ABSTRACT

A COMPARISON OF THE PERCEPTIONS OF FACULTY AND STUDENTS CONCERNING THE BENEFITS, NEEDS AND OBJECTIVES OF THE DEVELOPMENTAL SKILLS PROGRAM AT NEW YORK CITY COMMUNITY COLLEGE

By

Willie Edward James Pollard

The Problem

Gone are the days when the population was largely agrarian; when only 10 percent of the young people went through secondary school; when a high school diploma provided entree into the white-collar class, and gave assurance of high status.

Much of society now believes and acts as though college has something to contribute to everyone; thus, there is a shift in national attitudes about "who should go to college" and "what a college is and should provide."

The recognition of higher education as a "basic need for life" has helped pave the way for the community junior college. The community junior college is designed to serve the "needs" of the community. The community junior college has been called "democracy's college"; thus, providing a place for all.

Willie Edward James Pollard

Expanding enrollments in the community junior colleges have brought to the campuses, students with widely differing backgrounds; thus, more closely representing the total population of the United States. Among the community junior college students, are students with deficiencies that must be remedied. In order to fulfill the "concept of the open door," the community junior college must provide meaningful educational experiences for students with various deficiencies.

The need of education for everyone, and especially for "the low-achieving student," has led community junior colleges to develop courses and programs to help meet student needs. The program developed for the low-achieving student is called a "developmental program."

The primary purpose of the study was (a) to identify characteristics of developmental programs at selected public-supported community junior colleges, (b) to use these characteristics to identify what students and faculty perceived to be important aspects of the Developmental Skills Program at New York City Community College and (c) to compare the perceptions of students and faculty as to stated program benefits, needs and objectives.

Methods and Procedures

The "First Instrument," which was used in identifying characteristics, was mailed to the Director of Special Programs, at selected public-supported "open door"

community junior colleges located in cities identified as "riot communities of 1967," by the "National Commission on Civil Disorders." The "Second Instrument," which was used to compare perceptions, was self-administered to the students in the sample population, and given to the faculty participants, of the Developmental Skills Program of New York City Community College, through the department chairman, to be returned by mail. The research hypotheses for this investigation were:

1. There will be no difference in the perceptions of faculty and students as to the stated benefits and objectives of the Developmental Skills Program at New York City Community College.

2. There will be no difference in the perceptions of faculty and students as to the stated student needs of the Developmental Skills Program at New York City Community College.

The one-way analysis of variance was used for testing variability in the investigation. The .05 level of confidence was established and used in determining statistical significance. To add clarity and meaning, the responses to all items were reported using frequencies and percentages.

Findings and Conclusions

The analysis of variance of the responses based on the benefits and objectives had an approximate significance probability of F statistic of .008. An examination of this analysis indicated a statistical significant difference in the perceptions of faculty and students as to the stated benefits and objectives of the Developmental Skills Program at New York City Community College.

The analysis of variance of the responses based on needs had an approximate significance probability of F statistic of .001. An examination of this analysis indicated a statistical significant difference in the perceptions of faculty and students as to the stated needs of the Developmental Skills Program at New York City Community College.

Data from the investigation were indicative of the difference in perceptions of students and faculty on issues affecting the developmental education program.

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By

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TABLE OF CONTENTS

LIST OF TABLES

Table | Page

CHAPTER I

THE PROBLEM

Introduction

Gone are the days when the population was largely agrarian; when only 10 percent of the young people went through secondary school; when a high school diploma provided entree into the white-collar class, and gave assurance of high status.

Much of society now believes and acts as though college has something to contribute to everyone; thus, there is a shift in national attitudes about "who should go to college" and "what a college is and should provide."

These attitudinal changes have aided higher education in being characterized as a "screening agent." In an article, "The Next Decade of Higher Education," Harold L. Hodgkinson stated: "In this society, higher education will continue to be the major sorting and selecting agency to determine those who can be said to possess merit."[1] In a second article, "Directions in

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[1]Harold L. Hodgkinson, "The Next Decade of Higher Education," The Journal of Higher Education, January, 1970, p. 19.

Higher Education," Elliot L. Richardson stated:

> higher education has become the main source of credentials in American society. Employers find it easier to screen job applicants on the basis of the degree they hold than to evaluate their ability to perform specific tasks.[2]

The accepted goal of universal education for two years beyond high school has been given strong support by presidential and/or national committees and commissions. In 1947, The Truman Commission on Higher Education saw education as an aid in equalizing opportunities.

> Whatever form the community college takes, its purpose is educational service to the entire community, and this purpose requires of it a variety of functions and programs. It will provide college education for the youth of the community certainly, so as to remove geographic and economic barriers to educational opportunities and discover and develop individual talents at low cost and easy access.
>
> The time has come to make education through the fourteenth grade available in the same way that high school education is now available. . . .
>
> To achieve this, it will be necessary to develop much more extensively than at present such opportunities as are now provided in local communities by the 2-year junior college, community institute, community college, or institute of arts and sciences.[3]

The Educational Policies Commission of the National Education Association of the United States and the American Association of School Administrators in its publication "Universal Opportunity for Education Beyond the High School" stated:

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[2]Elliot L. Richardson, "Directions in Higher Education," School & Society, Summer 1972, pp. 296-97.

[3]President's Commission on Higher Education, Higher Education for American Democracy, Vol. I (Washington: Government Printing Office, 1947), pp. 37, 67.

> Unless opportunity for education beyond the high school can be made available to all, while at the same time increasing the effectiveness of the elementary and secondary schools, then the American Promise of individual dignity and freedom cannot be extended to all.[4]

In 1957, "The President's Committee on Education Beyond the High School" stressed the need for higher education to allow for one to develop his full potentials. It stated: "The American goal is to enable each young person to develop his or her full potential, irrespective of race, creed, national origin or sex."[5]

A continuous stress of higher education as an equalizer of opportunities can be seen in a special report "Quality and Equality." The special report stated:

> More and more Americans, with aspirations for a better life, assume the necessity of a college education.
>
> Equality of opportunity through education, including higher education, is beginning to appear as a realistic goal for the less privileged young members of our society.[6]

The recognition of higher education as a "basic need for life" has helped pave the way for the community

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[4]The Educational Policies Commission, Universal Opportunity for Education Beyond the High School (Washington: National Education Association of the United States, 1964), pp. 4-5.

[5]President's Committee on Education Beyond the High School, Second Report to the President (Washington: Government Printing Office, 1957), p. 8.

[6]Carnegie Commission on Higher Education, Quality and Equality: New Levels of Federal Responsibility for Higher Education (New York: McGraw-Hill Book Company, 1968), p. 1.

junior college. The community junior college is designed to serve the "needs" of the community. The community junior college has been called "democracy's college"; thus, providing a place for all.

Community junior colleges have accepted as one basic principle for their existence the ideal of the "open door college." The "open door concept" embraces the policy of keeping the doors open to any person who can profit by what the college can offer, and the college endeavoring to offer that from which the people can derive benefit.

Expanding enrollments in the community junior colleges have brought to the campuses, students with widely differing backgrounds; thus, more closely representing the total population of the United States. Among the community junior college students are students with deficiencies that must be remedied. In order to fulfill the "concept of the open door," the community junior college must provide meaningful educational experiences for students with various deficiencies.

The need of education for everyone, and especially for "the low-achieving student," has led community junior colleges to develop courses and programs to help meet student needs. The program developed for the low-achieving student is called a "developmental program."

In a U.S. Department of Health, Education, and Welfare Publication, "A Guide for Planning Community Junior College Facilities," it is stated:

> Developmental Program--One of the most effective means for preventing the community college from changing its "open" door to a "revolving" door is the establishment of a developmental, remedial, or clinical program. This program is primarily designed to assist the marginal student, but may also be used to advantage by an average student with some deficiency in a subject matter area.[7]

This study will concern itself with the "Developmental Skills Program" of New York City Community College of the City University of New York.

Justification of This Study

> Low-achieving students enter the community college for a variety of reasons. Some do not decide on college early enough in high school to meet selective admissions requirements. Others become motivated too late. Some students have such low academic potential that there is little chance that they can succeed in regular college courses. For whatever reasons these students enroll in the community college, the institution is charged with providing educational programs to accommodate their diverse abilities and interests. The open-door concept of admissions has validity only if these students are able to succeed in their educational objectives.[8]

Educators are beginning to take a closer look at programs for low-achieving students in the community junior college. They are wondering which methods, courses and programs are best, and they are seeking answers to

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[7]U.S., Department of Health, Education and Welfare, A Guide for Planning Community Junior College Facilities (Washington: Government Printing Office, 1969), p. 13.

[8]John E. Roueche and A. S. Hurlburt, "The Open-Door College: The Problem of the Low Achiever," Journal of Higher Education, November, 1968, pp. 453-56.

questions which they have previously failed to ask. Much of the current concern for developmental programs is fostered to a great extent by a new situation; namely, great increases in enrollment representing the total range of population, mentally, socially, and economically.

> New students to higher education will be primarily students whose performance at academic tasks in the past has been below average. Low academic ability, as that ability is traditionally nurtured and measured in the schools, will be the distinguishing characteristic of these students.[9]

While low-achieving student numbers increases and concern over an equal educational opportunity grows, establishment of effective developmental programs is a vitally important matter to every student. The type of program developed plays a major role in determining the student's success in college and in post-collegiate situations. Acquiring a skill or the capacity to become a productive citizen is an important part of one's life. Therefore, effective developmental programs are essential as means of developing this desired productivity. Studies of developmental programs are then of importance to students, instructors, and institutions alike. Studies such as this one can become initial steps toward answering questions, identifying problems, and providing suggestions for administering a developmental program.

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[9]K. Patricia Cross, Beyond the Open Door (San Francisco: Josey-Bass Inc., Publishers, 1971), p. 12.

Research on developmental programs, as defined in this investigation, is virtually nonexistent. Information that is available is presented in the form of surveys of the availability of programs at various institutions or papers presented at various conventions. One such document, "A Report of the Conference on Two-Year Colleges and the Disadvantaged," draws on personal experience of educators actively involved in running developmental programs at the college level. A survey, "Developmental Programs in Midwestern Community Colleges," focused on the disadvantaged student and attempted to examine the extent of community junior college involvement in special educational and support services for him. The study ascertained the types of programs in operation, the number of students involved in each, and the nature of the services provided.

Probably more than any other group, "the disadvantaged" has been categorized, described, scrutinized and sympathized with. Much of this rhetoric has led to promotions--due to publication; to financial assistance--due to administration of a program; and to general distraught and distaste on the part of the disadvantaged--due to participation in ineffective programs. Research conducted by Roueche indicated:

> Students assigned to remedial courses either believe or hope that they will eliminate deficiencies and that eventually they can pursue their intended educational program. Research on these students leads to the conclusion that either remedial students

> have unrealistic educational goals or that the programs in the community junior colleges are failing to remedy their educational deficiencies.[10]

An extensive review of the research has not revealed an assessment and a comparison of benefits, needs and objectives as perceived by program administrators and directors with those of students who have either completed, or students who are presently enrolled in a developmental education program.

The challenges brought to the community junior college by the disadvantaged students should demand a greater part of the financial and educational knowledge of the "concerned society." The investment of time, money and effort to improve the lot of the poor student is a substantial but necessary undertaking. The undertaking may include the careful analysis and the overhauling of many program and curriculum offerings, but educators must make every effort to really give the disadvantaged a "real" double chance if necessary.

A further justification of this study can be seen from the standpoint of educational fulfillment. That is, fulfillment of the "open door concept" of the community junior college philosophy. This is expressly true in the case of the community junior colleges selected for this

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[10]John E. Roueche, Salvage, Redirection, or Custody? Remedial Education in the Community Junior College (Washington: American Association of Junior Colleges, 1968), pp. 13-14.

investigation. The community junior colleges surveyed, in the first stage of the study, are public-supported "open door" institutions, located in cities identified as "riot communities of 1967," by the "National Commission on Civil Disorders" (Appendices E and F). The Commission mandates an improvement in educational opportunities; thus, employment opportunities for all concerned. It is assumed that because of the educational philosophy, the location, and the mandates of the National Commission, these community junior colleges should have viable developmental education programs. The findings, conclusions and implications of this investigation should enhance the developing of "developmental education programs" geared to the particular needs, beliefs and objectives of the students being served by the program.

Purpose of This Study

It is the purposes of this study (a) to identify characteristics of developmental programs at selected public-supported community junior colleges, (b) to use these characteristics in identifying what students and faculty perceive to be important aspects of the Developmental Skills Program at New York City Community College, and (c) to compare the perceptions of students and faculty as to stated program benefits, needs and objectives. Impetus for this study is found in comments such as the following:

> Community junior colleges have established courses and curricular programs to deal with the low-achieving student. Typically these programs are called "remedial" or "developmental," or one of a score of less common terms. Most of these programs have as their central purpose the remediation of students to the point that they can enter regular college credit courses. . . . Courses and programs have been established because another college has a similar program or because there are outside funds to support a particular activity.[11]
>
> There is, however, no consensus on specific goals toward which remedial programs are pointed. Junior college administrators and others cannot even agree on the tangible objectives of remedial education, much less on a program that would meet the objectives.[12]
>
> Remedial programs must be designed specifically to remedy student deficiencies and nothing more.[13]

Roueche reports several institutional research efforts confirming the need for courses and programs whose objectives are geared to the needs of the students enrolled in them.

This investigation will enable one to see important aspects of the Developmental Skills Program at New York City Community College of the City University of New York, as perceived by students presently enrolled in the program. This investigation can help in pointing the way to more effective institutional efforts in the near future.

The writer of the study is cognizant of the fact that this investigation cannot "be" all things to developmental education, and will not attempt to prescribe a specific blueprint for all programs to follow. Special emphasis will be placed on descriptive analysis of:

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[11]Ibid., p. 2. [12]Ibid., p. 21. [13]Ibid., p. 43.

1. student assessment of the program
2. perceived and stated rationale and/or objectives of the program, and
3. instructional approaches and materials used in the program.

Hypothesis

The major hypothesis is that there will be a difference in the perceptions of faculty (faculty, staff, administrators) and students as to the stated benefits, needs and objectives of the Developmental Skills Program at New York City Community College of the City University of New York.

The theory supporting this hypothesis is that because of their experiences and positions, the faculty and the students will have different perceptions of benefits, needs and objectives of the developmental program. Norvel Smith in an address, "Can the Community College Meet A New Role in New Times?", described the tendency of many black and white middle class faculty members to bring with them, to the community junior college programs, their lack of idealism and empathy into structuring and teaching developmental courses. A "Survey Report of State-Funded College Programs for Disadvantaged Students in Massachusetts" found a tendency for program language and thinking to express more concern for subject

matter than for students. Berg and Axtell (1968) concluded:

> Most of the programs for disadvantaged students have been initiated by administrators. Although there is a growing awareness among the faculty of the needs of disadvantaged students, the evidence from this study indicates that the majority of faculty members of California's junior colleges are not generally concerned about providing equal educational opportunities for disadvantaged students.[14]

Definition of Terms

1. Developmental Program - A program designed to develop skills or attitudes required to complete the program.

2. Disadvantaged - Having an academic, a socio-economic, a cultural or other handicap, resulting from conditions of poverty, neglect and isolation of life experiences, which prevents one from succeeding in a "traditionally" designed educational program.

3. Remedial Work - Work designed to correct student deficiencies in order that the student might enter a program for which he was previously ineligible.

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[14] Ernest H. Berg and Dayton Axtell, Programs for Disadvantaged Students in the California Community Colleges (Oakland: Peralta Junior College District, 1968), p. 75.

Limitations of This Study

1. The number and the institutions to be surveyed are limited to those located within a city area that is listed on the "List of Riot Communities for 1967."

2. The questionnaire technique itself creates limitations in
   - 2.1 the quality and the validity of the survey instruments.
   - 2.2 the difficulties in securing the complete cooperation of the respondents in collecting data.
   - 2.3 the difficulties in tabulating, validating and interpreting responses of the participants.

Sources of Data for This Study

Data for this study were gathered in three ways. The first method used was the securing of data through a survey of existing literature pertinent to the study. The second method of data generation was through implementation of the questionnaire-survey technique. The third method of data generation was through the use of personal interviews and interactions with the director, the faculty, staff and the students of the Developmental Skills Program at New York City Community College.

