publications, Teachers College, Columbia University, 1951.
- Simms, Charles. The Present Legal Status of the Public Junior College. Nashville: George Peabody College for Teachers, 1948.
- Simon, Herbert, Smithburg, Donald, and Thompson, Victor. Public Administration. New York: Alfred Knopf, 1958.
- Smith, Leo, and Lipsett, Laurence. The Technical Institute. New York: McGraw-Hill Book Company, 1956.
- Starrak, J. A., and Hughes, Raymond. The Community College in the U. S. Ames, Iowa: Iowa State College Press, 1954.
- Stouffer, Samuel, et al. The American Soldier: Combat and Its Aftermath. Princeton: Princeton University Press, 1944.
- Ward, Phebe. Terminal Education in the Junior College. New York: Harper and Brothers, 1947.
- Walker, Helen, and Lev, Joseph. Statistical Inference. New York: Henry Holt and Company, 1953.
- Wattenbarger, James. A State Plan for Public Junior Colleges with Special Reference to Florida. Tallahassee: University of Florida Press, 1953.



APPENDICES

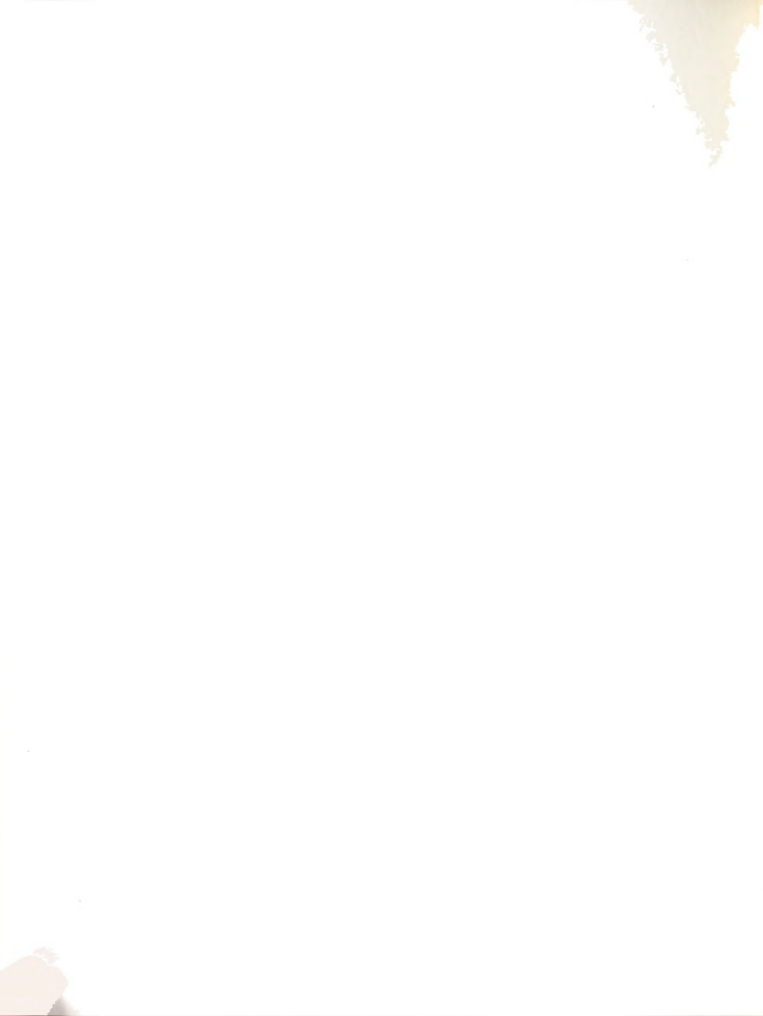


APPENDIX A
RESPONSES FROM QUESTIONNAIRES



APPENDIX A
RESPONSES FROM QUESTIONNAIRES

Question- naire	Items																					
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APPENDIX A--Continued

Question- naire	Items																					
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APPENDIX A--Continued

Question- naire	Items																					
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APPENDIX A--Continued

Question- naire	Items																			
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Question- naire	Items
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Question- naire	Items																										
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Question- naire	Items																										
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APPENDIX A--Continued

