

A STUDY OF THE ACADEMIC, PERSONAL,  
AND SOCIAL DEVELOPMENT OF  
HIGH SCHOOL DROPOUTS IN AN  
ALTERNATIVE LEARNING ENVIRONMENT

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## CHAPTER I

### NATURE OF THE PROBLEM

#### Introduction

There has been a concentrated effort this last decade to deal with an increasingly large number of high school dropouts. Many different attempts have been made to deal with the dropout problem. Some programs are oriented toward working with the student before he drops out and are managed by the school itself; others are managed by an outside group (Work Experience/ Career Exploration Program and Experiment in Experience). Some programs are oriented toward working with the student after he has dropped out of school (Neighborhood Youth Corps). In this paper, one method of dealing with the high school dropout problem is examined, and evaluated in reference to its effectiveness in facilitating the development of students academic, personal, and social growth.

During the spring of 1972, the city of Duluth Neighborhood Youth Corps Program (Duluth NYC) approached the University of Minnesota, Duluth (UMD) about providing educational services for that program. A pilot program was instituted at UMD under Supportive Services on April 15, 1972 and expired August 19, 1972. Duluth NYC wanted to continue that part of its program at UMD for another year and entered into a contract with the Students College (SC), a newly emerging organization located at UMD. Students College provided an educational system for a maximum of thirty 16 or 17 year old high school dropouts for a minimum of eight hours per week for the August 20, 1972 to August 19, 1973 time period.

### Background

The Economic Opportunity Act of 1964, as defined in the book, Youth Employment Programs in Perspective (Benjamin, Lesh, and Freedman, 1965), states that the Neighborhood Youth Corps director shall formulate and carry out

1. programs to provide part-time employment, on the job training and useful work experience for students from low-income families who are in the ninth through twelfth grades of school (or are of an age equivalent to that of students in such grades) who are in need of the earnings to permit them to resume or maintain attendance in school, and
2. programs to provide unemployed individuals useful work experience and on the job training, combined where needed with educational and training assistance, including basic literacy and occupational training designed to assist the individuals to develop their maximum occupational potential. Enrollment shall be limited to individuals aged sixteen through twenty-one years.

Duluth NYC wanted these services provided by Students College on the UMD campus because

1. UMD offered a large number of volunteers who once recruited allowed more individual help for each NYC enrollee.
2. Since the enrollee did not succeed in the environment from which he came, UMD provided an opportunity to have a "fresh start", that is, an environment where he could be successful.
3. UMD provided an opportunity for NYC enrollees to relate to UMD students, a group that is close in age to the NYC peer group.

4. The Students College Neighborhood Youth Corps Program (SC-NYC) provided an educational setting with the flexibility to meet the NYC students' individual needs.

Students College is an experimental management service organization that received its charter from the University College Governing Council of the University of Minnesota, Minneapolis campus, but makes its home at the University of Minnesota, Duluth campus. The management consists of qualified undergraduate students who operate the college and make the goals of Students College attainable. They provide leadership and management for a group of students who offer services such as advising, tutoring, and group leadership to individuals and groups in the three programs of the Students College.

1. SHARE (Students Helping and Reaching Everyone) -- undergraduate UMD students providing advising and lay counseling to other UMD students.
2. HRB (Human Resource Bank) -- a bank of UMD student volunteers organized on a project basis in the community and on the campus with each project serving a different need. Examples include tutoring at Washington Junior high school, UMD on-campus tutoring, and volunteers in the Duluth Boys Club.
3. Free U. (Free University) -- free, non-credit classes held once a week on the UMD campus taught by UMD faculty, students and members of the Duluth community that are offered to these same people.

One of the stated purposes of the University of Minnesota, Duluth is to provide students the opportunity to develop social responsibility. Social responsibility includes the delivery of human services, which is the major product of Students College, both to UMD students and residents of the community surrounding the UMD campus. Both groups (management and service) earn

University College credits for their work within Students College.

Students College is organized for the purpose of achieving the following major goals:

1. To develop an informal, yet well organized and accountable educational sub-system and give students the opportunity to engage in experiences not generally promoted and evaluated within the regular system.
2. To provide students with the opportunity to develop leadership, management, administrative, and evaluative skills.
3. To give students the opportunity to engage in various service-learning experiences.
4. To bring about closer relationships among students, faculty, administrators and community members.

As a result of that contract between Students College and Duluth NYC, three program components were identified: the academic component, the interpersonal component, and the occupational component.

The academic component of NYC is carried out through the SC-NYC Mini U, which became the fourth program in the Students College, with the SC-NYC staff responsible for organizing and coordinating the SC-NYC Mini U. SC-NYC Mini U goals are

1. To motivate the NYC student to continue his educational experience.
2. To encourage the NYC student to earn credits leading toward a high school diploma.
3. To prepare the NYC student for the General Educational Development (GED) test.

The Interpersonal component of the NYC program is carried out both by the SC-NYC Mini U and the Duluth NYC program. The goal is to provide a

personalized caring environment where the NYC enrollee can develop socially and personally.

The Occupational component is the responsibility of the Duluth NYC Program. The goal of the Occupational Component is to coordinate the enrollees' ability and desires into the best suitable job for him so that he may gain skills desirable for future employment.

#### Statement of the Hypotheses

As a result of the contract between the Students College and Duluth NYC, the SC-NYC program was initiated. The following hypotheses were formulated in an attempt to evaluate the SC-NYC program in respect to facilitating the development of its students' academic, personal, and social growth.

It was expected that high school dropouts enrolled in the SC-NYC program would benefit academically from their involvement within individual SC-NYC classes as a result of low student-teacher ratios, co-teaching of classes, and young teachers with whom their students could identify. It was therefore expected that educational achievement as preparation for the GED test or high school credit competency testing would increase as the high school dropouts participated in SC-NYC classes.