The survey of the literature pertinent to the study was accomplished through investigation of what could be

called major and minor sources. The major sources of data within the survey of existing literature were publications of associations directly involved with the subject under investigation. Included in this group are publications from the American Council on Education, Carnegie Commission on Higher Education, American Association of Community Junior Colleges, College Entrance Examination Board and existing dissertations and theses in the field. The minor sources of data within the survey of existing literature came from investigation of publications which include material of use here but which are not limited solely to the subject under study. Chief among these sources are the Educational Resources Information Center Indices which provided information on pertinent articles, studies, and volumes directly or indirectly associated with the objectives of this study. A summary of existing literature pertinent to the study appears as Chapter II of this investigation.

The second method of data generation for the investigation--use of the questionnaire-survey technique--provided the most useful and directly usable data. This information was more closely associated with the objectives of this investigation and was more characteristic of present programs than information secured through the survey of existing literature.

Data generated from personal interviews with the director, the faculty, staff and the students of the Developmental Skills Program were even more current and beneficial. Additional information in reference to objectives and program practices could be acquired through direct conversations and observations.

Organization of This Study

The remaining chapters of this study are organized as follows:

Chapter II presents a review of the related literature in reference to the developmental concept of the community junior college, problems of the disadvantaged as they relate to the urban concept of education, and the studies on developmental education programs.

Chapter III describes the design and the methodology used in developing the questionnaires, conducting the investigation, and in analyzing the data.

Chapter IV is used to report the analyses of the data and the findings.

Chapter V provides a summary of the findings, along with the conclusions, and the implications for further study.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter focuses on a review of the literature as it pertains to the developmental concept of the community junior college, problems of the disadvantaged and the urban concept of education, and selected studies on developmental education programs.

The Developmental Concepts of the Community Junior College

The community junior college is an "All American" institution. Its needs and growth are substantiated and supported by the increasing demands for higher education. The increase in the number of students graduating from high schools, the length of life expectancy, the economical and the technological changes, the shifts in the population, and attitudinal and social awareness have all aided the growth of the community junior college.

The community junior college has placed higher educational opportunities within the reach of persons who were unable to participate in these activities earlier. It has further helped to allow America to wave the banner

and sing praises to its founding dream of "every person being able to make the most of his abilities." The community junior college is geared to providing educational opportunities necessary to cover a wide range of abilities, all social and economic classes and to enable an individual citizen to pursue areas of self-interest.

These varied functions or purposes have caused a change from the traditional admission policies of many other institutions of higher education. The basic admission policy of most public community junior colleges is geared to "a high school graduate, or a person who is over the age of 18 and seems capable of profiting by the instruction offered." The policy at Lansing Community College states: "All persons eighteen years of age or older and persons graduated from high school are eligible for admission."[15] The policy at New York City Community College states: "A student must have received a high school diploma or its equivalent. . . . High School Equivalency Diploma, and the U.S. Armed Forces Institute are acceptable for admissions purposes."[16] Statements of this nature are used to give credence to the ideal "of equal opportunity for appropriate education for all citizens." Many of these policies help to give us "the

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[15] Lansing Community College Catalog, Number 12, July, 1972, p. 11.

[16] New York City Community College Catalog, 1973, p. 16.

open-door college," "democracy's college"--the community junior college.

Births of the community junior college increased from a trickle, in its early development, to a full flood of "one community junior college each week," during the sixties. Many of these community junior colleges were established in "urban disadvantaged communities." Their location, availability of federal, state and private funds, and the awareness of the needs for education caused a major growth in community junior college enrollment. The Digest of Educational Statistics for 1972 reported a total of 697 public community junior colleges, with an enrollment of 2,365,867 students. For further detailed information on growth in the enrollment and in the number of community junior colleges observe the following table.

Table 1. Number and Enrollment in Public 2-Year Institutions of Higher Education

Year	Number of Institutions	Total Enrollment
1947	250	163,005
1952	299	191,602
1957	283	315,990
1962	349	519,257
1967	495	966,000
1971	697	2,365,867

Source: Excerpts from: U.S., Department of Health, Education, and Welfare, Digest of Educational Statistics 1972 Edition (Washington: Government Printing Office, 1973), p. 84.

Increasing enrollment has brought with it a more diversified student body. Many of these students have handicaps, because of denial and/or discrimination in their previous efforts at educational experiences. Thus, some have the ability but lack specific preparation for success in their chosen field of study and must have "remedial" educational opportunities before they can successfully complete the program. Many others, because of socio-economic conditions have not had or have not taken advantage of the opportunities to participate in "beneficial educational" experiences; thus, needing or requiring "developmental" courses before they can take advantage of many offerings of the community junior college.

This investigation concerned itself primarily with these developmental students. The first section of this chapter deals specifically with the attempts of community junior colleges to define their roles, in providing "viable educational experiences" for these developmental students.

To reach this point, the community junior college has shifted and strengthened its emphasis to meet the changing times. Thornton (1972) has outlined a period of evolution from 1850-1920 which stressed the ideal "of the junior college being primarily a continuation of the high school," and stressing liberal arts training. A period of expansion from 1920-1945 which supported the inclusion of occupational programs. Continued expansion between

1945-1965 gave rise to the addition of adult education and community services. These periods of growth and development fully supported the concept of the community junior college, and highlighted the need for it.

The period beginning with 1965, has been described as that of consolidation. This period is marked by a recognition of the need of educational opportunities by disadvantaged persons. Federal, private and state funds were made available for the recruitment of minority students, and the development of educational programs to fit the needs of these students. Thus, among developmental functions of the community junior college are listed "improvement of learning skills for disadvantaged students."[17]

Many educators have written and spoken of the needs and responsibilities of the community junior college in its efforts to reach the developmental students. Koch and Woolley stated:

> The community college cannot be all things to all people but, in concert with the E. O. A., the urban community college is in a position to increase its responsibilities in a zone of need thus far barely charted by higher education, namely helping persons in the poverty cycle to break out of that cycle so that their next generation may not be born into poverty.[18]

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[17]James W. Thornton, Jr., The Community Junior College (New York: John Wiley & Sons, Inc., 1972), p. 63.

[18]Moses S. Koch and Priscilla M. Woolley, "An Opportunity for Community Colleges," Junior College Journal, October, 1965, p. 26.

In describing the identity and mission for community junior colleges in a state-wide master plan, Harrison A. Williams proposed the development and construction of comprehensive community junior colleges that stress programs that have a special emphasis on the needs of the educationally and economically disadvantaged.[19]

A report sponsored by the U.S. Department of Health, Education and Welfare stressed a developmental program geared to the extent of commitment to developmental education by the college, and predicted that "from a third to a half of the students in a typical junior or community college would benefit from such a program."[20] Medsker and Tillery estimated that "30 to 50 percent" of the community junior college students are in need of developing basic skills.[21]

In writing about the commitment of the community junior college to developmental education, O'Banion stated:

> The junior college has made a commitment to the undereducated of this country that no other institution of higher education has ever dared make. It is a bold commitment and a commitment

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[19]Harrison A. Williams, "To Close the Opportunity Gap," Junior College Journal, September, 1969, p. 11.

[20]U.S., Department of Health, Education, and Welfare, A Guide for Planning Community Junior College Facilities.

[21]Leland L. Medsker and Dale Tillery, Breaking the Access Barriers: A Profile of Two-Year Colleges (New York: McGraw-Hill Book Company, 1971), p. 65.

> that reflects the democratic-humanitarian philosophy upon which the junior college rests. If the junior college can succeed in providing meaningful educational experiences for those who have known only failure, then no one will doubt its claim of uniqueness.[22]

Gleazer further stated:

> Community college leaders know that "remediation" is an inescapable obligation in an institution which has an open-door admissions policy and which invites enrollment of all high school graduates and others who can benefit from its programs.[23]

The Curriculum Commission of the American Association of Junior Colleges considered the problem of providing courses and curriculums for students with low ability of such importance that it supported A National Study of Junior College courses and curriculums. Findings of this study:

> . . . indicates the high interest and concern college administrators have for this problem. . . .
> 4. A vast majority (91 percent) of the colleges responding indicated that the door was "wide open" for all high school graduates and "open" for all those eighteen years of age and over who could profit from the instruction. . . .
> . . . . . .
> 7. The recommendations of administrators of public institutions appear to be consistent with public policy--educational opportunity for all.[24]

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[22]Terry O'Banion, Teachers for Tomorrow: Staff Development in the Community Junior College (Tucson: The University of Arizona Press, 1972), p. 32.

[23]Edmund J. Gleazer, Jr., This is the Community College (Boston: Houghton Mifflin Company, 1968), p. 58.

[24]Robert F. Schenz, "What is Done for Low Ability Students?" Junior College Journal, May, 1964, p. 22.

In his book, "Islands of Innovation Expanding," Johnson described plans of instruction particularly designed for low achievers as "a notably important responsibility of the two-year college.[25]

Problems of the Disadvantaged and the Urban Concept of Education

Growth in the urban population is surpassed only by the number and the complexity of the problems found there. A continuous influx of people from rural American and immigrants from other countries have caused an increase in the number of persons occupying certain areas of major United States cities. These people came for many different reasons, but a careful analysis of these reasons might lead one to conclude that they all came seeking "better opportunities." Regardless of their reasons for coming, they occupy an area in most large cities that is described as a "ghetto."

Kenneth Clark stated:

> The dark ghettos are social, political, educational, and--above all--economic colonies. Their inhabitants are subject peoples, victims of the greed, cruelty, insensitivity, guilt, and fear of their masters.
> The objective dimensions of the American urban ghettos are overcrowded and deteriorated housing, high infant mortality, crime, and disease. The subjective dimensions are resentment, hostility,

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[25]B. Lamar Johnson, Islands of Innovation Expanding: Changes in the Community College (Beverly Hills: Glencoe Press, 1969), p. 191.

despair, apathy, self-depreciation, and its ironic companion, compensatory grandiose behavior.[26]

The examination of "Urban and Rural Population of the United States: 1790 to 1970" shows an increase in the urban population of from 5.1% of the total population in 1750 to 73.5%, in 1970. Table 2 shows excerpts from data gathered by the "U.S. Department of Commerce Bureau of the Census."[27]

Table 2. Urban and Rural Population of the United States: 1790 to 1970

Year	Percent of Total		Total Population
	Urban	Rural	
1750	5.1	94.9	3,929,214
1850	15.3	84.7	23,191,876
1900	39.6	60.4	76,212,168
1950	59.6	40.4	151,325,798
1970	73.5	26.5	203,211,926

Ledebur and Henderson (1972) in describing problems and causes of the perpetuation of a ghetto made reference to a phenomenon described by Myrdal as the

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[26]Kenneth B. Clark, Dark Ghetto: Dilemmas of Social Power (New York: Harper & Row Publishers, 1965), p. 11.

[27]U.S., Bureau of the Census, U.S. Census of Population: 1970 Number of Inhabitants Final Report (Washington: Government Printing Office, 1971), p. 142.

"principle of cumulation" or the "vicious circle."[28] Myrdal described a general interdependence among all factors in the ghetto Negro problem. These factors included: White prejudice and discrimination, and keeping the Negro ghetto resident low in standards of living, health, education, manners and morals. The low standards, poor health, lack of education, all support white prejudice. The attack on any one of the isolated problems or prejudices does little toward changing the entire circumstances or conditions. Ledebur and Henderson gave a descriptive analysis of the principle of cumulation as . . .

> 3. A phenomenon exists in the ghetto that is described as "the vicious circle of poverty." Describing employment opportunities are in part responsible for the low incomes of ghetto residents. Low income results in the inability to obtain adequate education and skills level and, in some cases, to require a proper nutritional level in their diets. Malnutrition, inferior education and skills level causes low productivity in the labor factor in the ghetto. Low productivity results in low incomes and the chain of causation begins again.[29]

For years, the ghetto problems went unnoticed, unspoken of--other than in light conversation as one passed on the train, or when someone needed an issue to launch a political campaign. James Bryant Conant (1961)

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[28]Gunnar Myrdal, An American Dilemma: The Negro Problem and Modern Democracy (New York: Harper & Row, Publishers, Inc., 1969), p. 75.

[29]William L. Henderson and Larry C. Ledebur, Urban Economics: Processes and Problems (New York: John Wiley & Sons, Inc., 1972), pp. 165-66.

in describing one condition, education, mentioned by Myrdal in his "cumulative circular causation" theory wrote:

> . . . I am convinced we are allowing social dynamite to accumulate in our large cities. . . . In some slum neighborhoods I have no doubt that over a half of the boys between sixteen and twenty-one are out of school and out of work. Leaving aside human tragedies, I submit that a continuation of this situation is a menace to the social and political health of the large cities.[30]

Conant's final sentence in the same work ended: "American people should be prepared to take prompt action before it is too late." Numerous studies were made, reams of paper used in presenting the findings, conclusions and recommendations, and much energy expended in paying lip service to the issues and problems. "The Long Hot Summer of 1967" gave vent to the urban problems in such a forceful manner the whole world was able to witness the dejection of the urban poor and/or disadvantaged.

In the summer of 1967, some 150 American cities reported racial disorders. These racial disorders were like a chain reaction and brought shock, fear and bewilderment to the nation. These activities were so astounding, that the President established a commission to investigate the underlying causes, and "to guide the country through a thicket of tension, conflicting evidence and extreme opinions." The findings of this commission

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[30]James Bryant Conant, Slums and Suburbs: A Commentary on Schools in Metropolitan Areas (New York: McGraw-Hill Book Company, Inc., 1961), p. 2.

revealed that the causes of the racial disorders were "imbedded in a massive tangle of issues and circumstances--social, economic, political, and psychological--which arise out of the historical pattern of Negro-white relations in America."[31] These enumerated factors are intermingled and directly related to education, or the lack of it.

Among the recommendations of the commission were all-out efforts should be made:

1. to decrease unemployment and underemployment of the disadvantaged minorities.
2. to improve education of the disadvantaged minorities.[32]

In commenting on education, the committee stated:

> Education in our democratic society must equip the children of the nation to develop their potential and to participate fully in American life. . . . But for many minorities, and particularly for the children of the racial ghetto, the schools have failed to provide the educational experience which would help overcome the effects of discrimination and deprivation.[33]

The commission made many recommendations for the improvement of opportunities in all areas. The one most related to our area of concern in this investigation stressed "expanding opportunities both for higher education and for vocational training."

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[31]U.S., National Commission on Civil Disorders, Report of the National Advisory Commission on Civil Disorders (Washington: Government Printing Office, 1968), p. 91.

[32]Ibid., p. 231.

[33]Ibid., p. 236.

Many aspects of the educative process are cumulative; that is, the early teachings of the family, the elementary years, the secondary years and the college years are mutually supportive. If one aspect of the educative process is faulty, then the succeeding aspects of the "total process" must suffer the consequences.

The Task Force on Urban Education of the Department of Health, Education, and Welfare in reporting on the environment of the impoverished urban student in terms of its impact, its offerings, and its differences on his perception and performance in the school concluded:

> 3. Economically, he lives in a world in which unemployment, underemployment, and the inadequate welfare check are common facts of life.
> 4. He lives in housing which is apt to be in poor condition. . . .
> . . . . . .
> 8. The concepts, language, and problem solving techniques he acquires will be primarily geared to his survival in the neighborhood and the necessary interactions in and demands of his family.[34]

These elements, along with others cited, characterize the impoverished urban environment, and are reflected in students from it and help make the task of urban education a unique one. Berg and Axtell (1968) wrote:

> Since disadvantaged students experience a "cumulative deficit" in achievement in the elementary and

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[34]U.S., Department of Health, Education and Welfare Urban Education Task Force, Urban School Crisis: The Problem and Solutions (Washington: Washington Monitoring Service, 1970), p. 31.

> secondary schools, the junior college faces a most difficult task in providing effective compensatory programs and services.[35]

When considered in terms of success, the results of this unique task have been described as everything but overwhelming. In testimony before the House of Representatives it was stated:

> But each student in America should be given the opportunity to acquire the basic tools of speech, writing, reading, and math without which he can neither learn further or compete effectively. The core city youth, especially the ghetto Negro is not now acquiring those skills. And we believe that urban education is inadequate to provide him the opportunity to acquire them.[36]

The Task Force on Urban Education reported that "the educational system is generally failing to provide the inner-city economically and educationally disadvantaged student an educational experience which will afford him an equal opportunity to enter the occupational and cultural mainstream."[37]

Substandard family and living conditions and failure of our urban education efforts are two unproductive aspects of the educative process. This leaves the higher education years. How can one dare hope to be successful at higher education efforts when the necessary foundation

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[35]Berg and Axtell, Programs for Disadvantaged Students, p. 75.