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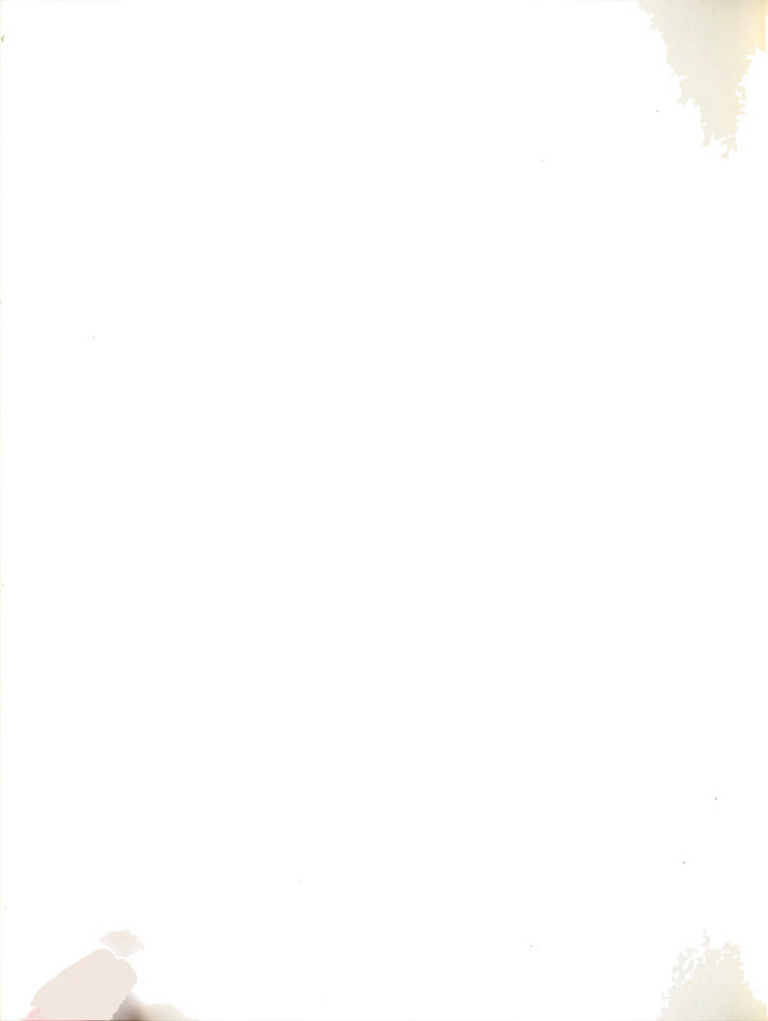
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APPENDIX B

JUNIOR-COMMUNITY COLLEGE QUESTIONNAIRE



APPENDIX B

JUNIOR-COMMUNITY COLLEGE QUESTIONNAIRE

Dear Colleague:

One of the most noticeable trends in American education today is the rapid increase and expansion of the programs of Junior-Community Colleges. While the objectives of the program of the Junior-Community College are well defined by experts in this field, the unique position of the institution allows for considerable variation in individual programs. While considerable writing and research have been conducted in the area of philosophical assumptions underlying the objectives of this type of institution, it appears that little research has been conducted which purports to describe objectives of such institutions as perceived by the persons most directly concerned with institutional objectives, the faculty and administrative officials of the institutions.

The purpose of this questionnaire is to learn your views on several areas of the program of the Junior-Community College. Please check your opinion for each question. There are no "right" or "wrong" answers, the purpose of the questionnaire is simply to learn your views on this matter. Please indicate your response by checking the blanks according to the following key:

1. Strongly agree with the statement.
2. Tend to agree with the statement.
3. Have no opinion on the statement.
4. Tend to disagree with the statement.
5. Strongly disagree with the statement.

The questionnaire may be completed in approximately twenty minutes. It is important that we receive the opinion of each faculty member to insure the validity of the study. Please complete the questionnaire as soon as it is convenient for you to do so and return it to the central office of your college.

Thank you in advance for your help in completing this study.

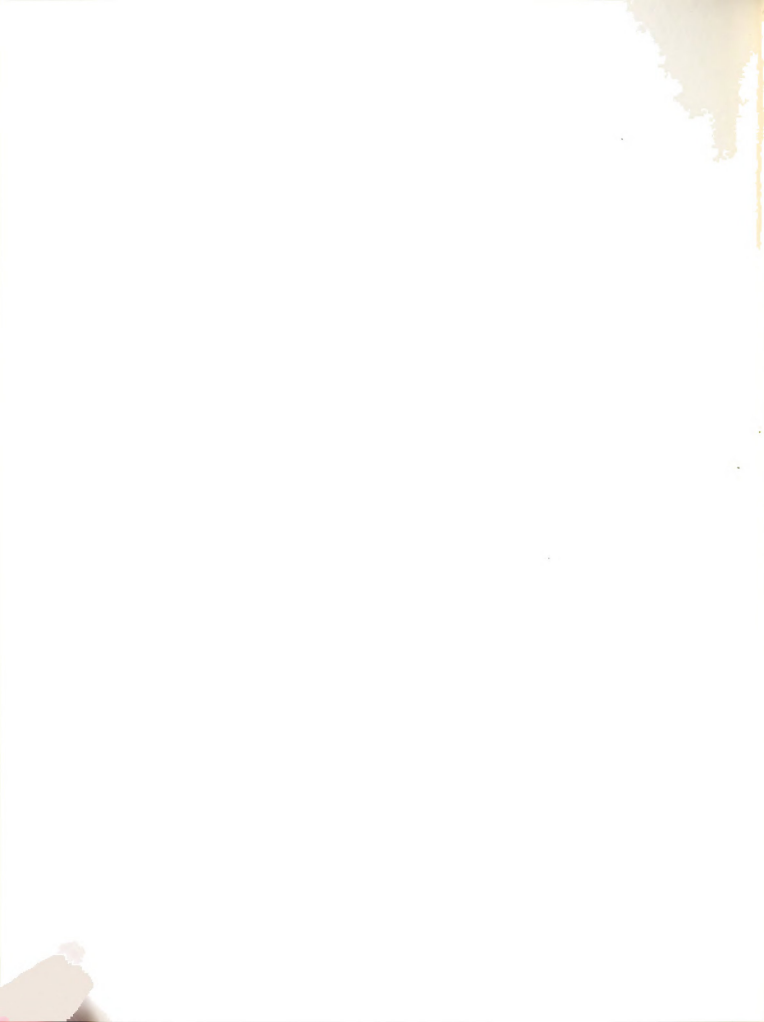
John Kimball
Graduate Student
Michigan State University