It was expected that high school dropouts enrolled in the SC-NYC program would become more oriented toward education as a result of being involved in a learning environment that exhibited relevance and an absence of failure, and that motivation to continue educational experiences by students would increase as a result of that orientation.

It was expected that high school dropouts enrolled in the SC-NYC program would become more open through their involvement in a personalized and caring learning environment, resulting in increases in personal and social adjustment.

Importance of the Study

A recent article in a Duluth Minnesota newspaper (Duluth Herald, 1973) titled Principals Urge Educational Alternatives reported the following educational goals and options:

"Development of educational alternatives for those who want them, but without abandoning certain basics of public schools was recommended to the Duluth School Board by a committee of secondary school principals. Along with this it suggests study be given such things as open attendance areas for the entire city, alternative grading and pupil evaluation systems, examination of mandatory attendance laws and student and family selection of teachers and programs. The principals estimated that sixty percent of the population is satisfied with what it gets from the public schools but that the other forty percent is saying the accepted system is not working satisfactorily for them."

The article went on to report that the committee recognized that educational options were emerging by chance rather than by choice and that it was their point of view that our society must accept more educational alternatives for students and begin to legitimize these experiences.

If, as this committee of principals suggest, the public schools are not adequately meeting the needs of a large percentage of the student body, then educational alternatives must be explored. Experimental prototype projects that prove either partially or wholly effective with the enormous dropout problem through the implementation of such innovations as personalized environments, relevant curriculums, small student teacher ratios, and work experience offer themselves as working models for our educational systems. This study examines one such alternative learning environment, the results of which could have strong implications for needed change in our educational system.

## CHAPTER II

### REVIEW OF THE LITERATURE

This chapter presents a sampling of the literature relevant to alternative learning environments. Their effectiveness in working with high school dropouts and common strategies are examined.

O'Gara and Thurston (1970) found that Vocational Village in Portland, Oregon helped disadvantaged youth to earn high school diplomas and develop job entry skills in one of several "clustered" areas -- including automotive technology, food service, marketing, office occupations, electronics assembly, fabrication processes, cosmetology, industrial mechanics, and health occupations. The students at Vocational Village were "turned off" by some of the best schools in the country, mainly as a result of failure, and the Portland program attempted to "turn them on" via a format including a personalized approach, a low student teacher ratio of about fifteen to one, and individual tutoring when necessary.

Vocational Village is housed in a converted store-warehouse structure where students spend a minimum of ten hours per week studying in their major field. Grading has been replaced with a job sheet that is oriented around students progressing at their own rate and being encouraged to do something as opposed to just being present. The authors reported that student reaction was favorable but this was based only on verbal statements from the students.

Carrier (1971) found that the Hancock County, Indiana Pre-Vocational Program presented an educational offering in which students who do not fit into the normal high school setting could experience success. The program

is based on a philosophy that every individual has the right to an equal opportunity to develop traits and skills necessary for a successful and useful life. The curriculum of the program called for training in ten general areas including personality development, social adjustment and citizenship, occupational information, and home and community life. Students spent half a day studying academic courses in a local high school and then were based to a building not far from the high school for a half day pre-vocational laboratory. Academic classes were taught on a non-graded, non-subject plan using a practical approach. Pre-vocational lab subjects for girls included meal planning, child care and home economics, while boys were instructed in woodwork, mechanics, and home maintenance.

The most popular part of the Pre-Vocational Program was the community work experience in which students received pay and high school credit for taking part in training in local businesses and industries. The author saw the major fault of the program as the removal of students from their home school ranks in which they might have found more social acceptance. Adjustment to the program was better than expected and no student withdrew from it in order to return to his home school.

Sindoz (1970) found that Educage, a program for alienated youth in White Plains, New York, helped high school dropouts to establish a sense of value of self, and of responsibility by providing a caring educational system that included a relevant curriculum and small student-teacher ratios. The most important priority in handling the dropout was to be able to understand and encourage him and guarantee him success. The Cage Teen Center, a community recreation facility already attended by high school dropouts served as the

building for the program and also its central recruiting location. The idea was to provide an environment in which the students were already involved and toward which they already had positive feelings. It was hoped that this setting combined with a new curriculum would result in enthusiasm for school.

The curriculum of Educage was planned around each student's needs rather than what is indicated on his record. It was modified, within state standards, to add such courses as Afro-American history and psychology for which the student might receive high school credit for Social Studies I. The staff of the program consisted of two paid full-time and four paid part-time persons and of volunteers. Results indicated that of fifty-one students enrolled, thirty-five maintained regular attendance, nineteen earned from one to five high school credits and eight students returned to high school.

Hols (1972) found that the Minneapolis Work Experience Career Exploration Program (WECEP), turned students back on to learning by letting them spend part of every work day working in a paid job at which they could succeed. Jobs were provided to the educationally disadvantaged ninth grade boys and girls by area employers. They were paid salaries by their employers ranging from \$1.25 to \$2.50 per hour. At each of the nine participating junior highs, WECEP students were supervised by a WECEP teacher/coordinator. The coordinator taught the daily seminar for WECEP students, advised each student, and served as program contact with business leaders, employers, government agencies, teachers and parents. Each student's day consisted of a one and one-half hour Employability Skills Seminar, three to four hours working at a paid job and two hours studying English and Math.

The local, state and federally funded program was evaluated in 1972 by an outside evaluator who found teachers' ratings, employer' ratings, WECEP student interviews and supervisors' ratings all were consistent in showing that behavior and attitudes of students in WECEP improved during the school year. Although school grades did not improve significantly, WECEP students did hold their own academically.

Oceanside Technical School, an alternative learning environment within the Oceanside Public Schools at Oceanside, California, has operated successfully since the 1967-68 school year (Delgiorno, 1970). The principal objective of the school was to meet as many of the students individual needs as possible so that he would remain under instruction until he could arrive at a stage of financial and emotional independence. Sessions were held two afternoons each week using the existing facilities at Oceanside High School, and included course offerings in auto servicing, data processing, electricity, and typing, among others. In addition to occupational training, students were given opportunities to receive assistance in preparing for the high school equivalence diploma examination.