[36]U.S., Congressional Record, 90th Cong., 2d Sess. (1968), Volume 114, part 22, pp. 28437-28438.

[37]Urban Education Task Force, p. 39.

is faulty, or in some cases non-existent. Do we need crash programs? What level should these programs be offered? How would you like to be twenty-five and in sixth grade? These are a few questions that educators have pondered in attempting to solve the problems of education in an urban area.

Community junior colleges have accepted the responsibility of attempting to meet some of the needs of the "disadvantaged population" over 18 years of age. There are many variations of these programs, some bad, some good and some indifferent. Regardless of the case or the reason, some type of effort is being made. The final part of this chapter will review some of the research findings, pertinent to the subject under investigation, that have been reported in the literature.

Selected Studies on Developmental Education Programs

John Roueche, in 1968 conducted an investigation aimed at assembling and collecting pertinent research related to programs that were available for disadvantaged students enrolled in the community junior college. Roueche described "a paucity of evidence on the efforts of remediation" in the community junior college.

Findings indicated the majority of community junior colleges throughout the nation made some attempt to offer courses for low-achieving students. Research revealed many

institutional efforts stressing "the total program approach." The total program approach is characterized by carefully defined objectives and study of student outcomes.[38] Formal developmental programs as defined here came into being since the spring of 1968. Studies selected for review here, are those designed to use "the total program approach."

A survey, "Developmental Programs in Midwestern Community Colleges," with 137 public two-year colleges in the midwest responding, reported about one in nine students involved in "developmental education through remedial courses, special academic skill services, and/or formal developmental programs."[39] Nearly one-third of the participating colleges have formal developmental programs. In terms of characteristics, most of the programs were designed to serve a given student for at least one year. The developmental programs stressed:

> 1. tutoring,
> . . . roughly four out of five colleges with developmental programs provided tutoring, less than one-half (43 percent) of all developmental students actually receive tutoring at least once a week.[40]

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[38]John E. Roueche, Salvage, Redirection, or Custody?: Remedial Education in the Community Junior College (Washington: American Association of Junior Colleges, 1968), p. 27.

[39]Richard I. Ferrin, Developmental Programs in Midwestern Community Colleges (Princeton: College Entrance Examination Board, 1971), p. 1.

[40]Ibid., p. 11.

The review of the literature revealed a remedial program at Contra Costa Junior College that created a tutoring program to determine the effectiveness of tutoring as a means of meeting the needs of its low-achieving students. The program was based on the philosophy that the low-achieving student has handicaps which inhibit the reflection of his true potential as a student. Tutoring was purported as a supplement to regular classroom course work. In a tutoring session the student can ask questions and have materials repeated without slowing the pace of the class or being embarrassed.

Peer tutoring and faculty staff tutoring are increasing in usage, and in many reports were considered to be effective means of reaching disadvantaged students. In their research findings, Berg and Axtell reported tutoring widely used as a technique to assist students who had learning difficulties. This wide use of tutoring was reported as having an advantage to the program, as well as to the "majority" and the "minority" student.

> . . . 5. A minority group member who is given an opportunity to tutor a student of his own ethnic group or a student from another minority or the majority group not only receives financial aid but also experiences a significant enhancement of his own status. At the same time, he becomes a role model for other students of his ethnic group.
>
> 6. Tutoring by members of the majority group creates an opportunity for them to become closely and personally involved with minority group members and to

> gain an understanding of the culture and special needs of the disadvantaged minority group student.[41]

The faculty participants in the study by Berg and Axtell assigned a rating of only 19 percent in favor of the use of tutoring as being essential in developmental programs. A much higher percentage of counselors saw tutoring as an essential part of developmental programs.[42]

The Advisory Council for Compensatory Education for Texas Community Colleges felt tutors offered several advantages in teaching the low-achieving student. Among these were:

1. The obvious advantage that the student gets individual help with his studies.
2. The additional advantage of example and motivation if the tutor is a successful student from the same disadvantaged background as the student.
3. Personal friendships and encouragement which come from the close personal relationships between a student and his tutor.[43]

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[41]Berg and Axtell, Programs for Disadvantaged Students, p. 38.

[42]Ibid., p. 65.

[43]Texas College and University System Coordinating Board, Reaching for the Ideal: Recommendations for Texas Community Junior Colleges and Recommendations for State Action (Austin: Texas College and University System, 1971), p. 29.

Louise Ludwig and Ben K. Gold conducted an investigation to examine and compare the effectiveness of the Developmental Studies and tutorial programs being conducted on their campus. They reported that students tutoring Developmental Studies students "saw tutoring as a vital part of the total program, and recommended an improvement in the training of tutors." Instructors working in Developmental Studies Programs were reported as being in agreement on the need and benefit of tutoring as a part of the total program. Students taking part in the study responded overwhelmingly favorable to tutoring indicating the benefits and needs of tutoring as a part of the Developmental Studies Program.[44]

> 2. counseling,
> . . . programs appear to place considerable emphasis on nonacademic or personal counseling, for over two-thirds of the programs perform this function and two-thirds of all developmental students receive such counseling at least monthly.[45]

Much of the literature stressed building programs and courses that can aid in developing self-respect, by introducing students to things they can do, and people who have come from backgrounds similar to theirs and succeeded. This concept embraces faculty members and counselors

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[44]Louise Ludwig and Ben K. Gold, The Developmental Studies and Tutorial Programs: A Progress Report (Los Angeles: Los Angeles City College, 1969), pp. 34-35.

[45]Ferrin, Developmental Programs, p. 11.

functioning as a community of counselors who can collectively know and deal with each individual as a person. To support these and similar activities, Texas educators recommended:

> The community junior college should build a supportive environment for the disadvantaged student and provide him with a counseling program that will assure close personal contact plus professional counseling.[46]

> Community junior colleges should institute peer group tutoring, counseling, and learning programs.[47]

Schenz (1964) reported 70 percent of the 146 community junior colleges taking part in his survey, provide special counseling services for students with low ability.[48] The counseling services ranged from academic and personal counseling, testing and guidance information, to special courses offered and taught by trained counselors as instructors.

3. financial aid

> Seventy-seven percent of the students enrolled in programs that begin this year receive $200 or more, whereas only 26 percent enrolled in programs more than three years old received any aid.[49]

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[46] Texas College and University System Coordinating Board, Reaching for the Ideal:, p. 15.

[47] Ibid., p. 29.

[48] Schenz, "What is Done for Low Ability Students?", p. 27.

[49] Ferrin, Developmental Programs, p. 11.

It is generally recognized that disadvantaged students rarely qualify for scholarship grants, are reluctant to borrow money to pay educational expenses or in many cases may not be able to find loan sources. Berg and Axtell (1968) reported an expressed need for financial aid by students queried in their study. Only 24 percent of the faculty surveyed by Berg and Axtell rated the availability of guaranteed financial support to meet even minimum needs of disadvantaged students as essential. Even a lower percentage of counselors assigned an essential value to financial support for the disadvantaged students.[50]

The Advisory Council for Compensatory Education for Texas Community Junior Colleges recommended that:

> Community junior colleges should use all types of available financial aid individually and in combinations to assist students to attend college. This includes the federal college work-study, the National Defense Student Loan, the Economic Opportunity Grant, Texas Opportunity Plan and local financial aid programs. The need for financial aid should be calculated including the total cost of education: Tuition, fees, books, supplies, meals, transportation, clothes, entertainment allowance, and, where needed, lodging.[51]

The council further saw financial aid as an important recruiting technique, and specifically stated that "colleges that consistently give high proportions of their

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[50]Berg and Axtell, Programs for Disadvantaged Students, p. 65.

[51]Texas College and University System Coordinating Board, Reaching for the Ideal:, p. 9.

federal funds to students whose family incomes are at the lowest levels receive increased funds." These efforts represent a state-wide commitment to the ideal of developmental education, with concerted emphasis on the financial aid aspects.

The problem of transportation was presented as a "real hindrance" to college attendance for many students from low income families. This was true in Texas, because many of the community junior colleges were built on sites at the edge of town where land was less expensive and more available. In many cases there is no public transportation from the low income parts of the town to the college campus. Students from low income families may not have a dependable way to get to the college campus.

The problem of transportation still exists as a deterrent to college attendance for students from low income families despite the location of community junior colleges within urban areas. In many cases, public transportation is available, but the fare for the ride is forthcoming.

Henderson and Ledebur, in writing about equal opportunities, stated "the availability and quality of public transportation facilities then becomes of primary importance in determining the ability of ghetto residents to reach existing opportunities."[52]

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[52]Henderson and Ledebur, p. 165.

Circumstances of this nature lead to additional impediments to the disadvantaged student. The community junior college should try to solve the low income students' financial aid needs, so that they can have more time and "clearer minds" in meeting the demands of the educational environment.

> 4. coursework (complete curriculum)
> . . . 82 percent of the programs provide some coursework, and half of those offer complete curriculums. As for developmental students nearly (95 percent) take some developmental courses their first term in college, although 78 percent also take some coursework outside the program.[53]

Schenz reported 21 percent of the participating community junior colleges have special courses with enrollment limited to students with low ability. Eleven percent indicated that students with low ability are programmed into regular course offerings, with the frequency of class meetings increased (five days instead of three).[54]

Berg and Axtell reported 52 percent of faculty rating special remedial classes as essential to a developmental program.[55] Ferrin reported basic skill development as the primary focus of 84 percent of his surveyed respondents. In the same survey,

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[53]Ferrin, p. 11.

[54]Schenz, p. 26.

[55]Berg and Axtell, p. 65.

> two in five rated attitude development and content mastery as very important. Skill development and content mastery are emphasized in small programs whereas understanding self and attitude development are emphasized more in larger programs.[56]

Ferrin also indicated that about two-thirds of the developmental faculty and staff worked part-time, are about the same age or older than the regular faculty, and had volunteered or were expressly hired for their positions. Roueche (1968) reported that the remedial course teacher was typically younger, less experienced than other faculty, was normally assigned to his position and had no experience or formal training in working with remedial students. These differences could indicate a shift in practice from the more haphazardly administered remedial courses of earlier years to that of more objective developmental program efforts. Ferrin reported 92 percent of the surveyed faculty having the same or more teaching experience than other faculty members, and 85 percent having received some specific training for working with low-achieving students.

The program evaluative procedures ranged from about one in five conducting "experimental studies," to the majority conducting various types of follow-up studies of their developmental students.

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[56]Ferrin, pp. 11-12.

The researchers reviewed, defined and stressed the need for new approaches in program design, emphasis, content, methods, materials and evaluation (Schenz, 1964; Gordon and Wilkerson, 1966; Roueche, 1968; Bossone, 1969; and Ferrin, 1971).

Research conducted by Gordon and Wilkerson (1966) indicated a lack of imagination in designing innovative curriculums to help disadvantaged students overcome their academic deficiencies. They described most of the college programs as fitting:

> the somewhat dreary pattern of remedial courses which have plagued many generations of low-achieving students with but little benefit to most of them. There is need for fresh approaches in special curricular programs for disadvantaged students on the college level.[57]

Many reports stressed structuring a unified program with remedial courses augmented by intensive counseling.[58] A program, at Forest Park Community College, that is described in much of the literature, was designed along the above-mentioned lines. Among the goals established by the college faculty committee at Forest Park Community College were:

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[57]Edmund W. Gordon and Doxey A. Wilkerson, Compensatory Education for the Disadvantaged (New York: College Entrance Examination Board, 1966), p. 155.

[58]Richard C. Richardson, Jr. and Paul A. Elsner, "General Education for the Disadvantaged," Junior College Journal, December, 1965, p. 20.

> . . . 3. Providing educationally disadvantaged students with intensive counseling on an individual and group basis to:
> (a) minimize emotional factors inhibiting success;
> (b) aid students to assess realistically their potential and to relate this to vocational goals.[59]

Students were grouped in divisions of 100, and worked with a team consisting of--one counselor, one reading specialist, and three academic faculty members. The program attempted to build a core curriculum organized around the social science area and stressing development of the "whole student."

One of the objectives of the study by Berg and Axtell was to identify effective programs for the disadvantaged. They concluded that because of the lack of evaluative research, it was impossible to make qualitative judgments about the relative effectiveness of the described programs. The researchers also reported a lack of agreement as to what the criteria to measure effectiveness should stress. If effectiveness is measured by the proportion of disadvantaged students graduating with an associate degree or transferring to a four-year college--then, the programs would have to be described as "marginally effective." On the other hand, if effectiveness is measured in terms of taking the

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[59]Thomas J. Farrell, The History of the General Curriculum of Forest Park Community College in Saint Louis, Missouri--From its Beginning to Fall, 1971 (Saint Louis: Forest Park Community College, 1971), p. 2.

disadvantaged students from where they are and making it possible for them to experience improvement in their achievement; then, most of the programs could be rated as "reasonably effective."[60]

In reporting on existing programs, Berg and Axtell identified three approaches to providing necessary educational experiences for disadvantaged students.

1. A required series of remedial courses.
2. A special services program (programs stressing special services including tutoring, additional counseling, free transportation, free lunches, legal assistance, special financial assistance, part-time employment, and a designated area which is a "home base.")
3. An effort to revise existing educational policies and practices, materials, and subject matter.[61]

This investigator believes that there is no "model program" which could be used at all community junior colleges, rather program efforts should be geared to the particular needs of the disadvantaged students in that institution. Berg and Axtell stated:

> It should be quite clear at this point that it is not possible to outline a model program which could be established at any junior college. The programs

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[60]Berg and Axtell, p. 37.

[61]Ibid., pp. 38, 75.

> which appeared empirically to be more successful than others were those which had been designed specifically to meet the particular needs of the disadvantaged students in a given community. Thus, although the experience of other colleges should be studied in detail, each college planning to establish a program for the disadvantaged students in its community should begin with a community survey and a thorough study of the particular needs of the disadvantaged students in that community.[62]

The study by Berg and Axtell attempted to determine which educational needs administrators felt were significant in designing a developmental program for the socio-economically disadvantaged students of college age. The report indicated:

> "Education for citizenship"
> "Need to experience participation in programs that allow them to catch up"
> "Vocational-technical training"
> "Need to be encouraged to come to college"
> "Anything that will make him employable--with this comes self-respect and money"
> "The ability to read"
> "Motivation"
> "The need to experience relationships with other people"
> "Make them more productive citizens"
> "Supportive responses from the college"
> "A personalized relationship with the college"
> "Skill Training"
> "Self-awareness"
> "More counseling"
> "Financial aid"
> "Success"
> "Knowledge of customs and manners"
> "Instructors who care"
> "Many different ways of expressing themselves, such as art and music"
> "Social acceptance"
> "Need to be told they can succeed"
> "Opportunity to participate in the life of the college"
> "Same as other students"
> "The opening of vistas"
> "Start where they are"[63]

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[62] Ibid., p. 37.

[63] Ibid., pp. 41-42.

The goals of a program are often far removed from needs of students being served. Berg and Axtell sought to determine, the administrators' feelings on the most important goals of their programs. The reported responses were:

"To get more black students to transfer"
"To help in occupational choice"
"To give students an intrinsically valuable program"
"To pick them up where they are and to take them as far as they can go"
"To decrease the dropout rate"
"To increase retention"
"To lead to better positions"
"To give them a salable skill"
"To help people succeed who might not under the traditional system"
"To give the academic-risk student a fighting chance"
"To give students who have a history of failure an opportunity to accomplish something meaningful"
"To protect transfer courses"
"To give the vocational-terminal student the general education experiences he should have in a meaningful way that he can handle"
"To weed out students who should be encouraged to find employment"[64]

The responses cited were more closely related to the objectives of this investigation. This investigation was more in concert with the special service combination approach under one umbrella, stressing the student and student needs as the key to program design and content. This researcher went a step further in comparing student perceptions and those of administrators, faculty and staff.

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[64]Ibid., p. 42.