Identification

Administrator__ Teacher__ Age__ Sex__; Highest degree received:
Bachelors__ Masters__ Doctors; Number of years teaching or administrative experience in the Junior-Community College ____.



1. The Junior-Community College should be sure that its college parallel courses are adequate before establishing other programs. 1 2 3 4 5
2. The Junior-Community College should continually attempt to improve its program so that it may eventually expand to a full four year college. 1 2 3 4 5
3. The liberal arts courses of the Junior-Community College will provide adequate programs of higher education for most students who enroll in this type of institution. 1 2 3 4 5
4. In the recruitment of teachers for the Junior-Community College, emphasis is placed on securing good classroom teachers rather than upon securing persons for research or other aspects of pedagogy. 1 2 3 4 5
5. The technical and terminal programs of the Junior-Community College should reflect the needs of the local community. 1 2 3 4 5
6. Different certification standards should prevail for teachers in the Junior-Community College than for either high school teachers or teachers in the four year colleges and universities. 1 2 3 4 5
7. So-called Adult Education programs should not be a part of the Junior-Community College program but should be established as separate programs. 1 2 3 4 5
8. A deeper and more thorough knowledge of subject matter will generally set the teacher in the Junior-Community College apart from the high school teacher. 1 2 3 4 5
9. Placement and follow-up on graduates are important functions of the Junior-Community College. 1 2 3 4 5
10. A general, state level controlling agency is necessary to insure a uniform Junior-Community College program. 1 2 3 4 5
11. Admission standards comparable to those of the four year colleges and universities should determine a student's acceptance to the liberal arts courses of the Junior-Community College. 1 2 3 4 5
12. Local boards of control help the Junior-Community College determine local needs in higher education. 1 2 3 4 5



13. Post high school education should be limited to those who clearly show the ability to succeed in programs of higher education. 1 2 3 4 5
14. Since the local community shares the cost of the Junior-Community College, it should determine the program of the institution. 1 2 3 4 5
15. The cost of most technical and terminal programs prohibits their effective use in most Junior-Community Colleges. 1 2 3 4 5
16. The program of the Junior-Community College is not the appropriate place to include offerings in cultural areas. 1 2 3 4 5
17. The Junior-Community College should provide a general guidance and counseling service for all members of its community. 1 2 3 4 5
18. Since the Junior-Community College program is the least expensive form of higher education, this type of education should be available for all high school graduates. 1 2 3 4 5
19. The program of the Junior-Community College should meet the needs in higher education of all portions of the community rather than only meeting the needs of students wishing to transfer to four year colleges. 1 2 3 4 5
20. A general education program should be a part of all Junior-Community College programs. 1 2 3 4 5
21. Citizens advisory committees for the Junior-Community College are often most useful in the areas of the technical and terminal programs. 1 2 3 4 5
22. A separate board of control should be provided for the Junior-Community College at the local level. 1 2 3 4 5
23. One function of the Junior-Community College is to serve as the community cultural center. 1 2 3 4 5
24. Any guidance and counseling programs in the Junior-Community College should be limited to students enrolled for credit. 1 2 3 4 5
25. The level of difficulty of most courses in the Junior-Community College tends to be lower than in the four year colleges or universities. 1 2 3 4 5



26. The liberal arts courses of the Junior-Community College should be patterned after those of the four year colleges or the universities to which the students will transfer.
1 2 3 4 5
27. The fact that the Junior-Community College offers the students his least expensive form of higher education probably attracts more students to the program than any other factor. 1 2 3 4 5
28. Students entering the Junior-Community College would find it difficult to enter four year colleges on the basis of their academic records. 1 2 3 4 5
29. Students of limited academic ability should generally be encouraged to select courses in the trade and technical programs. 1 2 3 4 5
30. The Junior-Community College should serve the community by acting as a coordinating agency for other educational and civic groups. 1 2 3 4 5
31. The guidance and counseling programs of the high schools are adequate to prepare the student for his vocational choice. 1 2 3 4 5
32. Good coordination of the total educational program of a school district may be achieved by having the same board serve as the controlling agency for all community educational activities. 1 2 3 4 5
33. Retention standards based on grade point averages the same as in the four year colleges should be followed by the Junior-Community Colleges. 1 2 3 4 5
34. The general education programs of the Junior-Community College should be available to all members of the community who wish to take them. 1 2 3 4 5
35. One reason why most Junior-Community Colleges do not offer complete programs in the trade and technical areas is a lack of interest on the part of the students.
36. Admissions policies which allow all graduates of the districts high schools to enter its Junior-Community College should be followed. 1 2 3 4 5
37. The Junior-Community College should have as one of its central purposes the establishment of a comprehensive program in adult education. 1 2 3 4 5