To achieve its goals the Oceanside program provided work experience; there was little formal structure or regimentation; opportunities for job placement and personal counseling were provided; and a genuine flexible approach was used. Results indicated that although some students came for only a few sessions, over two hundred were retained under instruction for six or more sessions during the first two year operational period. Ten students earned New York State High School Equivalency Diplomas. Four

students were able to receive regular high school diplomas through credit received for training at Oceanside Technical School in cooperation with local school districts. The author reported that the most important result was the confidence and will to succeed that developed in the enrollees.

Wehrwein (1970) found that the Work Opportunity Center in Minneapolis, Minnesota had as its' goal keeping potential dropouts in a non-traditional school setting. The center was based on the assumption that these potential dropouts see no purpose in finishing high school since a diploma is not a saleable commodity on the job market, which produces non-involvement and frustration with school on their part. The center induced students to achieve a tangible end -- a job, in order to avoid this problem. At the same time on-the-job training reduced the financial burden on the students and the family. No information on results were reported by the author.

Shelby (1973) reported that the National School Volunteer Program is providing an estimated two million volunteers who work with five million students in three thousand programs. Volunteers vary from housewives and retired professionals to college and high school students and training for each volunteer varies from six sessions to no sessions. Besides teaching, school volunteers run special projects in health and guidance, assist school nurses, and acquaint students with the world of work, among others. The author reports that although some objectivity may be lost using volunteers, the concern and friendship gained makes up for it. No information on results were reported by the author.

Falk (1972) found that a systematic program applied in a major university promoted academic success for students who were predicted to become failures

when based upon a caring environment. The caring environment in the Student Tutorial Program (STP) at the University of Minnesota, Duluth was more than bringing together a group of people who needed help and a group willing to be of assistance. It was a comprehensive, achievement oriented, and relatively consistent program of experiences which made it possible for success to be enhanced.

The students and student tutors were all involved in STP on a voluntary basis. During each of the three quarters that the students were involved in STP they were required to participate in between one and four STP taught courses for which they received college credit. Although the professional staff was important in its role as instructor and trainer, the human essence of STP was the caring relationships developed between tutors and freshman students. The author in a program evaluation reported that a systematic program applied in a major university promoted academic success for students who were predicted to become failures and also demonstrated that the students involved developed a more positive academic self concept than comparable students not in the program.

#### Summary

In general, these studies reflect attempts to provide alternative learning experiences for junior or senior high school age students. Some common elements within the programs included:

1. caring environments
2. personalized approaches
3. relevant curriculums
4. small student-teacher ratios

5. work study experience
6. individualized instruction

Among those elements present but less common to these programs, yet still innovative and viable alternative educational experiences are:

1. contract learning
2. using volunteers
3. classes occurring away from the home school
4. pay for students

Program evaluations in the reviews yielded little information as a result of:

1. little or no evaluation performed
2. no control group or comparison data presented
3. results generally based on descriptive data
4. little substantiating data included

The authors in general felt that the programs they were describing were successful but seemed to base this on intuitive feelings or evaluations not entirely based on the program's goals.

It is this author's conclusion that many of the common elements present in these programs do yield success, but that evaluations up to this time are insufficient to show if some of the elements are yielding more success than others, if some of the elements are yielding no success at all, or if there are relationships among the elements.

With these assumptions and conclusions in mind, this author's study was set up to explore and evaluate an alternative learning environment where some of the elements already mentioned are present as well as some not previously mentioned.

## CHAPTER III

### DESIGN

#### Subjects

Thirty high school dropouts enrolled in the Duluth NYC program and participating as students in the SC-NYC program at UMD were subjects for this study. The students were self-referred or referred by Manpower Services (Minnesota State Employment Service), previous school personnel or significant others to the Duluth NYC program. The students all were sixteen or seventeen years of age and were from low income families in the greater Duluth community. Most had dropped out of school in the tenth grade although a few had dropped out earlier or later.

Many students had served time in corrective institutions or had previous brushes with the law. Some had been involved with drugs and alcohol. Some had dropped out because of pregnancy or teenage marriage. Some were living at home while others had become self sufficient and independent. Some had no place they called home and slept at the homes of relatives or friends whenever possible.

#### Treatment

The SC-NYC program is oriented around two six-hour school days each week for which students are paid the minimum wage. During each school day students spend four hours in one hour long courses, having previously registered into required courses, elective courses or study halls. There is a student initiated requirement that each student take at least two required courses (Appendix A). During each school hour there are simultaneously occurring a

required course such as biology, an elective course such as art, and a study hall, which averages ten students per class ideally, but since some courses are more popular than others there is a maximum limit of fifteen students per class. Since all classes are co-taught this yields a maximum student-teacher ratio of fifteen to two. Course offerings are jointly determined each academic quarter by the students and staff (Appendix B). Classes are taught by UMD undergraduate students and are oriented around academic interest areas and learning skills (Appendix C).

Classes are not graded; rather, they are oriented around the concept of Dynamic Learning Units (DLU), course lesson plans written up as behavioral objectives to allow for individualized instruction (Appendix D). Each DLU course had a specific number of learning modules in it. When a student completed all the learning modules he is recognized as having completed the DLU. In this way, SC-NYC was able to shift the emphasis in courses away from failing or passing and onto learning or not learning, and was also able to deal with students enrolling in the program throughout the time the courses were offered.

During each school day each student also spends one hour in a process oriented semi-structured SHARE (Students Helping and Reaching Everyone) Rap Session oriented around issues relevant to the students that normally can't be adequately covered in the courses. All thirty students meet once a week for a SHARE Rap Session in which a knowledgeable person either from the campus or community speaks on a topic previously requested by the students; such topics as abortion, death, alcohol, and tenant rights are typical. The other weekly SHARE Rap Session is devoted to discussing the topic previously

presented in three small groups, each composed of ten students and two SHARE facilitators (Appendix E). The student spends the remaining hour each school day in an information oriented Group Meeting and at lunch.