SUMMARY

A review of the literature as it pertains to the developmental concept of the community junior college, problems of the disadvantaged and the urban concept of education, and selected studies on developmental education programs, revealed genuine concern for the problems. The existence of the problems have been substantiated by presidential commissions, higher education associations, public and private foundations, and the general public.

The community junior college has defined and accepted "providing educational opportunities for the disadvantaged" as a part of its professional goals. The community junior college has designed and supported programs for the disadvantaged student..

Educators throughout the world have written of the enormity of the problems in providing educational opportunities for the disadvantaged. They have stated that the problems of providing educational opportunities for the disadvantaged are not "just educational," but social, political, psychological, educational and economical. This fact has caused educators to recognize the uniqueness of the problems of educating the disadvantaged.

Studies on developmental education programs showed a paucity of research evidence on evaluation of

the efforts of remediation in the community junior college. However, research efforts revealed a "total program approach," that has been emerging since 1968. This "total program approach" is characterized by carefully defined objectives and study of student outcomes.

CHAPTER III

METHODOLOGY AND PROCEDURE

The purpose of this chapter is to present the methods and the techniques employed in the collection of data. This chapter includes a discussion of the (1) procedures used to identify the population and the participants included in the study, (2) the research techniques, (3) the procedures used to collect the information, and (4) the techniques used to analyze and present the findings of the study.

The Population

Using the "List of Riot Communities for 1967" taken from the Report of the National Advisory Commission on Civil Disorders, the investigator identified each public-supported community junior college located in a city having civil disorders (Appendices E, F). These 19 community junior colleges were used, in the first step of the investigation, to identify characteristics of developmental programs, and for selection of an institution for an in-depth study on developmental education. The

questionnaire was specifically addressed to the Director of Developmental Studies and/or Special Programs at the community junior colleges surveyed. The Developmental Skills Program at New York City Community College of the City University of New York, Brooklyn, New York was chosen for the in-depth study. This program was selected because of the number of students it served, the size of the faculty and staff, and the genuine interest in developmental education portrayed by the program director.

The population from the Developmental Skills Program at New York City Community College was composed of:

1. The director of the program.
2. All the full-time faculty and staff of the program.
3. The students enrolled in program courses for the Fall term beginning September, 1973.

From a total student head count of approximately 1,180 students, a sample of 269 students was selected. The random sample was selected by using designated classes of students enrolled in the program.

The Research Techniques

Several methods of collecting data were used in this investigation. The initial survey was conducted using the survey questionnaire technique. This technique was used to identify characteristics of developmental programs, to be used in constructing a second instrument

and in selecting an institutional program to be used in an in-depth study. In reference to the use of the questionnaire technique, Good stated:

> the questionnaire extends the investigator's powers and techniques of observation by reminding the respondent of each item, helping insure response to the same item from all respondents, and tending to standardize, and objectify the observations of different enumerators (by singling out particular aspects of the situation and by specifying the units and terminology for describing the observations.[65]

The telephonic and in-person interviews were used to collect data to be used in selecting the program for the in-depth study. Walter R. Borg stated: "the interview provides the interviewer with the opportunity to follow up leads and obtain a greater depth of information than is often possible using other techniques.[66] The telephonic interviews were basically used for substantiating and expanding on information provided by the questionnaire technique.

Personal observations, interactions and a self-administered questionnaire were used in collecting data from participants at New York City Community College. Good described personal observations and interactions as useful in dealing "with the overt behavior of persons in

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[65]Carter V. Good, Essentials of Educational Research: Methodology and Design (New York: Appleton-Century-Crofts, 1966), pp. 213-14.

[66]Walter R. Borg, Educational Research: An Introduction (New York: David McKay Company, Inc., 1963), p. 224.

appropriate situations, sometimes under conditions of normal living and at other times with some special set of factors operating."[67] The use of the self-administered questionnaire has been described by Good as providing "subjective data from the respondent and has the advantages of cheapness because of the reduction of interviewer costs and the possibility of group administration, plus applicability on a systematic sampling basis."[68]

The use of a combination of several research techniques has been described by Sieber and Lazarsfeld as "the Integration of Techniques."[69]

Instruments Used

A review of the literature pertaining to developmental programs was undertaken as the first step in the development of the questionnaire. Similar instruments were examined and questions were collected to be used in constructing the instrument. A pilot study was prepared for the purpose of identifying characteristics of developmental programs at selected community colleges located in cities having civil disorders in 1967.

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[67] Good, pp. 242-43.

[68] Ibid., p. 229.

[69] Sam D. Sieber and Paul F. Lazarsfeld, The Organization of Educational Research in the United States (New York: Bureau of Applied Research, Columbia University, 1966), p. 13.

The first instrument. The completed questionnaire, the first instrument, was a five-page document so constructed as to require the respondent to make a check mark or rate items using a 1, 2, 3 ordering. The questionnaire was constructed in this manner, and kept short to enhance understanding and the rate and number of returns (Appendix A). The first mailing of the questionnaire took place in early June and resulted in 17 out of 19 returns by the end of August. This rate of return was so high, and time so valuable, a second mailing was not attempted. Time was valuable, in that this questionnaire was only the first step in deciding on the institution to be used, and the questions to be asked in the second stage of the investigation.

Based on the examination of returned questionnaires, four institutions were selected and additional information secured through a telephonic or a personal interview with the program director. These four institutions were selected because of the size of the student population served, the size of the faculty and staff, the age of the program, and the "total program approach" being used. This step was taken to aid in determining the institution to be used in an in-depth investigation. After the interviews, it was decided that the "Developmental Skills Program" of New York City Community College of the City University of New York, Brooklyn, New York provided the most viable program.

A telephone call was made to the director of the Developmental Skills Program requesting his extended cooperation in the investigation on developmental education. A letter of confirmation was sent to the director of the program with a copy to the dean of faculty (Appendix B). Details of the investigator's visit were worked out, and a week was spent at the Developmental Skills Center of New York City Community College. During this week, the investigator interacted with the director, the faculty, the staff and the students of the Developmental Skills Program.

The second instrument. The responses from the first questionnaire, the summer interviews, the director, the faculty, the staff, the students, the review of the literature and the examination of program objectives were used to construct a questionnaire on the format of a Likert-type scale. A pilot study was conducted at Essex County College, Newark, New Jersey, changes made and the final questionnaire was made ready for self-administration. The instrument of 40 questions was designed with a five-point response scale. Respondents were asked to indicate the degree or extent of agreement, disagreement or no comment they might have on each item (Appendix C).

The Presentation and Analysis of Data

The research hypotheses for this investigation were:

1. There will be no difference in the perceptions of faculty and students as to the stated benefits and objectives of the Developmental Skills Program at New York City Community College.
2. There will be no difference in the perceptions of faculty and students as to the stated student needs of the Developmental Skills Program at New York City Community College.

The data were analyzed to identify what students perceived to be important aspects of the Developmental Skills Program at New York City Community College, and to explore the relationship of expressed student aspects to stated administrative, faculty and staff (faculty) program benefits, needs and objectives.

The one-way analysis of variance was used for analyzing the data in this study. The .05 level of confidence was established and used in determining statistical significance. In addition to the testing of the stated hypotheses, the responses to all items were reported in frequencies and percentages, and a table constructed showing faculty and student comments using the "Open Ended Question." These additional processes were used to add clarity and meaning to the data.

SUMMARY

This investigation identified characteristics of developmental programs at selected public-supported community junior colleges located in a city having civil disorders in 1967. This initial survey was made through a questionnaire addressed to the director of special programs. This questionnaire was used in collecting current data, and in selecting a viable program for in-depth study.

The Developmental Skills Program at New York City Community College was chosen for the in-depth study. The sample population was composed of the faculty (faculty, administrators, staff), and selected students. A self-administered questionnaire was used in acquiring student and faculty perceptions as to the stated benefits, needs and objectives of the Developmental Skills Program. Personal and telephonic interviews are also used in collecting data. The one-way analysis of variance was used in measuring variability of perceptions. Frequencies and percentages were used in reporting data.

CHAPTER IV

ANALYSIS OF THE DATA

The purpose of this chapter is to present the analysis of the data. In the first section, descriptive analysis is used to present characteristics of developmental programs at selected public state community junior colleges located in cities having civil disorders in 1967. The section also includes descriptions of the Developmental Skills Program at New York City Community College.

The second section is used to present an analysis of the data concerning the perceptions of selected students and the faculty (faculty, staff, administrators) with respect to the benefits, needs and objectives of the Developmental Skills Program at New York City Community College. The section also includes a comparison of the perceptions of the faculty and the students. In analyzing the data in this section, items were grouped under two major areas: (1) benefits and objectives, and (2) needs.

In order to test the hypotheses, they were converted into their null form.

Null Hypothesis I:

> There will be no difference in the perceptions of faculty and students as to the stated benefits and objectives of the Developmental Skills Program at New York City Community College.

Null Hypothesis II:

> There will be no difference in the perceptions of faculty and students as to the stated student needs of the Developmental Skills Program at New York City Community College.

The one-way analysis of variance was used in measuring variability between groups in the tested hypotheses. Null Hypothesis I, based on the faculty and students' perceptions of benefits and objectives was rejected in favor of the alternate hypothesis. The .05 level of confidence was used to determine statistical significance in interpreting the data.

The analysis of data based on the questions categorized as benefits and objectives showed a faculty mean score of 19.47, and a student mean score of 22.25; thus, showing a difference of 2.78 points in the mean scores of the two groups. Complete data showing statistics for the faculty, and the students on responses to questions categorized as benefits and objectives are presented in Table 3. The analysis of variance of the responses based on the benefits and objectives showed a F statistic of 7.03 with an approximate significance probability of F statistic of .008. Table 4 shows complete data of the analysis of variance.

Table 3. Means of Groups I and II Based on Benefits and Objectives

Sample Groups	Frequency	Mean	Standard Deviation
Faculty (I)	23	19.47	5.10
Students (II)	239	22.25	4.76

Table 4. Analysis of Variance of Benefits and Objectives

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Statistic	Approx. Significance Probability of F Statistics
Between Categories	161.79	1	161.79	7.03	.008
Within Categories	5977.17	260	22.98		
TOTAL	6138.96	261			

Null Hypothesis II, based on the faculty and students' perceptions of needs was rejected in favor of the alternate hypothesis. The .05 level of confidence was used to determine statistical significance in interpreting the data.

The analysis of data based on the questions categorized as needs showed a faculty mean score of 48.65, and a student mean score of 55.25; thus, showing a difference of 6.60 points in the mean scores of the two groups. Complete data showing statistics of the faculty, and the students on responses to questions categorized as needs are presented in Table 5. The analysis of variance of the

Table 5. Means of Groups I and II Based on Needs

Sample Groups	Frequency	Mean	Standard Deviation
Faculty (I)	23	48.65	7.45
Students (II)	239	55.25	9.28

responses based on needs showed a F statistic of 10.95 with an approximate significance probability of F statistic of .001. Table 6 shows complete data of the analysis of variance.

Table 6. Analysis of Variance of Needs

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Statistic	Approx. Significance Probability of F Statistics
Between Categories	915.93	1	915.93	10.95	.001
Within Categories	21733.13	260	83.58		
TOTAL	22649.06	261			

Survey of Developmental Programs at Selected Urban Community Junior Colleges

The first stage of this investigation, "A Survey of the Developmental Programs at Selected Urban Community Junior Colleges," was undertaken to provide background information to be used in an in-depth study of a viable developmental education program. Information from the survey indicated the director of the program had the title of Department Chairman, had a full-time faculty ranging from 4 to 32 members and a para-professional staff from 1 to 50 members. He worked in a community college having an enrollment in excess of 6,000, with the developmental program serving a total number of students ranging from a high of 7,000 to a low of 23.

The majority of the programs have been in operation for five years or more, with the basic criterion for admission into a program being a standardized test.

Programs surveyed were designed for one semester, and allowed students to enroll only at the beginning of a semester. The average number of students per class was between 15 and 20, with a class meeting on the average of three times per week. The average teaching load (contact hours) of a developmental faculty member was 15 hours.

The grading system used in the programs was the standard A, B, C, D, and F designations. The developmental programs were designed to provide tutorial help in basic skills. Academic counseling support was described as being provided with counselors available by appointment in centralized counseling centers. The demonstration/ laboratory and/or class discussion methods of teaching were used in most programs. Programmed materials were used extensively in programs surveyed.

Program evaluations were handled through the use of extensive follow-up studies. The largest portion of funds for developmental programs were furnished from the general college funds. Respondents indicated a need for research in the area of content, design and teaching techniques of programs.

Developmental Skills Program at New York City Community College

The Developmental Skills Program, at New York City Community College of the City University of New York, provides instructions geared to basic skills development

and content mastery for students who have educational handicaps brought on through omissions and deficiencies in their prior educational experiences.

Prior to the Fall of 1969, the remedial non-credit courses were offered through the various major departments. The departments offered courses in, and related to English and mathematics. The courses were basically taught by the newest instructors or adjuncts, using strictly a lecture method.

The Developmental Skills Department was formed in 1970, relocating under one umbrella the "non-credit courses" offered by the major departments. Efforts were made to objectively evaluate the existing remedial courses and services, and to make recommendations for changes in the curriculum, in the staffing and in the services provided for students. Additional monies were acquired and used in expanding the diagnostic and placement testing procedures, the counseling services, the curriculum offerings and the full-time faculty.

During the Fall of 1969 - Spring of 1970, the' Developmental Skills Department consisted of:

1. a department chairman
2. an assistant to the department chairman
3. three unit coordinators (one each in math, reading and writing)
4. eight full-time instructors, and
5. two laboratory technicians.

Programs were provided in Mathematics, Reading and Writing, with various supportive services. Curriculum modifications allowed flexibility and enumerated some courses students requiring remediation could take for college credit while enrolled in remedial courses.

Faculty, experimenting with teaching methods, discovered the use of the lecture method to be "impossible" for many of the slower students. Therefore, efforts were made to acquire, design and use some individualized programmed materials. This approach would allow students to move more at their own pace. Instructions using various degrees of tutorial assistance were used. Faculty experimented with tutoring on a one-to-one basis. This tutoring consisted of "peer-tutoring" (students hired from within the college, and local institutions), and "tutoring by faculty members."

Experience taught faculty members that instructions had to be attempted using a multi-media approach, individualized instructions were critical, and that the semester basis of remedial coursework was insufficient. Using a "self-study format," students were able to pace themselves and often needed more than the traditional semester to complete the work. Special emphasis was given to proper evaluation and placement of students. Students were often provided with "on the spot" evaluation for placement.

Many evaluative techniques have been used, and many efforts made to direct program and course objectives to the benefits, needs, and objectives of students participating in the program.

The program had grown to such an extent, that by the Fall of 1973 there was a full-time staff of 34 (administration/faculty), and some 43 adjunct day session part-time faculty (figures approximated from Roster 1973-74) and numerous "in-class college and teaching assistants." Approximately 1,180 different students are enrolled in developmental program courses. There are course offerings in developmental mathematics, in developmental science, in developmental reading and in developmental writing. There are a variety of tutorial programs (peer-tutorial service in open laboratory setting, in-class tutorial assistance and regular tutorial assistance) as well as programmed self-study modulars (audio-tutorial self-study modulars) and various other traditional learning approaches. There are on-going curriculum development and improvement programs existing in all areas of the Developmental Skills Department.

To collect data, to talk and to interact with faculty and students, a final one-week visit was made to the Developmental Skills Program. The director, the faculty members, the para-professional staff and the students freely discussed and talked about their program.

The receptive atmosphere gave one the feeling that productive experiences were being engaged in by the faculty, staff and students.

Seated on grayish-brown mod cubicles located between classrooms, are students of all college-age categories, races, colors and creeds. The latest fashions, hair styles can be seen and the latest speech patterns heard from the group discussions. There is little idle chatter. Students are "getting down" to reading (The Future of the Family); writing sentences and paragraphs for papers; practicing how to use a slide rule and working mathematical problems. They are "getting it together."

In a Mathematics Open Laboratory, first I am ignored by the students seated in carrels--they are involved. Taking a seat in the nearest carrel, I summoned assistance. In a matter of moments, three different student assistants inquired, "Do you need help in math?" Walking around proved to be interesting, in that several questions were directed to me. The surprising thing was, I was able to answer--"Whew!! Better get out of here whie while I am ahead."

The events and experiences of the entire week entrenched an impression of "helpful togetherness"--as characterizing the interactions of faculty, staff and students in the program.