38. The Junior-Community College in most communities offers the only educational opportunity for adequate counseling with adults in such areas as job retraining and vocational rehabilitation. 1 2 3 4 5
39. The college parallel offerings of the Junior-Community College should generally be held at a somewhat lower level of difficulty than in the four year college since many of the students taking these courses in the Junior-Community College are only interested in a general educational background. 1 2 3 4 5
40. Vocational training for students is the most important function of the Junior-Community College. 1 2 3 4 5
41. Nationwide job analysis data should be used to determine the course offerings of the terminal and technical programs of the Junior-Community College. 1 2 3 4 5
42. All levels of personnel in the Junior-Community College should be aware of the unique philosophical goals of this type of institution. 1 2 3 4 5
43. The adult education program of the Junior-Community College should enable adults to complete a high school education. 1 2 3 4 5
44. The guidance and counseling services of the Junior-Community College should not be developed until the general academic program of the institution is well established. 1 2 3 4 5
45. Some special training emphasizing the unique philosophical concepts of the Junior-Community College is essential for persons who hold administrative positions in this type of institution. 1 2 3 4 5
46. Most Junior-Community College students are capable of profiting from courses in the liberal arts areas.
1 2 3 4 5
47. Since many high school graduates have not found their purpose or goal in education, the Junior-Community College should provide a "trial" period for such students as they explore vocational and educational possibilities. 1 2 3 4 5
48. The programs of any Junior-Community College should follow closely the general programs of all other such institutions in the state so that uniformity of offering may be achieved. 1 2 3 4 5



49. All urban communities can demonstrate a significant need for programs of a terminal nature at the Junior-Community College level. 1 2 3 4 5
50. The Junior-Community College should establish its program to follow closely the programs of the local high schools, insuring a logical extension of the secondary program. 1 2 3 4 5
51. The Junior-Community College provides an appropriate local center for extension courses from the state colleges and universities. 1 2 3 4 5
52. Guidance and counseling services of the Junior-Community College are best accomplished by the individual teacher rather than by special guidance persons. 1 2 3 4 5
53. The programs of the Junior-Community College should provide services for students from a larger area than the legal limits of the college. 1 2 3 4 5
54. Any student admitted to the Junior-Community College should be able to participate in the liberal arts program. 1 2 3 4 5
55. The student should bear a larger share of the increasing costs of the Junior-Community College. 1 2 3 4 5
56. The academic ability of students in the trade and technical programs of the Junior-Community College should be at a level with students in other programs. 1 2 3 4 5
57. One measure of the quality of the teaching staff of the Junior-Community College will be the number of advanced degrees obtained by the staff. 1 2 3 4 5
58. Students with very poor high school records should not be admitted to the Junior-Community College. 1 2 3 4 5
59. Since the cultural needs of most communities are very poorly defined, it is difficult for the Junior-Community College to offer programs in these areas. 1 2 3 4 5
60. Since the majority of Junior-Community College students live at home, the personnel programs of these institutions need not be developed to the point that they are in most four year colleges. 1 2 3 4 5
61. The student should bear only a very small share of the cost of the program at the Junior-Community College. 1 2 3 4 5



62. In general, the liberal arts offerings of most Junior-Community Colleges tend to be more complete than other programs, since most students are interested in these areas and instructors are more easily found. 1 2 3 4 5
63. Course offerings in a program of general education will vary from those of a liberal arts or college parallel program. 1 2 3 4 5
64. Some salary differential should exist between teachers in the Junior-Community College of a school district and the teachers in the district's high schools. 1 2 3 4 5
65. In many communities, the need for trade and technical programs is so slight that these programs should not be included in the Junior-Community College. 1 2 3 4 5
66. Most Junior-Community Colleges are so lacking in facilities due to increasing numbers of students coming directly from high school that they should decrease offerings in adult education. 1 2 3 4 5
67. The acceptance of non-resident students in the Junior-Community College should not be encouraged. 1 2 3 4 5
68. An intensive guidance and counseling program should be conducted during the first year a student is enrolled at the Junior-Community College since nearly all students will spend only two years at the institution. 1 2 3 4 5
69. Earning an Associate of Arts degree in the college parallel or liberal arts program of the Junior-Community College should entitle any student to continue his education at a state four year college or university. 1 2 3 4 5
70. The general education program in the Junior-Community College should not be used as transfer credit for further education at a four year college or university. 1 2 3 4 5
71. A state system of Junior-Community Colleges embracing the total area of the state is desirable. 1 2 3 4 5
72. A lack of trained personnel hampers most Junior-Community Colleges from establishing trade and technical programs, even where great community need has been demonstrated. 1 2 3 4 5
73. Most needs for adult education in a community may be met by programs in general education, crafts, and the like rather than in offerings in academic or trade areas. 1 2 3 4 5

74. In most districts, the program of the Junior-Community College can be conducted in the facilities used by the local high school. 1 2 3 4 5
75. Vocational counseling alone is an adequate justification for a strong guidance and counseling program in the Junior-Community College.