Rooms for the SC-NYC Program are provided free of charge by the UMD administration and by individual departments and divisions. Books and audio visual materials are supplied free of charge by the Duluth Public Schools (Appendix F).

Through an arrangement established with the Duluth Public Schools, students in the program can receive high school credit for successful participation in courses (Appendix G). Although the student is encouraged to continue his educational experiences, assisted to earn credits leading toward a high school diploma or helped to prepare for the Minnesota State General Equivalency Diploma Examination, the basis for doing any of these is the facilitation of the students own personal educational goal. If the student has no identified educational goals the staff of the program helps him to identify one. If after a reasonable amount of time the student does not identify an educational goal and is not benefiting while in school at SC-NYC, he is asked to leave and make room for someone who really wants the opportunity.

Between academic quarters at UMD, one day seminars with community participation are held in areas of interest to the students because their UMD undergraduate student-instructors are on vacation (Appendix H). Past seminars have dealt with

1. Indian Culture -- including an art and crafts exhibit and a pow-wow by the Duluth Indian Youth Education Program.
2. Electronic Mass Media -- including a presentation on communication and the First Amendment by a Duluth civil rights lawyer

and a presentation on misuses of mass media presented by a Duluth television investigative reporter.

3. Sex and Responsibility -- including a presentation on contraceptives by a member of a Duluth family planning clinic and a presentation on pre marital sex by a member of the UMD Psychology Department.
4. Area Vocational Technical Schools -- including a visit to Duluth's Area Vocational Technical Institute followed by a discussion on entrance requirements.

#### Research Hypotheses and Design

The following were the hypotheses tested in this study. All hypotheses pertain to the effect of the SC-NYC program and its classes on students during the treatment period, March 22, 1973 to June 12, 1973.

Hypothesis one: It was expected that high school dropouts enrolled in the SC-NYC program would benefit academically from their involvement within individual SC-NYC classes as a result of low student-teacher ratios, co-teaching of classes, and young teachers with whom their students could identify. It was therefore expected that educational achievement as measured by the GED test or high school credit competency testing would increase as the high school dropouts participated in SC-NYC classes.

Each student took a test at the beginning and end of the treatment period for each of the four required courses offered, English, General Mathematics, Biology, and World History. Students then registered into courses for the treatment period. Therefore, a pre and post score for each course was collected for both students who had registered into a course and those who had not. At the end of the treatment period pre and post scores for students who registered into a course and those who did not were compared for relative

increases in educational achievement as indicated by improvement in the test score.

Hypothesis two: It was expected that the motivation of the high school dropouts enrolled in the SC-NYC program to continue their educational experiences would improve. Attendance data was included and analyzed on the assumption that such data indicated increasing or decreasing motivation.

It was expected that attendance would improve as a result of being involved in a learning environment that exhibited relevance and absence of failure.

Hypothesis three: It was expected that improvement in personal and social adjustment would occur for high school dropouts enrolled in the SC-NYC program. Each student was administered a test yielding social and personal adjustment scores both at the beginning and the end of the treatment period.

It was expected that social and personal adjustment would improve as a result of being involved in a personalized and caring learning environment.

### Instrumentation

#### Minnesota High School Achievement Examinations

Achievement was measured with four tests of the Minnesota High School Achievement Examination (MHSAE) which is comprised of twenty-six different achievement tests covering all of the principal subjects at both the junior and at the senior high level in Minnesota. The MHSAE manual states that the items in each test were chosen because they measured the subject matter objectives of the standard high school curriculum. Curricula at local levels may vary somewhat but the basic approach to skills as tools of learning in

all school systems is relatively similar. The particular tests included in the present study were World History, Language Arts (Grade 10), Biology, and Mathematics, including elementary Algebra. Approximately one hour is needed to complete each of the four tests.

These particular tests were used because:

1. Required courses offered during the treatment period in the program included World History, Language Arts, Biology, and General Mathematics.
2. The Minnesota State Department of Education indicated that MHSAE are used by nonaccredited schools to validate student's work in basic subject matter areas and that all students who score at the fifteenth percentile or above are recognized as having achieved a passing score (Appendix I).
3. In discussions with the Duluth Public Schools, one of the criteria established in order that students in the program could receive credit for their successful participation in courses was achieving an adequate score on the appropriate MHSAE.

The MHSAE manual states that the authors of many of the tests gave the entire set of selected items experimentally to students locally in order to test all of the items and provide a basis for retaining only those items in the final edition which seemed to carry a high degree of validity. The editors eliminated no fewer than ten per cent of the questions originally submitted on the basis that these did not carry as high content validity as desirable. Selected college instructors and high school teachers of each subject were further asked to identify items in each test which, in their opinion, did not meet desirable validity standards. In some tests the number of questions eliminated came to nearly twenty-five percent of those originally submitted.

All questions were originally edited very carefully by several editors in order to allow, to the degree possible, only one interpretation of the question by all testees. Experts in the field were further called upon to identify questions which could have more than one interpretation and these were either revised or eliminated completely.

### California Test of Personality

Social and personal adjustment were measured by the California Test of Personality. Fifteen scores including total personal adjustment, total social adjustment and total adjustment were derived. Approximately one hour was needed to complete the test.

According to the CTP manual, certain outcomes such as knowledges, understandings and skills, once attained, remain relatively stable and tests designed to reveal their presence may possess high statistical reliability. The normal student, on the other hand, is a growing organism whose integration must be preserved while his feelings, convictions and modes of behavior are changing in accordance with his experiences. Some of the items in this test touch relatively sensitive personal and social areas, and such student attitudes may change in a relatively short time. The coefficient of reliability using the Kuder Richardson formula for internal consistency shows the California Test of Personality to have relatively high statistical reliability.