Faculty and Student Perceptions at New York City Community College

In presenting the student and faculty perceptions as they relate to benefits and objectives, the following sub-categories will be used: (1) Program Content, and (2) Program Design.

Program Content. Item 6 was concerned with providing instructions to improve basic reading habits. Table 7 summarizes the responses to this item. Eighty-seven percent of the students, and 93 percent of the faculty agreed that a program should improve basic reading habits (faculty held this position more strongly than students). Eleven percent of the students, and 7 percent of the faculty responding had no opinion or comment. Two percent of the students disagreed with the item.

Table 7. Item 6: The Program Should Provide Instructions to Improve Basic Reading Habits

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	37.8	49.0	11.2	1.8	-	100
Faculty	81.4	11.1	7.4	-	-	100

Item 9 stressed instructions to help one live a more productive life as a citizen. The responses to item 9 are summarized in Table 8. Fifty-seven percent of the

students and 72 percent of the faculty agreed that the program should provide instructions to aid one in living a more productive life as a citizen (faculty held this position more strongly than students). Thirty-four percent of the students and 24 percent of the faculty had no comment or opinion. Nine percent of the students and 4 percent of the faculty disagreed with the item.

Table 8. Item 9: The Program Should Provide Instructions to Help One Life a More Productive Life as a Citizen

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	21.6	35.8	33.9	7.8	.7	100
Faculty	48.0	24.0	24.0	4.0	-	100

The responses to item 26, that the program should help one develop his ability to speak effectively, are listed in Table 9. Eighty-eight percent of the students and 78 percent of the faculty agreed with the item (students were stronger in their approval than the faculty). Nine percent of the students and 15 percent of the faculty had no opinion or comment. Seven percent of the faculty and 3 percent of the students saw the program helping a student develop his ability to speak effectively.

Table 9. Item 26: The Program Should Help One Develop His Ability to Speak Effectively

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	45.1	43.2	8.6	2.6	.3	100
Faculty	37.0	40.7	14.8	7.4	-	100

The majority of respondents in both sample groups agreed that the program should help one improve his vocabulary (Table 10). The combination of the agree categories showed 100 percent of the faculty and 92 percent of the students in favor of a program helping to improve student vocabulary. Six percent of the students had no opinion or comment.

Table 10. Item 28: The Program Should Help One Improve His Vocabulary

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	46.0	45.6	6.0	1.1	1.1	100
Faculty	50.0	50.0	-	-	-	100

The responses to item 30 that the program should help one develop his ability to write, are presented in Table 11. Eighty-three percent of the students, and 93 percent of the faculty agreed that the program should help one develop his ability to write. Fourteen percent of the students, and 7 percent of the faculty had no opinion or comment. Three percent of the students disagreed with the item.

Table 11. Item 30: The Program Should Help One Develop His Ability to Write

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	27.3	55.5	14.0	3.0	-	100
Faculty	71.4	21.4	7.1	-	-	100

Program Design. The responses given for item 4, that the program should be designed to improve student comprehension, are found in Table 12. Ninety-eight percent of the students, and 100 percent of the faculty agreed that the developmental skills program should be designed to improve student comprehension.

Table 12. Item 4: The Program Should be Designed to Improve Student Comprehension

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	59.7	37.6	1.4	.7	.3	100
Faculty	92.8	7.1	-	-	-	100

The responses to item 13, that the program should assist the student in developing a more positive self-concept, are listed in Table 13. Student respondents of 89 percent and faculty respondents of 100 percent agreed with the item. Ten percent of the students had no opinion or comment. Only 1 percent of the students disagreed that a program should help develop a more positive self-concept.

Table 13. Item 13: The Program Should Assist the Student in Developing a More Positive Self-Concept

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	41.0	47.7	9.7	1.1	.3	100
Faculty	88.8	11.1	-	-	-	100

Table 14 lists the results of item 20. Item 20 stated that the program should assist the student in developing a more realistic self-concept. Seventy-nine percent of the students, and 92 percent of the faculty agreed with the item. Eighteen percent of the faculty had no opinion or comment.

Table 14. Item 20: The Program Should Assist the Student in Developing a More Realistic Self-Concept

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	26.6	52.6	18.4	1.8	.3	100
Faculty	40.7	51.8	7.4	-	-	100

Item 21 concerned the designing of a program to improve study habits and skills. Table 15 gives the responses to item 21. Table 15 shows 92 percent of students and 100 percent of the faculty agreeing with the program improving study habits and skills. Seven percent of the students had no opinion or comment.

The responses to item 23, that the counselor should aid a student developing a program of study to follow in reaching his career goals, are listed in Table 16. Ninety percent of the students and 93 percent of the faculty

agreed, that the counselor should aid a student in designing a program of study to follow in reaching his career goals. Eight percent of the students and 7 percent of the faculty had no opinion or comment. One percent of the students disagreed with the item.

Table 15. Item 21: The Program Should be Designed to Improve Study Habits and Skills

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	49.4	42.6	6.7	.3	.7	100
Faculty	67.8	32.1	-	-	-	100

Table 16. Item 23: The Counselor Should Aid a Student in Designing a Program of Study to Follow in Reaching His Career Goals

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	52.4	37.8	8.2	.3	1.1	100
Faculty	57.1	35.7	7.1	-	-	100

Table 17 shows the responses to item 33. Seventy-six percent of the students, and 100 percent of the faculty agreed, with the item (faculty held this position more

strongly than students). Twenty-two percent of the students responded with no comment or opinion with respect to the use of program objectives based on needs of students being served.

Table 17. Item 33: Program Objectives Should be Based on Needs of Students

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	26.4	49.4	22.2	1.8	-	100
Faculty	80.7	19.2	-	-	-	100

Table 18 contains the results of item 36 that the program should be designed to allow a student to qualify to take college credit courses. Eighty-six percent of the students, and 100 percent of the faculty agreed with the item. Twelve percent of the students had no opinion or

Table 18. Item 36: The Program Should be Designed to Allow a Student to Qualify to Take College Credit Courses

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	60.1	25.5	11.6	1.8	.7	100
Faculty	67.8	32.1	-	-	-	100

comment. Two percent of the students disagreed that the program should be designed to allow a student to qualify to take college credit courses.

Table 19 lists the responses to item 37, that the students should receive full college credit for all courses completed in the Developmental Skills Program. The combining of the agree categories showed 93 percent of the students and 81 percent of the faculty agreeing with the item (students were stronger in their approval than the faculty). Three percent of the students and 7 percent of the faculty disagreed that the students should receive full college credit for all courses completed in the Developmental Skills Program. Four percent of the students, and eleven percent of the faculty had no opinion or comment.

Table 19. Item 37: Students Should Receive Full College Credit for All Courses Completed in the Developmental Skills Program

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	74.4	19.1	3.7	1.1	1.5	100
Faculty	44.4	37.0	11.1	-	7.4	100

In presenting the student and faculty perceptions as they relate to needs the following sub-categories will be used: (1) Teaching Methods and Materials, (2) Supportive Services, and (3) Program Strategies and Emphases.

Teaching Methods and Materials. The responses to item 7, that teachers should use discussions centered around personal experiences with textbooks used as reference sources, are presented in Table 20. Sixty-nine percent of the students, and 67 percent of the faculty agreed with the use of discussions centered around personal experiences with textbooks used as reference sources. Twenty-one percent of the students and 7 percent of the faculty had no opinion or comment. Ten percent of the students and 26 percent of the faculty disagreed with the item.

Table 20. Item 7: Teachers Should Use Discussions Centered Around Personal Experiences With Textbooks Used as Reference Sources

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	17.5	51.4	20.8	5.9	4.1	100
Faculty	22.2	44.4	7.4	25.9	-	100

The responses to item 8 are reported in Table 21. Fifty percent of the students and 96 percent of the faculty agreed that the program should provide for peer tutoring (the faculty held this position more strongly than students). Twenty-five percent of the students and 4 percent of the faculty had no opinion or comment. Sixteen percent of the students disagreed with the item.

Table 21. Item 8: The Program Should Provide for Tutoring by Fellow Students (Peer Group Tutoring)

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	19.5	39.0	25.1	10.5	5.6	100
Faculty	15.3	80.7	3.8	-	-	100

The responses to item 14 regarding teachers being aware of the needs of students, are presented in Table 22. Eighty-eight percent of the students and 100 percent of the faculty agreed that teachers should be aware of the needs of students. Six percent of the students had no opinion or comment and also disagreed with the item.

Table 22. Item 14: Teachers Should be Aware of the Needs of Students

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	44.1	43.7	6.4	5.2	.3	100
Faculty	85.1	14.8	-	-	-	100

Item 15 was concerned with the teachers using the Independent Study Method in teaching. The responses to item 15 are presented in Table 23. Thirty-five percent of

the students and 30 percent of the faculty agreed with the item. Twenty-two percent of the students had no opinion or comment. Forty-three percent of the students and 70 percent of the faculty disagreed with using the Independent Study Method in teaching.

Table 23. Item 15: Teachers Should Use the Independent Study Method in Teaching (Students Work Alone With Little Faculty Help)

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	11.3	24.1	21.5	23.0	20.0	100
Faculty	14.8	14.8	-	37.0	33.3	100

The responses to item 17 are presented in Table 24. Eighty percent of the students and 93 percent of the faculty agreed with the item. Fifteen percent of the students had no opinion or comment. Five percent of the students and 7 percent of the faculty disagreed with the use of films, pictures, speakers, field trips, charts, slides and other audio-visual aids in presenting lessons.

The responses given for item 19, that teachers should use the Lecture Method in teaching, are listed in Table 25. Twenty-five percent of the students and 20 percent of the faculty agreed with the item. Thirty-eight percent of the students and 4 percent of the faculty had

no opinion or comment. Thirty-seven percent of the students and 76 percent of the faculty disagreed with the use of the Lecture Method in teaching in the program.

Table 24. Item 17: Teachers Should Use Films, Pictures, Speakers, Field Trips, Charts, Slides and Other Audio-Visual Aids in Presenting Lessons

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	43.8	36.3	14.6	4.8	.3	100
Faculty	51.8	40.7	-	7.4	-	100

Table 25. Item 19: Teachers Should Use the Lecture Method in Teaching (Formal Presentation One-Way Communication by Teacher)

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	10.1	14.6	38.2	24.3	12.7	100
Faculty	-	20.0	4.0	48.0	28.0	100

Item 22 of the questionnaire stated that the teachers should use the Recitation/Discussion Method in teaching. Table 26 lists the responses to the item. Seventy-one percent of the students and 92 percent of the

faculty agreed with the use of the Recitation/Discussion Method in teaching in the program. Twenty-three percent of the students had no opinion or comment. Six percent of the faculty disagreed with the item.

Table 26. Item 22: Teachers Should Use the Recitation/Discussion Method in Teaching (Two-Way Communication of Course Materials)

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	29.1	42.0	23.1	4.5	1.1	100
Faculty	19.2	73.0	-	7.6	-	100

Item 25 stated that teachers should use the Seminar Method in teaching. The responses to item 25 are given in Table 27. Forty-four percent of the students, and 28 percent of the faculty agreed with the item. Twenty-five percent of the students and 28 percent of the faculty had

Table 27. Item 25: Teachers Should Use the Seminar Method in Teaching (Students Prepare the Lessons and Present Them)

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	7.8	35.5	25.0	24.7	6.7	100
Faculty	-	28.0	28.0	24.0	20.0	100

no opinion or comment. Thirty-one percent of the students and 44 percent of the faculty disagreed with the use of the Seminar Method in teaching in the program.

The responses to item 27, that teachers should use the Laboratory Method in teaching, are presented in Table 28. Sixty-six percent of the students and 100 percent of the faculty agreed to the use of the Laboratory Method in teaching. Twenty-six percent of the students had no opinion or comment, and 8 percent disagreed with the item.

Table 28. Item 27: Teachers Should Use the Laboratory Method in Teaching (Instructing, and Supervising Student Investigations)

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	20.6	44.7	25.9	7.8	.7	100
Faculty	15.3	84.6	-	-	-	100

The responses to item 29, that teachers should use teaching methods that allow for immediate feedback on how students are doing, are presented in Table 29. Eighty-one percent of the students and 100 percent of the faculty agreed that teachers should use teaching methods that allow for immediate feedback on how students are doing (faculty held this position more strongly than students). Seventeen percent of the students had no opinion or comment on the item.

Table 29. Item 29: Teachers Should Use Teaching Methods That Allow for Immediate Feedback on How Students are Doing

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	32.7	48.4	17.2	1.1	.3	100
Faculty	62.9	37.0	-	-	-	100

Item 31 stated that teachers should use the Tutorial Method in teaching. The responses to this item are listed in Table 30. Seventy-one percent of the students, and 88 percent of the faculty agreed that teachers should use the Tutorial Method in teaching. Twenty-one percent of the students and 12 percent of the faculty had no opinion or comment. Eight percent of the students strongly disagreed.

Table 30. Item 31: Teachers Should Use the Tutorial Method in Teaching (Students Work One-to-One With the Instructor)

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	25.4	45.3	20.9	6.7	1.4	100
Faculty	46.1	42.3	11.5	-	-	100

The responses to item 34, that the teachers should use Programmed Instruction Materials in teaching, are presented in Table 31. Forty-five percent of the students and 71 percent of the faculty agreed that teachers should use Programmed Instruction Materials in teaching. Forty-four percent of the students and 13 percent of the faculty had no opinion or comment. Eleven percent of the students and 16 percent of the faculty disagreed with the item.

Table 31. Item 34: Teachers Should Use Programmed Instruction Materials in Teaching (Course Contents Presented Through Programmed Materials)

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	12.5	32.0	44.2	8.0	3.0	100
Faculty	25.0	45.8	12.5	8.3	8.3	100

Supportive Services. The responses to item 2, that the program should provide nonacademic or personal counseling, are found in Table 32. Seventy-three percent of the students and 93 percent of the faculty agreed with the item. Fifteen percent of the students had no opinion or comment. Twelve percent of the students and 7 percent of the faculty disagreed with the program providing nonacademic or personal counseling.

Table 32. Item 2: The Program Should Provide Nonacademic or Personal Counseling

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	17.9	55.0	15.3	6.3	5.2	100
Faculty	67.8	25.0	-	-	7.1	100

Item 5 stated the program should have counselors that are aware of student needs. The responses to item 5 are listed in Table 33. The majority of the respondents, 97 percent of the students and 100 percent of the faculty agreed that the program should have counselors that are aware of student needs.

Table 33. Item 5: The Program Should Have Counselors That Are Aware of Student Needs

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	69.0	27.9	1.8	.7	.3	100
Faculty	89.2	10.7	-	-	-	100

The responses to item 11 regarding the program providing academic counseling, are reported in Table 34. Seventy-nine percent of the students, and 93 percent of the faculty agreed that the program should provide

academic counseling. Fifteen percent of the students had no opinion or comment. Six percent of the students and 7 percent of the faculty disagreed with the item.

Table 34. Item 11: The Program Should Provide Academic Counseling

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	31.9	46.9	15.4	1.8	3.7	100
Faculty	53.5	39.2	-	7.1	-	100

The responses given for item 18, that the program should provide financial aid counseling, are listed in Table 35. Eighty-three percent of the students and 93 percent of the faculty agreed with the item (faculty held this position more strongly than students). Nine percent of the students had no opinion or comment. Eight percent of the students and 7 percent of the faculty disagreed with the program providing financial aid counseling.

Table 35. Item 18: The Program Should Provide Financial Aid Counseling

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	49.2	34.2	8.6	3.3	4.5	100
Faculty	35.7	57.1	-	7.1	-	100

The responses given for item 32, that the program should have counselors that are competent, are listed in Table 36. Eighty-one percent of the students, and 100 percent of the faculty agreed with the item. Eighteen percent of the students had no opinion or comment in reference to the program providing counselors that are competent.

Table 36. Item 32: Program Should Have Counselors That are Competent

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	37.4	43.8	17.9	.3	.3	100
Faculty	60.7	39.2	-	-	-	100

Program Strategies and Emphases. In Table 37 the responses to item 1, that the program should place the student at the center of the learning process, are presented. Eighty-five percent of the students, and 100 percent of the faculty agreed that the students should be placed at the center of the learning process. Twelve percent of the students had no opinion or comment, and 3 percent disagreed with the item.