OPINIONAIRE--Please check your opinion for all of the following items.

- I. The present scope of the program of this college is:

___ Adequate in all areas
___ Inadequate in some areas

- II. Check the areas of the program which you feel to be the strongest and also check those which you feel are weakest:

	<u>Strongest</u>	<u>Weakest</u>
Liberal Arts	___	___
General Education	___	___
Trade, terminal and technical	___	___
Adult Education and Community Service	___	___
Guidance and Counseling	___	___

- III. Check the most important barrier to securing adequate programs.

___ Lack of funds
___ Lack of facilities
___ Lack of community support
___ Lack of faculty interest
___ Lack of administrative interest

- IV. If lack of funds is an important barrier, more funds should come from:

___ State
___ Local taxes
___ Students

- V. Other Comments:



APPENDIX C

LETTERS



LETTER TO COMMUNITY COLLEGE DEANS

Michigan State University--East Lansing

Dear -----

Mr. John Kimball, Director of Admissions at Alma College is finishing up his doctoral program here at Michigan State University. As a member of his committee, I am writing you endorsing his research.

His study involves the staff members of selected community junior colleges. The data that he plans to collect will only be used for purposes of his thesis.

He is writing you relative to the details. The purpose of this letter is to endorse the project as a worthwhile undertaking. I realize that it is near the end of the college year and that everyone is quite busy. However, I hope that you will give Mr. Kimball the brief time necessary in order for him to collect his data. He plans on delivering and picking up the materials personally.

Thank you in advance for your cooperation I remain,

Sincerely,

Max S. Smith
Assistant to the Provost
5 Kellogg Center

LETTER TO COMMUNITY COLLEGE DEANS

Dear -----

I would like to ask your help in completing a research study which I am conducting to satisfy the requirements for the Doctoral program at Michigan State University. The study concerns itself with the opinions of administrators and teachers in selected Michigan Community Junior Colleges toward the objectives of this type of institution of higher education. The general outline of this study has been approved by my doctoral committee and they have given me permission to contact you in this matter.

Specifically, I would like to ask you to allow me to bring to you a supply of questionnaires which I have prepared pertaining to the above mentioned area. These would be distributed to all your teachers and administrators for completion. The questionnaire is printed and may be completed in approximately twenty minutes. I will deliver the materials and will pick them up when they have been completed. I regret that I am forced to make this request so late in the academic year but I have been unable to complete the work prior to this time.

If you feel that it will be possible for me to work with you in this matter, I will plan to visit your college during the latter part of next week to distribute the materials and talk personally with you.

Sincerely,

John Kimball
Director of Admissions
Alma College



APPENDIX D

OBJECTIVES OF MICHIGAN COMMUNITY COLLEGES

STATEMENTS OF INSTITUTIONAL OBJECTIVES FROM CATALOGS
OF MICHIGAN COMMUNITY COLLEGES

Alpena

"The Basic purpose of the college is to meet the educational needs of all the people in Northeastern Michigan.

"In pursuit of this purpose, Alpena Community College offers the following programs: college and university transfer, vocational technical-terminal, general education, and adult education.

"The college has the policy of encouraging all groups and individuals in Northeastern Michigan to contact college officials regarding educational needs, and the college, wherever its facilities permit, then organizes programs to meet the demand indicated by the request.

"For example, although the industry of the area is not sufficiently homogeneous to call for highly specialized courses of study in vocational technical-terminal fields, yet it has been demonstrated that there is a need for basic technical training. A basic industrial technical program has been developed which may be adapted to specific situations with a minimum of transitional difficulty. It is intended that this program be constantly studied and revised to keep it related to the changing needs for technical personnel in industry.

"It is a purpose of the college to encourage more qualified students in the Northeastern Michigan area to enter a higher education program.

"It is a purpose of the college to contribute to the improvement of the general, cultural, intellectual, and economic level of the area.

"The college has the policy of constant study of the community and the college to be sure it is carrying out its function."

Bay City

"Bay City Junior College exists for the purpose of providing an educational program beyond the high school level which prepares its students for the responsibilities of citizenship and which offers opportunities for continuing education for all residents of the area. The specific purposes of the college are as follows:



- "1. To provide two years of college instruction for those planning to transfer to other colleges.
2. To provide two years of general education beyond the high school level for those who wish further education for personal development.
3. To provide one and two-year business, technical, and semi-professional programs for those who wish employment at the conclusion of their Junior College training.
4. To provide courses or total programs which meet the cultural, professional, and vocational needs of the adults in the community.
5. To co-operate with other departments of the school system and with individuals, civic groups, and other institutions of higher learning in making available educational opportunities for the community."