An instrument is valid if it accomplishes the purpose or purposes for which it is designed. Among the purposes for which the California Test of Personality was designed are the following:

1. To provide a frame of reference (including a conceptual structure and a sampling of specific types of thinking, feeling, and acting patterns) regarding the nature of personality determinants and their relationships to each other and to the total functioning

personality.

2. To provide information about individuals which is useful in understanding their problems and improving their adjustment.
3. To serve as an instrument of research for obtaining other types of information.

The original sources of the items of this test were the publications of psychologists and original research by the authors. The specific adjustment patterns which they held to be the best indicators of adjustment (or lack of it) were selected from this literature as criteria for adjustment.

The manual for the California Test of Personality reports that a study revealed that the test correlates more closely with clinical findings than any other personality test. Another study revealed that four judges rated sixty categorized questions and sixty analogous interview items as most, less, or least ego-involving. It was found that the great majority of subjects give less favorable, or what may be called less incriminating, responses to the questionnaire than they do to the interview. It was concluded that, for the purpose of this study, the questionnaire is as satisfactory as the interview and for more ego-involving questions, it may produce more self-relevant data.

#### Analysis

The pre and post scores on each of the Minnesota High School Achievement Examinations were compared between students who had registered into a course and those who had not registered into the same course. Pre scores of those students were first tested for equality using a two sample Analysis of Variance Test. If both groups were equal then post group scores were tested

for equality using a two sample Analysis of Variance Test. If pre scores for the groups were not equal, then pre-post gain scores for the groups were to be analyzed using a two sample Analysis of Variance Test on gain scores.

Pre and post scores on the California Test of Personality (CTP) for those students who were in the program during the entire treatment period were analyzed using expectancy tables to demonstrate the relationship between the increase in CTP scores:

1. Personal Adjustment
2. Social Adjustment
3. Total Adjustment

and

1. length of time in the program
2. original scores on the CTP

The CTP was also analyzed using Multiple Regression Analysis. Independent variables and dependent variables were:

<u>Dependent Variable</u>	<u>Independent Variable</u>
Post CTP total	Pre CTP total social Pre CTP total personal Time in program
Post CTP total	Pre CTP total Time in program
Post CTP social	Pre CTP social Time in program
Post CTP personal	Pre CTP personal Time in program

Attendance data was analyzed using a graph on which the weekly average attendance for students in the program during the entire treatment period is shown. Individual students first week attendance in the program were added together and then an average first week attendance figure was derived and

entered on the graph. Additional entries were made for the following weeks attendance in the same manner.

## CHAPTER IV

### RESULTS

#### Introduction

The first three chapters provide a background and rationale for the problem, a review of related research, and a description of the design and methods used in studying the effect of an alternative learning environment on high school dropouts. In this chapter the results of the analysis of the data are reported.

The general hypotheses of the writer were that:

1. educational achievement will increase.
2. motivation to continue educational experiences will increase.
3. social and personal adjustment will increase.

#### Findings Related to the Hypotheses

##### Hypothesis One:

There is no significant difference in educational achievement between students who registered into a class and were present during the entire treatment period and those who did not register into the class during the treatment period.

The pre and post data on students taking the Minnesota High School Achievement Examinations (MHSAE) for World History, Biology, General Mathematics, and Language Arts with accompanying data on group means, the number of students in groups and a summary of analysis of variance (ANOVA) used to test for differences are contained in Tables 1-8.

TABLE 1

MHSAE mean pre scores of students registered in and not in World History during the treatment period: Summary of Analysis of Variance.

	<u>In</u>	<u>Not in</u>
$\bar{X}$	32.09	29.25
N	11	4

Source	df	SS	MS	F	Sig
Treatment	1	23.70	23.70	.19	N.S.
Error	13	1583.60	12.18		

TABLE 2

MHSAE mean post scores in World History of students registered in and not in during the treatment period: Summary of Analysis of Variance.

	<u>In</u>	<u>Not in</u>
$\bar{X}$	38.36	26.75
N	11	4

Source	df	SS	MS	F	Sig
Treatment	1	398.7	398.70	5.06	.05
Error	13	1025.2	78.86		

The following analysis refers to Tables 1 and 2. In general, the mean in-group pre score 32.09 was larger than the mean not in-group pre score 29.25. However, an Analysis of Variance test indicates that this difference was not significant. The post scores showed a similar trend, in-group mean of 38.36 larger than not in-group mean 26.75. An Analysis of Variance test showed that this difference was significant at the .05 level. The group of students who had registered into World History during the treatment period scored significantly higher on the post test than those who had not registered into the course.

TABLE 3.

MHSAE mean pre scores of students registered in and not in General Mathematics during the treatment period: Summary of Analysis of Variance.

	<u>In</u>	<u>Not in</u>
$\bar{X}$	13.14	16.50
N	7	6

Source	df	SS	MS	F	Sig
Treatment	1	36.4	36.40	4.58	N.S.
Error	11	87.4	7.95		

TABLE 4

MHSAE mean post scores of students registered in and not in General Mathematics during the treatment period: Summary of Analysis of Variance.

		<u>In</u>	<u>Not in</u>		
$\bar{X}$		13.57	14.00		
N		7	6		

Source	df	SS	MS	F	Sig
Treatment	1	.6	.60	.048	N.S.
Error	11	137.7	12.52		

The following analysis refers to Tables 3 and 4. The mean not in-group pre score 16.50 was larger than the mean in-group pre score 13.14 but not significantly so as indicated by an Analysis of Variance test. The mean not in-group post score 14.00 was larger than the mean in-group post score 13.57 but this difference was also shown to be not significant as indicated by an Analysis of Variance test. The group of students who had registered into General Mathematics during the treatment period did not score significantly higher on the post test than those who had not registered into the course.