The responses to item 3, that teaching should be geared to the level of the adult that is being taught, are reported in Table 38. Seventy-one percent of the students

and 100 percent of the faculty agreed that teaching should be geared to the level of the adult that is being taught (faculty held this position more strongly than students). Nineteen percent of the students had no opinion or comment. Ten percent of the students disagreed with the item.

Table 37. Item 1: The Program Should Place the Student at the Center of the Learning Process

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	33.9	51.1	11.5	1.4	1.8	100
Faculty	88.8	11.1	-	-	-	100

Table 38. Item 3: Teaching Should be Geared to the Level of the Adult That is Being Taught

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	38.9	31.8	19.1	7.4	2.6	100
Faculty	82.1	17.8	-	-	-	100

The responses to item 10, that the program should allow for discussion of special problems, are reported in Table 39. Seventy-two percent of the students and 85 percent of the faculty agreed that the program should

allow for discussion of special problems. Sixteen percent of the students and 15 percent of the faculty had no opinion or comment. Twelve percent of the students disagreed with the item.

Table 39. Item 10: The Program Should Allow for Discussion of Special Problems

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	23.2	48.6	16.4	7.1	4.4	100
Faculty	51.8	33.3	14.8	-	-	100

The responses to item 12 are reported in Table 40. Eighty-four percent of the students and 100 percent of the faculty agreed with the item. Thirteen percent of the students had no opinion or comment, and 3 percent disagreed with the program providing for learning at different rates.

Table 40. Item 12: The Program Should Provide for Learning at Different Rates

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	40.8	43.0	12.7	3.3	-	100
Faculty	78.5	21.4	-	-	-	100

The responses given for item 16, that the program should stress factual information, are presented in Table 41. Sixty-two percent of the students and 41 percent of the faculty agreed the program should stress factual information (students were stronger in their approval than the faculty). Twenty-nine percent of the students had no opinion or comment. Eight percent of the students and 59 percent of the faculty disagreed with the item.

Table 41. Item 16: The Program Should Stress Factual Information

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	12.9	49.4	29.2	3.0	5.3	100
Faculty	14.8	25.9	-	51.8	7.4	100

The responses to item 24, that the program should recognize and respond to individual differences in skills, are reported in Table 42. Eighty-eight percent of the students and 100 percent of the faculty agreed with the program recognizing and responding to individual differences in skills. Seven percent of the students had no opinion or comment. Five percent of the students disagreed with the item.

Table 42. Item 24: The Program Should Recognize and Respond to Individual Differences in Skills

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	29.3	58.6	6.7	4.8	.3	100
Faculty	85.1	14.8	-	-	-	100

Item 35 in the questionnaire stated that the program should recognize and respond to individual differences in values. Table 43 presents the responses to this item. Sixty-one percent of the students and 93 percent of the faculty agreed that the program should recognize and respond to individual differences in values. Twenty-four percent of the students and 7 percent of the faculty had no opinion or comment. Fifteen percent of the students disagreed with the item.

Table 43. Item 35: The Program Should Recognize and Respond to Individual Differences in Values

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	16.6	43.9	24.2	13.6	1.5	100
Faculty	71.4	21.4	7.1	-	-	100

The responses to item 38, that the program should recognize and respond to individual differences in learning styles, are presented in Table 44. Eighty-two percent of the students and 100 percent of the faculty agreed that the program should recognize and respond to individual differences in learning styles. Sixteen percent of the students had no opinion or comment.

Table 44. Item 38: The Program Should Recognize and Respond to Individual Differences in Learning Styles

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	35.3	46.9	16.1	1.1	.3	100
Faculty	92.8	7.1	-	-	-	100

Item 39 stated that the program should provide a flexible curriculum. The responses to this item are presented in Table 45. Eighty-two percent of the students and 100 percent of the faculty agreed that the program should provide a flexible curriculum (faculty held this position more strongly than students). Sixteen percent of the students had no opinion or comment, and 2 percent disagreed with the item.

Table 45. Item 39: The Program Should Provide a Flexible Curriculum

Sample Groups	Scale: Strongly Agree %	Agree %	No Opinion %	Disagree %	Strongly Disagree %	Total %
Students	48.2	34.2	15.5	1.1	.7	100
Faculty	84.6	15.3	-	-	-	100

The "second instrument," used for recording perceptions of students and faculty at New York City Community College, provided item 40 for respondents to express opinions on any area of the questionnaire or the Developmental Skills Program. Table 46 is used to list the responses to item 40. These responses are listed as given by the respondents.

Table 46. Faculty and Student Comments Using Open-Ended Question 40

Item No.	Item	Comments
		STUDENT COMMENTS:
15	Teachers should use the Independent Study Method in teaching. (Students work alone with little faculty help)	This would be okay, as long as the faculty is available when you need help.
17	Teachers should use films, pictures, speakers, field trips, charts, slides and other audio-visual aids in presenting lessons.	They should be using these things now. Where are they?
18	The program should provide financial aid counseling.	The financial aid department should develop a better way of making it aware that money is available for people who need help.
27	Teachers should use the Laboratory Method in teaching. (Instructing, and supervising student investigations)	Lab class is very good--it really helps me a lot. They should use that more.
37	Students should receive full college credit for all courses completed in the Developmental Skills Program.	I believe we should receive credit for the courses, after all you attend class, just as you will for a credit course so why not give us credit for them. The program should give at least one credit for each class. I feel that full college credit should be granted to the students who are taking developmental courses.

Table 46 (continued)

Item No.	Item	Comments
		STUDENT COMMENTS (continued)
37	Students should receive full college credit for all courses completed in the Developmental Skills Program.	I feel that a student should get full credit for finishing a developmental course. It is necessary for these developmental classes. They prepare you for the next math course. It gives you a head start. I personally think that it should be worth 1 or 2 credits because many students don't come to class all the time because they feel it is a no credit course. Get credit for developmental subjects. I think college credits should be allowed. People waste their time coming, and not get any credits for a class that meets three hours a week, give credit or cut time down. I feel that if a person is regularly attending a Developmental Skills Course, he should receive full credit as if in any other class or if not full credit at least half credit. I mean that if you add up the hours that in a way we are losing credits, it takes out a lot of your other credit classes. It's true that it's for your own improvement or your own benefit, but still, it's credits lost. There should really be some credits in Developmental Courses. We should receive full college credit for all courses completed in the Developmental Skills Program.

Table 46 (continued)

Item No.	Item	Comments
		STUDENT COMMENTS (continued)
37	Students should receive full college credit for all courses completed in the Developmental Skills Program.	We should receive credit for this course. Sometimes I feel like I am in high school. I disagree strongly, because if that one student doesn't have the qualities for academic credits he has no right to take any.
GENERAL		FACULTY COMMENTS No one teaching method should be the sole mode of instruction. Different students respond to different methods. All of the teaching methods and materials mentioned should be used in teaching. The instructor should decide what is best for a particular class, in a given situation. A teacher should use appropriate means of instruction to enable the student to achieve optimum learning. These are all valid instructional approaches, when one uses them, for what purpose, and on what group, etc.

SUMMARY

Descriptive analyses were used to present characteristics of developmental programs at selected public state community junior colleges, and specifically the Developmental Skills Program of the New York City Community College.

Perceptions of the faculty, and selected students with respect to the benefits, needs and objectives of the Developmental Skills Program at the New York City Community College were compared using a one-way analysis of variance.

The Null Hypotheses were intended to determine the differences in perceptions of the sample groups with regard to the stated need, and benefits and objectives of the Developmental Skills Program. The Null Hypotheses were rejected in favor of the alternative hypotheses when analyses indicated a statistical significant difference in the perceptions of faculty and students as to the stated need, benefits and objectives of the Developmental Skills Program.

Frequencies and percentages were used in reporting responses to each item. Responses to the open-ended question were given for faculty and student participants.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND IMPLICATIONS

The Problem

The primary purpose of the study was to (a) identify characteristics of developmental programs at selected public, state-supported community junior colleges, to use these characteristics to (b) identify what students and faculty perceived to be important aspects of the Developmental Skills Program at New York City Community College and to (c) compare the perceptions of students and faculty as to stated program benefits, needs and objectives. Two sample groups were used for the purpose of comparing perceptions. The two sample groups were (1) the students, and (2) the faculty (faculty, staff, administrators), of the Developmental Skills Program of New York City Community College.

The initial survey was conducted during the Spring term of 1973, with the final data gathering efforts taking place during the Summer and Fall terms of 1973.

The "First Instrument," which was used in identifying characteristics, was mailed to the Director of

Special Programs during the Spring term of 1973. This mailing resulted in a 90 percent return (17 of 19). The "Second Instrument," which was used to compare perceptions, was self-administered to the students in the sample population, and given to the faculty participants, through the department chairman, to be returned by mail. Responses from these efforts were 100 percent for students (269) and 80 percent for faculty (28). For the entire investigation there was a total sample return of 90 percent.

The Design and Procedure of the Study

The "First Instrument," based on similar instruments, problems, and responsibilities commonly associated with developmental programs, was designed to identify current characteristics. The "Second Instrument," was designed to obtain individual perceptions. The items were taken from writings in the area of developmental programs. On each item participants were asked to indicate the extent to which they agreed or disagreed that the issue presented in the item should be a part of the Developmental Skills Program. Responses were indicated on a five-point scale. The one-way analysis of variance was used for testing variability in the investigation. The .05 level of confidence was established and used in determining statistical significance. To add clarity and meaning, the responses to all items were reported using frequencies and percentages.

Findings, Conclusions and Implications

The findings in the investigation will be reported using areas of agreement and disagreement as they relate to (1) benefits and objectives, and (2) needs. The benefits and objectives will be reported using the sub-categories: (a) program content and (b) program design. The needs will be reported using the sub-categories: (a) teaching methods and materials, (b) supportive services, and (c) program strategies and emphases.

1. Benefits and Objectives

a. Program Content

Based on the responses to the items grouped under content, the faculty and students were in general agreement as to:

(1) providing instructions to improve basic reading habits,

(2) providing instructions to help one live a more productive life as a citizen,

(3) helping one develop his ability to speak effectively,

(4) helping one improve his vocabulary, and

(5) helping one develop his ability to write.

b. Program Design

Based on the responses to the items grouped under design, the faculty and students were in general agreement as to designing a program:

(1) to improve student comprehension,
(2) to assist the student in developing a more positive self-concept,
(3) to assist the student in developing a more realistic self-concept,
(4) with objectives based on the needs of students being served,
(5) to improve study habits and skills,
(6) that would aid a student in designing a program of study to follow in reaching his career goals,
(7) based on the needs of students being served,
(8) to allow a student to qualify to take college-credit courses, and
(9) that would give full-college credit for all courses completed in the Developmental Skills Program.

The analysis of variance of the responses based on the benefits and objectives had an approximate significance probability of F statistic of .008 (Table 4). An examination of this analysis indicated a statistical significant difference in the perceptions of faculty and students as to the stated benefits and objectives of the Developmental Skills Program at New York City Community College. Faculty respondents indicated a stronger

agreement on a higher percentage of issues, and at a higher rating level, than student respondents, representing benefits and objectives of the program.

2. Needs

a. Teaching Methods and Materials

Based on the responses to the items grouped under teaching methods and materials, the students and faculty were in general agreement:

(1) to the use of discussions centered around personal experiences with textbooks used as reference sources,

(2) to the use of tutoring by fellow students,

(3) that teachers should be aware of the needs of students,

(4) that the Independent Study Method should not be used in teaching in the program,

(5) that teachers should use films, pictures, speakers, field trips, charts, slides and other audio-visual aids in presenting lessons,

(6) that the Recitation/Discussion Method should be used in teaching in the program,

(7) that the Laboratory Method should be used in teaching in the program,

(8) that teaching methods that allow for immediate feedback on how students are doing should be used in teaching in the program.

(9) that the Tutorial Method should be used in teaching in the program, and

(10) that the teachers should use Programmed Instruction Materials in teaching in the program.

Based on the responses to two items related to teaching methods and materials, students and faculty differed in designated category choice. The faculty felt that teachers should not use the Lecture Method in teaching, the largest percentage of students had no opinion or comment on the item. The faculty felt that teachers should not use the Seminar Method in teaching, the largest percentage of students agreed with the item.

b. Supportive Services

Based on the responses to the items grouped under supportive services, the students and faculty were in general agreement:

(1) that the program should provide nonacademic or personal counseling,

(2) that the program should have counselors that are aware of student needs,

(3) that the program should provide academic counseling, and

(4) that the program should provide financial aid counseling.

c. Program Strategies and Emphases

Based on the responses to the items grouped under program strategies and emphases, the students, and faculty were in general agreement:

(1) that the program should place the student at the center of the learning process,

(2) that teaching should be geared to the level of the adult that is being taught,

(3) that the program should allow for discussion of special problems,

(4) that the program should allow for learning at different rates,

(5) that the program should recognize and respond to individual differences in skills,

(6) that the program should recognize and respond to individual differences in values,

(7) that the program should recognize and respond and respond to individual differences in learning styles, and

(8) that the program should provide a flexible curriculum.

The major differences expressed by students and faculty in this sub-category related to the perceptions based on item 16. The majority of the faculty disagreed with the program stressing factual information.

The analysis of variance of the responses based on needs had an approximate significance probability of F statistic of .001 (Table 6). An examination of this analysis indicated a statistical significant difference in the perceptions of faculty and students as to the stated needs of the Developmental Skills Program at New York City Community College. The faculty respondents registered a higher percentage of agreement, and at a higher rating level, than student respondents on issues representing needs of the program.

In the area of benefits and objectives, the items making up the sub-category, content, were perceived by the faculty as being highly important. The faculty rated four out of five items using the "strongly agree" designation, and the "agree" designation of the other item. The student participants perceived the importance of the items to a slightly lesser degree. The students rated two of the five items "strongly agree," and three of the items "agree." The responses to only one of the items reflected the faculty and the students agreeing with the issue, using the same degree designation in the agreement category.

The items making up the sub-category, design, were perceived by the faculty as being very significant to a

program. The faculty rated seven of the eight items "strongly agree." The students rated five of the eight items using the "strongly agree" designation. The faculty and students were in complete agreement on five of the eight items, as to their degree of feelings.

In the area of needs, the items making up the sub-category, teaching methods and materials, were perceived by the faculty as being significant. The faculty rated four out of the 12 items with the designation "strongly agree," six of the items "agree," and one item each for disagree," and "strongly disagree." The students rated two out of the 12 items "strongly agree," eight "agree" and two no opinion or comment. On seven of the items the faculty and the students were in complete agreement as to selected choice. The item that stressed the use of the Lecture Method of teaching showed a student rating of "no opinion or comment," and a faculty rating of "disagree." The item stressing the use of Programmed Instructions Materials in teaching showed a student rating of "no opinion or comment," and a faculty rating of "agree."

The items making up the sub-category, supportive services, were perceived as being extremely important by the faculty. Four out of the five items, were designated ratings of "strongly agree," with the other item being rated "agree." The students designated ratings of "agree" for three out of the five items, with the two other items

being rated "strongly agree." The faculty and students agreed only on one item as to the degree of agreement.

The items making up the sub-category, program strategies and emphases, were perceived as being extremely important by the faculty. Eight of the nine items received a rating designation of "strongly agree," with one item being rated "disagree." The students perceived the items as being of a lesser degree of importance. Through their choices of ratings, the students designated seven of the nine items "agree" and two of the items as "strongly agree." Only two items received the same designated rating choice by the faculty and the students. The greatest amount of difference in rating choices came from the item suggesting that the program stress factual information. The students chose the "agree" rating category, and the faculty chose the "disagree" category.

Discussion

The major hypothesis in this investigation is that there will be a difference in the perceptions of faculty and students as to the stated benefits, needs and objectives of the Developmental Skills Program at New York City Community College. Because of their experiences and positions, it was hypothesized that the faculty and the students would have different perceptions of benefits, needs and objectives of the developmental skills program.

The findings indicated a statistical significant difference in the perceptions of faculty and students as to stated benefits, needs and objectives of the Developmental Skills Program. The degree of acceptance by the faculty of issues presented in items was higher in number and at a higher rating level than student respondents. Student respondents showed a reluctance to strongly agree with certain items that should be highly important in a viable developmental education program. One area, that has received some mention in this investigation is financial aid counseling. A summary of the responses to item 18, which dealt with financial aid counseling, is given in Table 35. A lower percentage of the students than of the faculty saw financial aid counseling as being vitally important in a developmental education program. Several research investigations have indicated the need for strong financial aid counseling.