Benton Harbor

"The Community College and Technical Institute is dedicated to serving educationally, the needs of the community in which it exists, and from which it derives its support. It stands ready to provide education to all beyond the high school. The scope of its offerings and the type of service it renders flow from the determined needs and demands of the community.

"Specifically stated, the purposes of the Community College and Technical Institute are:

1. To provide two years of academic training for students who intend to transfer to four-year institutions.
2. To provide specialized and academic training for students who plan on one or two years of college.
3. To provide for adults continuing education which will contribute to their general and vocational development."

Flint

"In 1954, the Flint Board of Education, together with a group of leading Flint citizens, decided to expand and integrate all

of Flint's cultural activities into a College and Cultural Center with the Junior College as its nucleus.

"In response to a request of the Board of Education, the University of Michigan in 1955 voted to proceed with plans for a University branch in Flint to provide for a third and fourth year of college.

"The Flint College and Cultural Center is totally a community project, planned, financed, and developed by Flint people in an effort to give all Flint residents a place with adequate facilities where they can satisfy their educational and cultural needs. To this end, the Center's facilities and services will be available not only to students of the Junior College and the Flint College of the University of Michigan, but also to individuals and groups within the community."

Henry Ford

"Henry Ford Community College was organized to meet the educational needs of the community beyond those already provided for in the regular public school program through the twelfth grade by:

1. Providing the first and second years of work in the Liberal Arts and Preprofessional fields for those students who wish to transfer to higher educational institutions.
2. Providing one- to two-year technical programs of business and industrial education for those students who expect to terminate their formal education by preparing for employment at the semiprofessional level.
3. Providing a program of two additional years of general education for the social, cultural, and personal development of students wishing to continue beyond senior high school.
4. Providing for the adults of the community single courses or combinations of courses in those fields in which there are sufficient interest and demand to warrant the organization of classes. Classes may be scheduled for day or evening hours, from a single class meeting to a two-year program, on a credit or noncredit basis.

5. Providing educational services to the organizations and individuals of the community including; speakers, resource personnel or material, organization of special institutes or programs, reading lists, education counseling and testing, etc., as requested.

"It is a general objective in all programs, technical, general, liberal arts and pre-professional, to stress the importance of all students eventually becoming effective members of society and active participants in the democratic way of life.

"Educational needs of the community are under constant and continuous survey. The citizens of Dearborn are invited to participate in planning the total program."

Gogebic

"It is fundamental that a community college attempt to meet the needs of the community it serves. To this end the administration obtains the most accurate ideas of the careers, educational aspirations and expectations of the people who live in the area served by the college. Through its counseling facilities, the college encourages the young people and their parents to temper their aspirations and expectations with realism. For the community as a whole the college aspires to serve its needs with courses, conferences, and extension services that are available and feasible.

"The means for planning the curricula and the policies of the college is through the representative efforts of the people working together: community, students, faculty, and administrative officers.

"The Gogebic Community College provides an opportunity for its students to live at home during their two years of study. It is recognized that the big cost in going to college is the living cost. The college provides more opportunities for participation in both class, extra-class and community activities, than will be found on the campus of the big institution, and these opportunities are vital and important in developing depth and breadth of an advanced education."

Grand Rapids

"Established by the Board of Education and supported by local and state taxation, Grand Rapids Junior College is the only public college located in this industrially diversified area with a population of 320,000.



"Junior College offers a variety of daytime and evening courses. These may be divided into 1) the freshman and sophomore level liberal arts curricula, 2) the technical curricula, 3) the community service offerings.

"The liberal arts curriculums are intended to develop and vitalize the student's understanding of the scientific, social, and cultural forces among which he will live, and to acquaint him with the significant ways men have interpreted these forces the principles established in each area, and their implications for the maturing person. This exploratory general-type education provides a sound basis for intelligent living and citizenship.