TABLE 5

MHSAE mean pre scores of students registered in and not in Language Arts during the treatment period: Summary of Analysis of Variance.

		<u>In</u>	<u>Not in</u>		
$\bar{X}$		33.91	36.80		
N		11	5		

Source	df	SS	MS	F	Sig
Treatment	1	28.8	28.8	.16	N.S.
Error	14	2561.7	183.0		

TABLE 6

MHSAE mean post scores of students registered in and not in of Language Arts during the treatment period: Summary of Analysis of Variance.

		<u>In</u>	<u>Not in</u>		
$\bar{X}$		36.91	36.40		
N		11	5		

Source	df	SS	MS	F	Sig
Treatment	1	.9	.9	.004	N.S.
Error	14	3308.8	236.3		

The following Analysis refers to Tables 5 and 6. The mean not in-group pre score 36.80 was larger than the mean in-group pre score 33.91 but not significantly so as indicated by an Analysis of Variance test. The mean in-group post score 36.91 was larger than the mean not in-group post score 36.40 but this difference was also shown to be not significant as indicated by an Analysis of Variance test. Although the pre score means indicated that the in-group in general scored lower than the not in-group and the post score means indicated that the in-group in general scored higher than the not in-group, this gain was not significant.

TABLE 7

MHSAE mean pre scores of students registered in and not in Biology during the treatment period: Summary of Analysis of Variance.

		<u>IN</u>	<u>Not in</u>		
$\bar{X}$		25.6	26.9		
N		5	10		

Source	df	SS	MS	F	Sig
Treatment	1	5.6	5.6	.136	N.S.
Error	13	536.1	41.2		

TABLE 8

MHSAE mean post scores of students registered in and not in Biology during the treatment period: Summary of Analysis of Variance.

		<u>In</u>	<u>Not in</u>		
$\bar{X}$		29.6	25.0		
N		5	10		

Source	df	SS	MS	F	Sig
Treatment	1	64.5	64.5	1.83	N.S.
Error	13	457.2	35.17		

The following Analysis refers to Tables 7 and 8. The mean not in-group pre score 26.9 was larger than the mean in-group pre score 25.6 but not significantly so as indicated by an Analysis of Variance test. The mean in-group post score 29.6 was larger than the mean out-group post score 25.0 but this difference was also shown to be not significant as indicated by an Analysis of Variance test. Although the pre score mean indicated that the in-group in general scored lower than the out-group and the post score means indicated that the in-group in general scored higher than the out group, this gain was not significant.

Hypothesis Two:

There is no significant increase in motivation to continue educational experiences on the part of students in the program during the treatment period.

The average weekly attendance for students in the program during the treatment period is contained in Table and Graph 9.

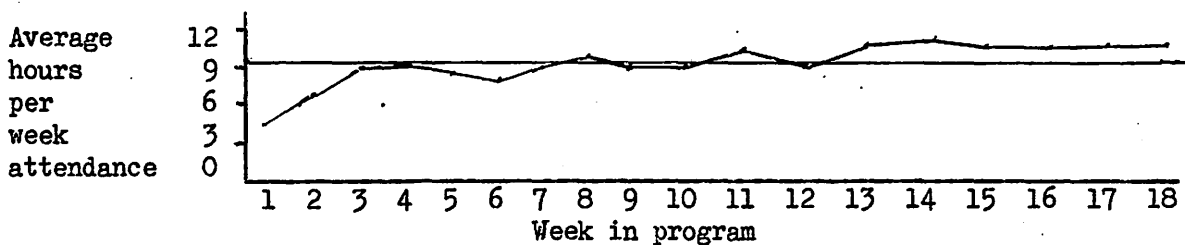
TABLE 9

Average weekly attendance of students: number of hours in attendance per week with a maximum of twelve hours (N=20).

Week	1	2	3	4	5	6	7	8	9
Average Student Attendance	4.7	6.8	9.1	9.3	8.5	8.0	9.0	9.7	9.0
Week	10	11	12	13	14	15	16	17	18
Average Student Attendance	9.1	10.3	9.2	10.6	11.1	10.7	10.5	10.6	10.6

GRAPH 9

Average weekly attendance of students



$$\bar{X} = 9.27$$

Taking the first week attendance of each student and averaging them yielded an average first week attendance of 4.7 hours. The mean average weekly attendance was 9.27 hours which the students did not reach until week four. An upward trend seems to be present indicating that the longer a student is in the program the better his attendance becomes which is indicative of students increasing motivation to continue their educational experience.

Hypothesis Three:

There is no significant increase in social and personal adjustment on the part of students in the program during the treatment period.

The pre and post means of the sections of the CTP are contained in Table 10. Table 11-16 are the expectancy tables that demonstrate the relationship between increases in CTP personal, social and total adjustment and length of time in the program or original scores on the CTP. Tables 17-19 contain data pertaining to the Multiple Regression Analysis.

TABLE 10

CTP - pre and post test mean raw scores and percentile ranks on subsections (1A - 1F and 2A - 2F), personal adjustment, social adjustment and total adjustment.

	Pre raw score	Pre percentile rank	Post raw score	Post percentile rank
1A. Self-Reliance	9.26	40	9.47	40
1B. Sense of Personal Worth	11.00	30	11.53	30
1C. Sense of Personal Freedom	12.00	40	12.16	40
1D. Feeling of Belonging	11.26	20	11.37	20
1E. Withdrawing Tendencies	9.47	20	10.05	30
1F. Nervous Symptoms	10.11	40	9.79	30
Total Personal	63.10	30	64.37	30
2A. Social Standards	11.00	10	10.21	5
2B. Social Skills	8.79	10	10.42	30
2C. Anti-Social Tendencies	8.21	10	8.89	10
2D. Family Relations	10.16	20	9.32	20
2E. School Relations	9.53	20	8.42	10
2F. Community Relations	8.53	10	8.95	10
Total Social	56.21	10	56.21	10
Total Adjustment	119.31	20	120.58	20

Percentile Ranks for total personal adjustment, pre 30 percentile and post 30 percentile, indicate that seventy percent of the secondary comparison group scored higher in personal adjustment than students in the program. The post score mean of 64.37 when compared with the pre score mean of 63.10 indicates that little if any change in personal adjustment occurred during the treatment period as measured by this test. The lowest sub section in the personal component was 1D, feeling of belonging.