In the area of allowing full-college credit for developmental courses, item 37, Table 19, showed a stronger support by students than by faculty for the item. Table 46, of item 40, also showed a strong student support for credit for developmental courses. Research has indicated that faculty members seem to "frown" on credit being given for developmental courses, for "they are not college level work." A common student argument for full credit, or some credit, is that they have to put in, in many cases, more

time for a developmental course than a full-college credit course. In the cases of deficient high school preparation, omissions of mathematics and science courses, this common problem cannot be, "blamed fully on the student"; therefore, the student should not have to fully pay for this in college. Students report that counselors often steer them clear of mathematics and science courses; thus, omissions. In college they must take developmental courses, without credit, paying for them, when traditional educational practices are responsible for their not having the courses.

In the area of teaching methods and materials, item 34, Table 31, revealed a higher percentage of the faculty than of the students in support of the use of Programmed Instruction Materials in program. Research has indicated that the most frequent developmental course students enroll in is "Reading." This in itself, says that the majority of the developmental students have reading problems. Students have also complained of the impersonal nature surrounding the extensive use of programmed instructional materials in teaching.

In the area of program strategies and emphases, item 16, Table 41, showed a higher percentage of the students than of the faculty, agreeing that the program should stress factual information.

In the area of program content, item 26, Table 9, showed a higher percentage of the students than of the

faculty agreeing to the importance of the program in helping one to develop his ability to speak effectively.

The specific items cited, and others included in the investigation gave indication of the difference in perceptions of students and faculty on issues affecting developmental education programs.

It is the faculty (administration, faculty and staff) that decides through its experiences and training what and how it is to be taught, but it is the student through his experience and training that must benefit.

Implications for Further Study

This study concerned itself with the perceptions of the students and the faculty with respect to the needs, benefits and objectives of the Developmental Skills Program at New York City Community College.

The findings are supportive of the benefits and objectives of a developmental skills program providing--

1. Flexible program content to improve student competence in the basic skills.
2. A program designed with flexibility to facilitate objectives based on the needs of students being served.

The findings are supportive of the needs of a developmental skills program providing for--

1. A variety of integrated teaching methods and materials to enhance student learning.
2. Sufficient supportive services (academic, financial, personal counseling, etc.) to allow the student the opportunity to pursue the educational experience with a clearer mind.
3. Program strategies that place emphases on the student and his needs.

These findings are indicative of the need for--

1. Expanded educational training opportunities for administrators, counselors and teachers of programs for students with deficiencies; designed to enable these personnel to provide better supervision, counseling and teaching for programs. These opportunities can take the form of educational preparation and in-service experiences for administrators, counselors and teachers. Research in these areas can improve the teacher training as well as the in-service activities efforts. Investigations can be made to ascertain successful administrative, counseling and teaching techniques. There is a need for research in the area of the use of the "teacher oriented" and programmed instructional materials in teaching.
2. Expanded supportive services, based on needs to accompany the administrative-educational program.

There is a need for improved academic, financial and personal counseling in terms of availability of services and service personnel for the maximum use of the services provided. There is a need for better guidelines to be used in the granting and administering of financial aid, to make sure that payments are made in sufficient time to cover financial obligations during registration. The expansion of stipulations to include clothing, housing, transportation, etc., as needed.

3. Flexible program strategies, with the student and his needs shaping the major objectives. Program efforts geared to meeting the student where he is and helping to fulfill his "life-survival goals."

A study of perceptions based on differences in (a) age, (b) work experience, (c) educational preparation, (d) educational aspirations, and (e) family background might prove to be revealing. A study using in-depth interviews with these selected groups to gain further insight into the causes for differences in their perceptions would be helpful in understanding further their opinions regarding needs, benefits and objectives of the program.

An institutional investigation using similar sample groups in a longitudinal study, comparing the results at intervals to see if any changes in perceptions take place,

should prove helpful in meeting the changing student demands.

To meet implied program goals, major emphases will have to be placed on increased--

1. financing to match administrative, educational and supportive efforts;
2. supportive services to match administrative and educational efforts;
3. administrative support to supervise the educational, the financial and supportive services to guarantee maximum benefits from input efforts;
4. research efforts on program design, content, teacher preparation, student characteristics and student needs.

The research findings are supportive of the need of a joint effort of administration, education, financial and supportive services in providing viable developmental education.

APPENDICES

APPENDIX A

COVER LETTER AND QUESTIONNAIRE TO DIRECTOR OF SPECIAL PROGRAMS

APPENDIX A

COVER LETTER AND QUESTIONNAIRE TO DIRECTOR

OF SPECIAL PROGRAMS

May 12, 1973

Director of Special Programs

In an effort to secure invaluable information in my research on Developmental Education, your assistance is requested and appreciated.

Please complete the enclosed questionnaire, and return it in the stamped self-addressed envelope. Your prompt reply will be greatly appreciated.

Thank you for your complete cooperation. Best wishes for your continued success in your program.

Gratefully yours,

W. E. J. Pollard
W256 Owen Graduate Center
Michigan State University
East Lansing, Michigan 48824

Enclosure

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SURVEY OF THE DEVELOPMENTAL PROGRAMS
AT SELECTED URBAN COMMUNITY COLLEGES

Instructions for Completion of the Questionnaire

Please answer each question that is appropriate to your institution. Feel free to explain any answer in the spaces provided.

The term "developmental program" describes a program specially designed--

1. for a student having an academic, and/or a socio-economic handicap.

2. to develop skills or attitudes required to complete the program.

INSTITUTION _____

1. What title do you hold?

( ) Dean of Instruction
( ) Director of Developmental Program
( ) Department Chairman
( ) Other (Specify) _____

2. How many full- and part-time personnel work in your program?

	No. Full Time	No. Part Time
Counselors	_____	_____
Faculty	_____	_____
Administrators	_____	_____
Para-professional assistants	_____	_____
Paid student assistants	_____	_____

3. What was the total enrollment at your institution 1972-73 school year?

( ) less than 1,000
( ) 1,000 to 2,000
( ) 2,000 to 3,000
( ) 3,000 to 4,000
( ) 4,000 to 6,000
( ) over 6,000

4. What was the total number of students enrolled in your developmental program, 1972-73 school year?_____

5. How long has your developmental program been in operation? (Check one)

( ) one year
( ) two years
( ) three years
( ) four years
( ) five years

6. What criteria are used for directing students into your developmental program?

Rate each item:
1 = A great deal
2 = Some
3 = Not at all

( ) Standardize tests
( ) High school rank
( ) High school GPA
( ) Student request
( ) Principal/Counselor referral
( ) Faculty referral
( ) Other (Specify) _____

7. When can a student enroll in your program? (Check one)

( ) Anytime
( ) Only at the beginning of a quarter
( ) Only at the beginning of a semester
( ) Only at the beginning of a school year
( ) Other (Specify) _____

8. What period of time does your developmental program cover? (Check one)

( ) One quarter
( ) One semester
( ) One year
( ) More than one year

9. What is the average teaching load (contact hours) of a developmental faculty member? (Check one)

( ) 10 hours
( ) 12 hours
( ) 15 hours
( ) Other (Specify) _____

10. How many hours per week do your classes meet? (Check one)

( ) one hour
( ) two hours
( ) three hours
( ) four hours
( ) five hours
( ) six hours or more

11. What is the average number of students per class within your developmental program? (Check one)

( ) less than 15
( ) 15 to 20
( ) 20 to 30
( ) 30 to 40
( ) over 40

12. Which of the following best describes the grading system in your developmental program? (Check one)

( ) A, B, C, D, F
( ) Pass, Fail
( ) Credit, No Credit
( ) 4.0, 3.5, 3.0, etc.
( ) Satisfactory, Unsatisfactory
( ) Other (Specify) _____

13. What functions are carried out through your developmental program? Rate each item:

1 = A great deal
2 = Some
3 = Not at all

( ) Tutorial help in basic skills
( ) Academic counseling
( ) Non-academic counseling
( ) Complete curriculum
( ) Limited courses
( ) Part-time job placement
( ) Assistance in obtaining financial aid
( ) Other (Specify) _____

_____

_____

_____

14. How would you describe your counseling support? (Check each that applies)

( ) Academic counseling--with counselor available full time in the developmental program office.
( ) Non-academic-counseling--with counselor available full time in the developmental program office.
( ) Academic counseling--with counselor available by appointment in centralized counseling office.
( ) Non-academic counseling--with counselor available by appointment in centralized counseling office.
( ) Other (Specify) _____

_____

_____

15. What instructional approaches and/or techniques are used in your developmental program?

Rate each item:
1 = A great deal
2 = Some
3 = Not much

( ) Lecture
( ) Demonstration/Laboratory
( ) Class Discussion
( ) Seminar
( ) Other (Specify) _____

_____

16. To what extent does your developmental program make use of the following resources?

Rate each item:
1 = A great deal
2 = Some
3 = Not much

( ) Closed circuit television
( ) Programmed materials
( ) Auto-tutorial facilities
( ) Films
( ) Guest speakers
( ) Field trips
( ) Other (Specify) _____

_____

17. How much emphasis is placed on each of the following areas in your developmental program?

Rate each item:

1 = A great deal
2 = Some
3 = Not much

( ) College adaptation
( ) Basic skills development
( ) Content mastery
( ) Self awareness and understanding
( ) Attitude development
( ) Student participation
( ) Other (Specify) _____
_____

18. What types of activities are used in evaluating your program? (Check each that applies)

( ) Follow-up studies
( ) Experimental research studies
( ) Other (Specify) _____
_____

19. How is your developmental program funded? (Check each that applies)

( ) General college funds
( ) Special grant from state agencies
( ) Special grant from federal agencies
( ) Grant from private sources
( ) Other (Specify) _____
_____

20. What areas in developmental program education would you like to see research conducted?

Rank these using--1, 2, 3, 4, etc.

1 = highest preference

( ) Program content
( ) Program administrative details
( ) Program functions
( ) Student evaluation of programs
( ) Teaching techniques in programs
( ) Other (Specify) _____
_____
_____

Thank you for taking the time to complete this questionnaire.

APPENDIX B

LETTER OF CONFIRMATION TO DIRECTOR OF THE DEVELOPMENTAL SKILLS PROGRAM

APPENDIX B

LETTER OF CONFIRMATION TO DIRECTOR OF THE DEVELOPMENTAL SKILLS PROGRAM

September 24, 1973

Professor Matthew Graber
Director of Developmental Studies
New York City Community College
300 Jay Street
Brooklyn, New York 11201

Dear Professor Graber:

This letter is a confirmation of our telephone conversation of September 24, 1973. I will arrive at your institution at 9 am on October 8, 1973.

My second visit to the New York City Community College initiates the final stage in my research efforts on Developmental Education Programs. During this visit, I would like to interact with you, your faculty, staff and as many students as possible. Again, thank you for the time, and the helpful suggestions you were able to give during my summer visit.

Best wishes for your continued success in your program efforts.

Cordially yours,

Bill Pollard
W256 Owen Graduate Center
Michigan State University
East Lansing, Michigan 48824

CC: Dean Iraggi

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APPENDIX C

COVER LETTER TO FACULTY OF THE DEVELOPMENTAL SKILLS PROGRAM

APPENDIX C

COVER LETTER TO FACULTY OF THE

DEVELOPMENTAL SKILLS PROGRAM

October 12, 1973

Developmental Skills Program
New York City Community College
300 Jay Street
Brooklyn, New York

In an effort to secure invaluable information in my research on Developmental Education, your assistance is requested and appreciated.

Please complete the attached questionnaire, and return it to your Departmental Secretary. Complete anonymity is desired, so please do not indicate in any way who you are on the questionnaire.

Thank you for your time and effort. Best wishes for your continued success in your program.

Gratefully yours,

Bill Pollard
W256 Owen Graduate Center
Michigan State University
East Lansing, Michigan 48824

Enclosure

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APPENDIX D

QUESTIONNAIRE ON THE PERCEPTIONS OF BENEFITS, NEEDS AND OBJECTIVES OF THE DEVELOPMENTAL SKILLS PROGRAM

APPENDIX D

QUESTIONNAIRE ON THE PERCEPTIONS OF BENEFITS, NEEDS AND OBJECTIVES OF THE DEVELOPMENTAL SKILLS PROGRAM

The purpose of this questionnaire is to gain your opinion with respect to the Developmental Skills Program in terms of its meeting benefits, needs and objectives of the students enrolled. The results of this questionnaire will be confidential and used for research purposes only.

For purposes of this questionnaire:

Benefit is defined -- As the results of program efforts based on needs fulfilled through the accomplishment of objectives.

Need is defined -- As everything necessary to ensure the maximum development of the abilities of a student enrolled in a program.

Objective is defined -- As an aim or goal to be achieved by a student when the work in the program is completed.

In answering the questionnaire you should determine the extent to which you Agree or Disagree with each statement. An Open-Ended Question is provided at the end of the questionnaire for additional comments or to help you qualify any particular response you have made. Please number appropriately any question on which you wish to comment. PLEASE DO NOT SIGN THE QUESTIONNAIRE. In answering the questionnaire only one response should be selected for each question.

For each of the following questions, please circle the response which most closely approximates the way you feel.

SA = STRONGLY AGREE
A = AGREE
N = NO OPINION OR COMMENT
D = DISAGREE
SD = STRONGLY DISAGREE

	1	2	3	4	5
1) The program should place the student at the center of the learning process.	SA	A	N	D	SD
2) The program should provide non-academic or personal counseling.	SA	A	N	D	SD
3) Teaching should be geared to the level of the adult that is being taught.	SA	A	N	D	SD
4) The program should be designed to improve student comprehension.	SA	A	N	D	SD
5) The program should have counselors that are aware of student needs.	SA	A	N	D	SD
6) The program should provide instructions to improve basic reading habits.	SA	A	N	D	SD
7) Teachers should use discussions centered around personal experiences with textbooks used as reference sources.	SA	A	N	D	SD
8) The program should provide for tutoring by fellow students (Peer group tutoring).	SA	A	N	D	SD
9) The program should provide instructions to help one live a more productive life as a citizen.	SA	A	N	D	SD
10) The program should allow for discussion of special problems.	SA	A	N	D	SD
11) The program should provide academic counseling.	SA	A	N	D	SD
12) The program should provide for learning at different rates.	SA	A	N	D	SD

SA = STRONGLY AGREE
A = AGREE
N = NO OPINION OR COMMENT
D = DISAGREE
SD = STRONGLY DISAGREE

	1	2	3	4	5
13) The program should assist the student in developing a more positive self-concept.	SA	A	N	D	SD
14) Teachers should be aware of the needs of students.	SA	A	N	D	SD
15) Teachers should use the Independent Study Method in teaching. (Students work alone with little faculty help)	SA	A	N	D	SD
16) The program should stress factual information.	SA	A	N	D	SD
17) Teachers should use films, pictures, speakers, field trips, charts, slides and other audio-visual aids in presenting lessons.	SA	A	N	D	SD
18) The program should provide financial aid counseling.	SA	A	N	D	SD
19) Teachers should use the Lecture Method in teaching. (Formal presentation one-way communication by teacher)	SA	A	N	D	SD
20) The program should assist the student in developing a more realistic self-concept.	SA	A	N	D	SD
21) The program should be designed to improve study habits and skills.	SA	A	N	D	SD
22) Teachers should use the Recitation/ Discussion Method in teaching. (Two-way communication of course materials)	SA	A	N	D	SD
23) The counselor should aid a student in designing a program of study to follow in reaching his career goals.	SA	A	N	D	SD

SA = STRONGLY AGREE
A = AGREE
N = NO OPINION OR COMMENT
D = DISAGREE
SD = STRONGLY DISAGREE

	1	2	3	4	5
24) The program should recognize and respond to individual differences in skills.	SA	A	N	D	SD
25) Teachers should use the Seminar Method in teaching. (Students prepare the lessons and present them)	SA	A	N	D	SD
26) The program should help one develop his ability to speak effectively.	SA	A	N	D	SD
27) Teachers should use the Laboratory Method in teaching. (Instructing and supervising student investigations)	SA	A	N	D	SD
28) The program should help one improve his vocabulary.	SA	A	N	D	SD
29) Teachers should use teaching methods that allow for immediate feedback on how students are doing.	SA	A	N	D	SD
30) The program should help one develop his ability to write.	SA	A	N	D	SD
31) Teachers should use the Tutorial Method in teaching. (Students work one-to-one with the instructor)	SA	A	N	D	SD
32) Program objectives should be based on needs of students being served.	SA	A	N	D	SD
33) Program should have counselors that are competent.	SA	A	N	D	SD
34) Teachers should use Programmed Instruction Materials in teaching. (Course contents presented through programmed materials)	SA	A	N	D	SD
35) The program should recognize and respond to individual differences in values.	SA	A	N	D	SD

SA = STRONGLY AGREE
A = AGREE
N = NO OPINION OR COMMENT
D = DISAGREE
SD = STRONGLY DISAGREE

	1	2	3	4	5
36) The program should be designed to allow a student to qualify to take college credit courses.	SA	A	N	D	SD
37) Students should receive full college credit for all courses completed in the Developmental Skills Program.	SA	A	N	D	SD
38) The program should recognize and respond to individual differences in learning styles.	SA	A	N	D	SD
39) The program should provide a flexible curriculum.	SA	A	N	D	SD

40)

Thank you for taking the time to complete this questionnaire.