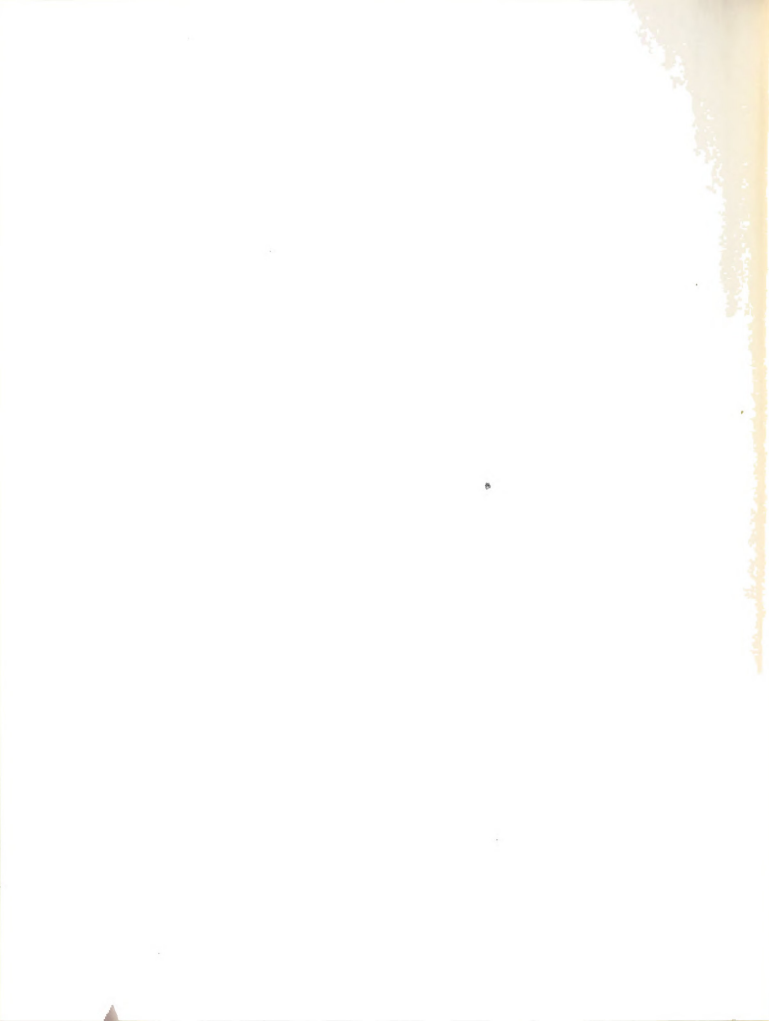
"Junior College believes that the student who plans to go on for a degree will find these liberal arts curriculums a solid foundation, whether his advanced work is of the general type, pre-professional, or professional. Objective studies prove that Grand Rapids Junior College graduates are as well prepared for specialization as those who take their first two years at a four-year institution.

"Junior College offers many one or two-year specialized courses for those who wish to prepare for specific positions in art, business, drafting, health services, home economics, industrial chemistry, mechanical technology, nursing, etc. The college has arrangements with hospitals, business establishments, and industry whereby students in some of the specialized courses may work--in most instances, for pay--under Junior College coordinators.

"The community service offerings of the Junior College are various. First, it offers a broad program of freshman-sophomore level evening classes; second, it has charge of the academic phase of the Board of Education evening high school program; third, it conducts the local Americanization program; fourth, it stands ready to cooperate with business, industry, labor, or cultural groups who want specialized work the College can provide."

Highland Park

"Highland Park Junior College has the general objective of all colleges, i.e., to meet the needs of high school graduates who seek further education as a means of achieving their ultimate goals in life. As a member of the North Central Association of Colleges and Universities, Highland Park Junior College provides courses with transfer credit to senior colleges in both pre-professional and vocational training. In its role



as junior college, this institution also offers a number of programs of study for the terminal student.

"A major purpose of this college is to provide a general background in a variety of fields and to develop in the student self-discipline, clear thinking, lucid expression of ideas, and a sense of responsibility to people around him and to society as a whole. Accepting the premise that education must aim to shape the whole man, the college offers special training in such fields as art, music, debating, play production, and creative writing, and fosters a number of clubs and athletic activities which give ample opportunity for leadership.

"For the transfer student, Highland Park Junior College offers basic and preprofessional courses similar to those in the first two years of the senior college. It is the aim of the school to facilitate the transition from the atmosphere of a high school to that of a senior college or university by providing frequent student-teacher conferences, so that the student may understand his own abilities and learn to apply them effectively.

"Socially, the life of the college is wholesome and varied. The student body is large enough to afford interesting friendships, whatever one's taste, and to support a good many projects and activities--dramatic, musical, journalistic, civic, recreational--, but small enough so that those seeking to participate will almost certainly find a use for their talents.

"Educationally, Junior College offers a wide range of opportunity, serving both terminal and transfer purposes. Its two-year courses give vocational competence. Art, music and literature courses are available for personal enrichment as well as to fulfill senior college requirements.

"Remedial and review courses aid those whose high school background is inadequate.

"Instructors are available for conference on everything from the next day's assignment to the choice of a career. This readiness of teachers, advisers, and counselors to consult with students on personal or educational problems is an outstanding feature of the college."

Jackson

"The purposes of a community college are not always understood. Those of Jackson Junior College, as they have developed

over more than a quarter century, may be summarized as follows:

1. To promote the educational advancement of the community, by its own programs of instruction, by promotion of other educational activities of interest and value to the community, and by providing consultative, guidance and service facilities in educational matters to groups and individuals in need of them.

The community is interpreted to embrace the Jackson Union School District and surrounding territory, including all of Jackson county and portions of adjacent counties.