Percentile ranks for total social adjustment, pre 10 percentile and post 10 percentile, indicate that ninety percent of the secondary comparison group scored higher in social adjustment than students in the program. The post score mean of 56.21 when compared with the pre score mean of 56.21 indicates that little if any change in social adjustment occurred during the treatment period as measured by this test. The lowest sub-sections in the social component were 2A, social standards; 2C, anti-social tendencies; 2E, school relations; and 2F, community relations.

Percentile ranks for total adjustment, pre 20 percentile and post 20 percentile, indicate that eighty percent of the secondary comparison groups scored higher in total adjustment than students in the program. The post score mean of 120.58 when compared with the pre score mean of 119.31 indicates that little if any change in personal adjustment occurred during the treatment period as measured by this test. Also, as indicated by percentile ranks in total personal of 30 and total social of 10, there seems to be unbalanced adjustment occurring.

TABLE 11

Expectancy table showing the relationship between individual student pre-post personal adjustment gain scores and number of weeks a student was in the program (N=20).

---

Number of students receiving each gain score

weeks in program	-20-(-16)	-15-(-11)	-10-(-6)	-5-(-1)	0-5	6-10	11-15	16-20	N
37-48		1		2	2		1		6
25-36			1		2			1	4
13-24		1			3		1		5
0-12		1			2	1		1	5
		3	1	2	9	1	2	2	20

The numbers in the cells refer to those students receiving positive or negative gain scores.

---

TABLE 12

Expectancy table showing the relationship between individual student pre-post social adjustment gain scores and the number of weeks a student was in the program (N=20).

---

Number of students receiving each gain score

Weeks in program	-20-(-16)	-15-(-11)	-10-(-6)	-5-(-1)	0-5	6-10	11-15	16-20	N
37-48	1		1	1	1	1	1		6
25-36				2	1	1			4
13-24	1				3		1		5
0-12		1	2			1	1		5
	2	1	3	3	5	3	3		20

The numbers in the cells refer to those students receiving positive or negative gain scores.

---

TABLE 13

Expectancy table showing the relationship between individual student pre-post total adjustment gain scores and the number of weeks a student was in the program (N=20).

---

Number of students receiving each gain score

Weeks in program	-20-(-16)	-15-(-11)	-10-(-6)	-5-(-1)	0-5	6-10	11-15	16-20	N
37-48	1			1	1	1	2		6
25-36		1			1	1	1		4
13-24				1	2	2			5
0-12	1		1	1		1		1	5
	2	1	1	3	4	5	3	1	20

The numbers in the cells refer to those students receiving positive or negative gain scores.

---

The following analysis refers to Tables 11, 12, and 13. Greatest gains in adjustment during the treatment period occurred in the personal adjustment component. Gains in Social adjustment were not related to length of time in the program. Gains in total adjustment were not related to length of time in the program.

TABLE 14

Expectancy table showing the relationship between individual student pre-post gain scores in personal adjustment and personal adjustment pre score (N=20).

---

Number of students receiving each gain score

Personal Adjustment Pre Score	-20-(-16)	-15-(-11)	-10-(-6)	-5-(-1)	0-5	6-10	11-15	16-20	N
81-90				1	1				2
71-80				1	3				4
61-70		1	1	1	2		2		7
51-69		1			2	1		1	5
0-50					1			1	2
	2	1	3	9	1	2	2	20	

The numbers in the cells refer to those students receiving positive or negative gain scores.

---

TABLE 15

Expectancy table showing the relationship between individual students pre-post gain scores in social adjustment and social adjustment pre score (N=20).

---

Number of students receiving each gain score

Social Adjustment Pre Score	-20-(-16)	-15-(-11)	-10-(-6)	-5-(-1)	0-5	6-10	11-15	16-20	N
81-90					1				1
71-80						1			1
61-70	1	1	3		1	2	1		9
51-60		1		3					4
0-50				1	2	1	1	1	6
	1	2	3	4	4	4	2	1	20

The numbers in the cells refer to those students receiving positive or negative gain scores.

---

TABLE 16

Expectancy table showing the relationship between individual student pre-post gain scores in total adjustment and total adjustment pre score (N=20).

---

Number of students receiving each gain score

Total Adjustment Pre score	-20-(-16)	-15-(-11)	-10-(-6)	-5-(-1)	0-5	6-10	11-15	16-20	N
161-180						1			1
171-160		1			1		1		3
121-140	1	1	1	2		2	1		8
101-120			1	1		2	1		5
0-100					2			1	3
	1	2	2	3	3	5	3	1	20

The numbers in the cells refer to those students receiving positive or negative gain scores.

---

The following Analysis refers to Tables 14, 15, and 16. Personal adjustment gains were not related to personal adjustment pre scores. Social adjustment gains were not related to social adjustment pre scores. Total adjustment gains were not related to total adjustment pre scores.

TABLE 17

CTP Total Adjustment: Summary of Multiple Regression Analysis

Independent Variable	Multiple Correlation Coefficient	R <sup>2</sup>
Pre social adjustment	.826	.682
Pre social adjustment & Pre personal adjustment	.851	.724
Pre social adjustment & Pre personal adjustment & Length of time in program	.853	.727

Post total adjustment was most related to pre social adjustment. The proportion of total variation accounted for was not increased greatly by adding pre personal and was increased almost not at all by adding length of time in program.