APPENDIX E

LIST OF RIOT COMMUNITIES FOR 1967

APPENDIX E

LIST OF RIOT COMMUNITIES FOR 1967

Atlanta, Ga.

Boston, Mass.

Buffalo, N. Y.

Cincinnati, Ohio

Dayton, Ohio

Detroit, Mich.

Elizabeth, N. J.

Grand Rapids, Mich.

Jersey City, N. J.

Newark, N. J.

New Brunswick, N. J.

New Haven, Conn.

New York, N. Y. (Brooklyn)

New York, N. Y. (Bronx)

New York, N. Y. (East Harlem)

Paterson, N. J.

Philadelphia, Pa.

Phoenix, Ariz.

Plainfield, N. J.

Rockford, ILL.

Tampa, Fla.

EXCERPTS FROM SUPPLEMENTAL STUDIES FOR THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDERS, JULY, 1968

APPENDIX F

COMMUNITY JUNIOR COLLEGES (USED IN INITIAL SURVEY) LOCATED IN CITIES HAVING CIVIL DISORDERS IN 1967

APPENDIX F

COMMUNITY JUNIOR COLLEGES (USED IN INITIAL SURVEY) LOCATED IN CITIES HAVING CIVIL DISORDERS IN 1967

Bronx Community College
Bronx, New York 10468

Borough of Manhattan Community College
New York, New York 10020

Cincinnati Technical Institute
Cincinnati, Ohio 45223

Community College of Philadelphia
Philadelphia, Pennsylvania 19107

Essex County College
Newark, New Jersey 07102

Grand Rapids Junior College
Grand Rapids, Michigan 49502

Hillsborough Community College
Rockford, Illinois 61101

Hostos Community College
Bronx, New York 10451

Kingsborough Community College
Brooklyn, New York 11235

Maricopa County Community College Systems Office
Phoenix, Arizona 85004

Massachusetts Community College Systems Office
Boston, Massachusetts 02109

New York City Community College
Brooklyn, New York 11201

Passaic County Community College
Paterson, New Jersey 07505

Phoenix College
Phoenix, Arizona 85013

Quinnipian College
New Haven, Connecticut 06518

Rock Valley College
Rockford, Illinois 61101

Sinclair Community College
Dayton, Ohio 45402

South Central Community College
New Haven, Connecticut 06510

Wayne County Community College
Detroit, Michigan 48201

BIBLIOGRAPHY

BIBLIOGRAPHY

Beatty, D. L. "Community College: Educational Opportunity for All," Education, December, 1969, pp. 149-50.

Berg, Ernest H., and Dayton Axtell. Programs for Disadvantaged Students in the California Community Colleges. Oakland: Peralta Junior College District, 1968.

Berry, S., and others. "What Can Junior Colleges Do For the Disadvantaged?" College and University Journal, Summer, 1970, pp. 482-83.

Borg, Walter R. Educational Research: An Introduction. New York: David McKay Company, Inc., 1963.

Bossone, R. M. "Remedial Program," Clearing House, February, 1969, pp. 364-67.

Boyer, E. L. "Neither Transfer Nor Terminal: The Next Step for Two-Year Colleges," Intellect, November, 1972, pp. 110-12.

Brick, M. Form and Focus for the Junior College Movement. New York: Bureau of Publications, Teachers College, Columbia University, 1964.

Bushnell, D. S. "Community College: Organizing for Change; Project Focus," Current Issues in Higher Education, 1971.

Campbell, William Giles. Form and Style in Thesis Writing. 3d ed. New York: Houghton Mifflin Company, 1969.

Carnegie Commission on Higher Education. The Open Door Colleges: Policies for Community Colleges. New York: McGraw-Hill, 1970.

_____. Quality and Equality: New Levels of Federal Responsibility for Higher Education. New York: McGraw-Hill, 1970.

Clark, Kenneth B. Dark Ghetto: Dilemmas of Social Power. New York: Harper & Row, Publishers, 1965.

Clarke, J. M., and R. M. Ammons. "Identification and Diagnosis of Disadvantaged Students," Junior College Journal, February, 1970, pp. 13-17.

Cohen, Arthur M., and Associates. New Prospective on the Community College. San Francisco: Jossey-Bass, 1971.

_____, and F. B. Brawer. Student Characteristics: Personality and Dropout Propensity. Washington: American Association of Junior Colleges, 1970.

Committee for Economic Development. Raising Low Incomes Through Improved Education. New York: 1965.

Committee on the Student in Higher Education. The Student in Higher Education. Washington: Hazen Foundation, 1968.

Conant, James Bryant. Slums and Suburbs. New York: McGraw-Hill Book Company, Inc., 1961.

Cross, Patricia. Beyond the Open Door: New Students to Higher Education. San Francisco: Jossey-Bass, Inc., Publishers, 1971.

_____. "Higher Education's Newest Student," Junior College Journal, September, 1968, pp. 38-42.

_____. The Junior College Student: A Research Description. Princeton: Educating Testing Service, 1968.

Department of Health, Education and Welfare Urban Education Task Force. Urban School Crisis: The Problem and Solutions. Washington: Washington Monitoring Service, 1970.

Dinkmeyer, Don C. Developmental Counseling and Guidance: A Comprehensive School Approach. New York: McGraw-Hill, 1970.

Donovan, R. A. "Bronx Community College Faces Change," Educational Leadership, February, 1972, pp. 408-9.

Educational Policies Commission. Education and the Disadvantaged American. Washington: National Education Association, 1962.

Educational Policies Commission. National Education Association of the United States. American Education and Search for Equal Opportunity. Washington: National Education Association, 1965.

_____. Universal Opportunity for Education Beyond the High School. Washington: National Education Association, 1964.

Egerton, J. Higher Education for "High-Risk" Students. Atlanta: Southern Education Found-tion, 1968.

Fantini, Mario D., and Gerald Weinstein. The Disadvantaged: Challenge to Education. New York: Harper & Row, Publishers, 1968.

Farrell, Thomas J. The History of the General Curriculum of Forest Park Community College in Saint Louis Missouri, From its Beginning to Fall, 1971. Saint Louis: Saint Louis Junior College District, 1971.

Ferrin, R. I. Developmental Programs in Midwestern Community Colleges. Higher Education Surveys Report 4. Evanston: College Entrance Examination Board, 1971.

Frankel, C. Education and the Barricades. New York: Norton, 1968.

George, R. L., and K. A. George. "Meeting the Non-Academic Needs Unique to the Junior College Student," National Association of Student Personnel Administrators Journal, October, 1971, pp. 155-59.

Gleazer, Edmund J., Jr. "Programs for the Disadvantaged: Statement of Policy. American Association of Junior Colleges," Junior College Journal, March, 1969, pp. 9-11.

_____. This is the Community College. Boston: Houghton Mifflin Company, 1968.

Good, Carter V. Essentials of Educational Research: Methodology and Design. New York: Appleton-Century-Crofts, 1966.

Goodrich, Andrew L. "A Survey of Selected Community Services Program for the Disadvantaged at Inner-City Community Colleges." Unpublished Doctor's dissertation, Michigan State University, 1969.

Gordon, Edmund W. The Higher Education of the Disadvantaged. Washington: Office of Education, 1967.

_____, and Doxey A. Wilkerson. Compensatory Education for the Disadvantaged. New York: College Entrance Examination Board, 1966.

Gregory, Merry Anne. "An Analysis of the College Preparation Developmental Program for Low-Achieving High School Graduates at Grand Rapids Junior College." Unpublished Doctor's dissertation, Michigan State University, 1966.

Harper, W. A. Junior College Directory. Washington: American Association of Junior Colleges, 1971.

Havighurst, Robert James. Developmental Tasks and Education. New York: D. McKay Company, 1972.

_____. "Social Change and the Community College," North Central Association Quarterly, Winter, 1967, pp. 241-48.

Heist, P. A. "Diversity in College Student Characteristics," Journal of Educational Sociology, February, 1960, pp. 279-99.

Henderson, William L., and Larry C. Ledebur. Urban Economics: Processes and Problems. New York: John Wiley & Sons, Inc., 1972.

Hodgkinson, Harold L. "The Next Decade of Higher Education," The Journal of Higher Education, January, 1970, pp. 16-28.

Holleb, Doris B. Colleges and the Urban Poor. Lexington: D. C. Heath and Company, 1972.

Hoyt, D. P. "Description and Prediction of Diversity Among Junior Colleges," Personnel & Guidance Journal, June, 1968, pp. 997-1004.

Jencks, C., and D. Riesman. The Academic Revolution. Garden City: Doubleday, 1968.

Johnson, B. Lamar. Islands of Innovation Expanding: Changes in the Community College. Beverly Hills: Glencoe Press, 1969.

Klotsche, J. Martin. The Urban University: And the Future of Our Cities. New York: Harper & Row, Publishers, 1966.

Knoell, D. M. "Are Our Colleges Really Accessible to the Poor?" Junior College Journal, October, 1968, pp. 9-11.

_____. People Who Need College: A Report on Students We Have Yet to Serve. Washington: American Association of Junior Colleges, 1970.

Koch, Moses S., and Priscilla M. Wooley. "An Opportunity for Community Colleges," Junior College Journal, October, 1965, pp. 26-29.

Lansing Community College Catalog. Number 12, July, 1972.

Losak, J. "Do Remedial Programs Really Work?" Personnel & Guidance Journal, January, 1972, pp. 383-86.

Loughlin, R. L. "Community Colleges and Civilization," School & Society, March 16, 1968, pp. 176-77.

Ludwig, Louise, and Ben K. Gold. The Developmental Studies and Tutorial Programs: A Progress Report. Los Angeles: Los Angeles City College, 1969.

Medsker, Leland L., and Dale Tillery. Breaking the Access Barriers: A Profile of Two-Year Colleges. New York: McGraw-Hill Book Company, 1971.

_____, and Dale Tillery. The Junior College: Progress and Prospect. New York: McGraw-Hill Book Company, 1960.

Meister, M. "College Program for the Disadvantaged: College Discovery Program," Science Education, December, 1966, pp. 406-8.

Miller, T. K., and others. "High-Risk Students in Junior College; A Special Program; Project SPEED," Personnel and Guidance Journal, March, 1971, pp. 537-43.

Monroe, W. R. "Must Role of the New Community College," School Shop, April, 1970, pp. 116-19.

Myrdall, Gunnar, and others. An American Dilemma: The Negro Problem and Modern Democracy. New York: Harper & Row, Publishers, 1969.

New York City Community College Catalog, 1973.

O'Banion, T. "Humanizing Education in the Community College," Journal of Higher Education, November, 1971, pp. 657-68.

_____, and Alice Thurston. Student Development Programs in the Programs in the Community Junior College. Englewood Cliffs: Prentice-Hall, Inc., 1972.

O'Connell, Thomas. Community Colleges: A President's View. Urbana: University of Illinois Press, 1968.

Oppenheim, A. N. Questionnaire Design and Attitude Measurement. New York: Basic Books, Inc., Publishers, 1966.

Parker, Franklin, and others. A Bibliography of Doctoral Dissertations, 1916-1963. Washington: American Association of Junior Colleges, 1964.

Passow, Harry A. (ed.). Developing Programs for the Educationally Disadvantaged. New York: Teachers College Press, 1968.

_____. Opening Opportunities for Disadvantaged Learners. New York: Teachers College Press, 1972.

Perel, William M., and Philip D. Vairo. Urban Education: Problems and Prospects. New York: David McKay Company, Inc., 1969.

Phillips, Bernard S. Social Research: Strategy and Tactics. 2d ed. New York: The MacMillan Company, 1971.

President's Commission on Higher Education. Higher Education for American Democracy. Washington: Government Printing Office, 1957.

President's Committee on Education Beyond the High School. Second Report to the President. Washington: Government Printing Office, 1957.

Reimer, M. K. "Areas of Concern for Comprehensive Community Colleges," School & Society, January, 1971, pp. 47-49.

Report of the Conference on Two-Year Colleges and the Disadvantaged. State University of New York Agricultural and Technical College, Delhi, New York, June 15-17, 1966.

Research and Policy Committee of the Committee for Economic Development. Raising Low Incomes Through Improved Education. Washington: Committee for Economic Development, 1965.

Resnik, S., and B. Kaplaw. "Report Card on Open-Admission: Remedial Work Recommended," New York Times Magazine, May 9, 1971.

Richardson, Elliot L. "Directions in Higher Education," School & Society, Summer, 1972, pp. 296-97.

Richardson, Richard C., and Paul A. Elsner. "General Education for the Disadvantaged," Junior College Journal, December, 1965, pp. 18-21.

Riessman, F. "The Culturally Deprived Child: A New View." In Programs for the Educationally Disadvantaged. Washington: Government Printing Office, 1968.

Roueche, John E. Salvage, Redirection, or Custody? Remedial Education in the Community Junior College. Washington: American Association of Junior Colleges, 1968.

_____ (ed.). A Bibliography of Doctoral Dissertations, 1964-66. Washington: American Association of Junior Colleges, 1967.

_____, and John Boggs. Junior College Institutional Research: The State of the Art. ERIC Clearinghouse for Junior College Information. Washington: American Association of Junior Colleges, 1968.

_____, and A. S. Hurlburt. "The Open-Door College: The Problem of the Low Achiever," Journal of Higher Education, November, 1968, pp. 453-56.

Schenz, R. F. "What to Do for Low Ability Students?" Junior College Journal, May, 1964, pp. 22-27.

Sieber, Sam D., and Paul F. Lazarsfeld. The Organization of Educational Research in the United States. New York: Bureau of Applied Research, Columbia University, 1966.

Texas College and University System Coordinating Board. Reaching for the Ideal: Recommendations for Texas Community Junior Colleges and Recommendations for State Action. Austin: Texas College and University System, 1971.

Theobald, Robert. An Alternative Future for America. Chicago: Swallow Press, Inc., 1968.

Thornton, J. W., Jr. The Community Junior College. New York: John Wiley & Sons, 1972.

U.S. Bureau of the Census. U.S. Census of Population: 1970 Number of Inhabitants Final Report. Washington: Government Printing Office, 1971.

_____. Congressional Record. Vol. 114.

_____. Department of Health, Education and Welfare. Digest of Educational Statistics, 1972 Edition. Washington: Government Printing Office, 1973.

_____. Department of Health, Education and Welfare. A Guide for Planning Community Junior College Facilities. Washington: Government Printing Office, 1969.

_____. Department of Health, Education and Welfare, Urban Education Task Force. Urban School Crisis: The Problem and Solutions. Washington: Washington Monitoring Service, 1970.

_____. National Commission on Civil Disorders. Report of the National Advisory Commission on Civil Disorders. Washington: Government Printing Office, 1968.

Weidenthal, Bud. The Community College Commitment to the Inner City. Washington: American Association of Junior Colleges, 1967.

Williams, H. A. "To Close the Opportunity Gap: Comprehensive Community College Act, 1969," Junior College Journal, September, 1969, pp. 8-13.

Woock, Roger R. (ed.). Education and the Urban Crisis. Scranton: International Textbook Company, 1970.