2. To provide testing and guidance services necessary to enable students to discover and follow suitable preparation for their chosen vocations, to correct errors or deficiencies in their earlier preparation for those vocations and to encourage them to make the best use of their aptitudes and interests.
3. To provide fully accredited instruction in the first two years of college work in arts and science, practical arts, music, art, education, business administration and the professions.
4. To provide instruction in a variety of vocations to the level required for responsible employment in the community.
5. To provide instruction intended, in conjunction with other objectives, to promote better understanding of human nature, of the history and principles of human society (especially concerning our own country, its backgrounds and its present world relationships), and of the principles of ethical conduct, to the end of preparing the student for adult citizenship and family responsibilities and for a useful and happy personal life.
6. To provide opportunity for adults to continue their educational growth in relation to any of the above objectives.
7. To promote, facilitate, and coordinate the offering in the community of university extension courses for advanced credit and the provision of other educational experiences beyond the scope of the facilities of the college alone.



8. To cooperate with other departments of the school system, with civic groups, with educational institutions and organizations outside the community, with educational foundations, and with private individuals and corporations in any proper endeavor likely to result in educational advantage to this community.
9. To maintain a program of activities, under faculty supervision, giving students experience in working together and performing in public and helping to develop physical or mental skills advantageous to them."

Kellogg

"Kellogg Community College is organized to meet the educational needs of the community and offers the following programs.

1. Freshman and sophomore programs in the Liberal Arts and Pre-Professional fields for those students who wish to complete degree programs at institutions of higher education.
2. Technical programs in industrial and business education for students who wish to prepare for employment at the semi-professional level.
3. A two-year program of general education for the social, cultural and personal development of students desiring to continue their education beyond high school.
4. Courses and combinations of courses for adults in those fields where sufficient interest and demand exists to warrant their organization. These classes may be offered on a credit or non-credit basis.
5. Other educational services including: educational counselling and testing, speakers, resource personnel and materials, etc."

Port Huron

"Although its original purpose was to offer liberal arts courses which paralleled those of the four-year institutions and thus to prepare its graduates for later transfers to colleges and universities, it has endeavored at all times to meet the needs of high school graduates who wish to continue



their studies and thus to prepare themselves for immediate entry into the business and industrial world. Community needs are recognized in the admission of adults to any classes which they may care to pursue for their own pleasure and profit."

Muskegon

"Years ago before the college was established Muskegon citizens asked, 'Why should we have a junior college?' Here are the clear-cut answers graduates and other students have expressed:

"Community College gives sound training in the basic subjects needed to pursue academic courses in senior colleges and professional schools.

"Community College bridges the gap between high school and university. Many students have found adjusting to campus college life easier after having spent their first two years in college while still living at home.

"Community College keeps educational costs low. In addition to saving money by residing at home many students have engaged in part-time employment, contributing in this way toward the heavy expense of living away from home during the last years spent in earning a degree.

"Community College provides skills needed in commercial and industrial fields through terminal courses.

"Community College gives students with weak high school records a chance to remove their deficiencies. Occasionally a student matures slowly and is not ready for serious study until he is of college age. Community College has a place for such a person.

"Community College offers a confused student the opportunity to explore fields of endeavor and to discover a vocational objective consistent with his interests and abilities.

"Community College takes a personal interest in the welfare and progress of students. No student is ever lost in the crowd.

"Community College enriches the lives of adults through courses of a vocational and cultural nature in the Evening Division.

"Community College seeks to assist planning groups of citizens interested in making Muskegon a better community in which to live. Faculty members hold membership on various boards and committees; they frequently appear as speakers before civic minded groups. These staff members believe the Community College is important to Greater Muskegon."



Northwestern

"The purpose of Northwestern Michigan College is to bring liberal and vocational studies on the college level to people of all ages in northwestern Michigan. Regionally controlled and supported, this institution is shaping its future around the needs of the area it serves. The College proposes to serve 1) students who wish to begin a liberal arts or pre-professional program, 2) students who wish to complete a two-year course combining liberal and vocational studies, 3) students who wish to develop particular skills or cultural interests without acquiring college credit in the process.

"The purpose of the College is also to serve as an educational and cultural center. It carries out these aims by providing leadership, technical aid, and facilities for groups engaged in community service, research or cultural development; by encouraging other Michigan schools to operate college extension courses on its campus; and finally, by standing ready to offer its services at off-campus points throughout the region when such needs arise."

South Macomb

"The South Macomb Community College was organized to serve the several educational needs of the community reaching beyond the senior high school.

"The college offers:

1. The first and second years of work of the Liberal Arts and Pre-professional fields. Students may transfer from these programs to senior colleges and universities upon meeting the requirements of the institution to which they transfer.
2. One to two year technical programs in industrial and business education. These are terminal in nature preparing the student for immediate employment on a semi-professional level.
3. Two years, beyond the senior high school, to the student who wishes a general background of cultural, social, and personal development.
4. A broad program of adult education classes.
5. A program of high school completion for adults who have been out of school for some period of time. This program is not designed to take the place of regular day high school programs. Students who would normally attend regular day programs are not eligible to admission.



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