TABLE 18

CTP Social Adjustment: Summary of Multiple Regression Analysis

Independent Variable	Multiple Correlation Coefficient	R <sup>2</sup>
Pre social adjustment	.739	.546
Pre social adjustment & Length of time in program	.739	.546

Post Social adjustment was most related to pre social adjustment. The proportion of total variation accounted for by adding length of time in program was increased not at all.

TABLE 19

## CTP Personal Adjustment: Summary of Multiple Regression Analysis

Independent Variable	Multiple Correlation Coefficient	R <sup>2</sup>
Pre personal adjustment	.762	.580
Pre personal adjustment & length of time in program	.762	.580

Post personal adjustment was most related to pre personal adjustment. The proportion of total variation accounted for by adding length of time in program was increased not at all.

Other Related Findings

One other very important finding not previously reported is the students' own perceptions of what the SC-NYC program meant to them. This information was gained through written reports the students did one day toward the end of the treatment period in which they responded to the open ended question, "The SC-NYC program is \_\_\_\_\_ because \_\_\_\_\_."

Following is a summary of student responses attempting to abstract major feelings and attitudes:

"The SC-NYC program is a program to help young people get their school credits and help them with different experiences because it helps them get their GED."

"The SC-NYC program is a program for kids who don't dig regular school so they teach it differently with younger teachers more up to the times and its here because Duluth needs it and the students need it."

"The SC-NYC program is a place for dropouts to go and learn because they can't go any place else to learn."

"The SC-NYC program is OK but I don't like school--it is boring because I don't like school any place."

"The SC-NYC program is the program that has turned me back to school because the teachers and staff were so helpful."

"The SC-NYC program is for drop-outs who couldn't hack it in city schools because we still want to learn but not in a city school."

"The SC-NYC program is a place where you meet new friends and learn new things."

"The SC-NYC program is a program for learning and experiencing. It is terrible sometimes but usually is a good thing to have when people don't have jobs and no place to get money because it helps train us for our GED and the future!" (student exclamation mark)

TABLE 20

Percentage of students enrolled in SC-NYC courses who scored at or above the 15<sup>th</sup> percentile on the MHSAE administered at the end of the treatment period.

Course	Percentage of students in the course who scored at or above the 15th percentile
Biology	20
World History	70
Language Arts	36
General Mathematics	86

Of the four courses that were tested with the MHSAE during the treatment period, the percentage of students who scored at or above the 15th percentile (that percentile reported by the Minnesota Department of Education to be used by nonaccredited schools as a passing score) varied from a low of 20% in Biology to a high of 86% in General Mathematics.

## CHAPTER V

### DISCUSSION

#### Summary and Conclusions

This study was designed to explore one alternative learning environment for high school dropouts in Duluth, Minnesota. The program was evaluated in reference to its effectiveness in facilitating the development of students' academic, personal and social growth.

Thirty sixteen or seventeen year old high school dropouts who were enrolled in the Duluth NYC program and participated as students in the SC-NYC program were subjects for this study. Most had dropped out of school in the tenth grade and had been self referred to the program, or referred by the Minnesota State Employment Service, by previous school personnel or by significant others.

Treatment consisted of involvement in the SC-NYC program during the March 22, 1973 to June 12, 1973 period and consisted of:

1. two six hour school days each week for which the students were paid the minimum wage
2. four hours in classes each school day with the classes co-taught by UMD undergraduate students.
3. low student teacher ratios with a maximum of fifteen to two.
4. one hour each school day in a process oriented group whose function was to deal with relevant issues to the student that normally couldn't be covered adequately in classes.
5. joint staff-student determined course offerings.
6. students pursuing their own educational goals whether these were achieving high school credit or the GED, learning for its own sake, or plans to return to high school.

7. seminars between academic quarters at UMD with community participation.
8. providing a personalized, caring and helpful learning environment.
9. an individualized non graded curriculum in which achievement was the major yardstick.
10. the free use of UMD rooms and other UMD facilities.
11. the free use of Duluth Public School Books and Audio Visual materials.

The Minnesota High School Achievement Examination for World History, General Mathematics, Biology and Language Arts was used to measure differences in achievement increases between students who had registered into and those who had not registered into courses. A two sample ANOVA procedure was used to determine if a significant difference existed between these groups on pre and post scores in different subject areas.

The California Test of Personality was used to determine if increases in social and personal adjustment had occurred. A table of means for test components, social, personal, and total adjustment was presented. Expectancy tables were used to analyze increases in CTP social, personal, or total adjustment scores and their relation to length of time in program or pre adjustment scores. The CTP was also analyzed using Multiple Regression Analysis.

Finally, attendance data was included to show the weekly average attendance for students in the program as a demonstration of increasing motivation to continue the educational experience. Conclusions are presented below:

1. Students who were registered into World History during the treatment period scored significantly higher on the post test than those students who had not registered into the course.

Those students who were registered into Biology, General Mathematics and Language Arts had mean score increases, but the increases were not significantly different from increases in the scores of students who had not registered into these courses.

2. The mean average weekly attendance of students was not reached until week four in the program. An upward trend in average weekly attendance was present indicating students' increasing motivation to continue their educational experience.
3. Little or no change in personal, social or total adjustment occurred during the treatment period. Total personal adjustment was higher than total social adjustment indicating that there was unbalanced adjustment occurring.
4. Greatest adjustment gains during the treatment period occurred in the personal adjustment component with these gains more common to students who had been in the program a shorter time.
5. Post adjustment scores were more related to the same pre adjustment scores than any other independent variable. Post adjustment scores were not predicted significantly better by adding time in the program as an independent variable.
6. Students viewed the SC-NYC program in general positively, seeing it as a place where they could make new friends, have new experiences and learn as preparation for high school credit or the GED. Students also thought the program was something that was needed for high school dropouts and that the teachers and staff were friendly and helpful.

#### Experimental Limitations

The conclusions previously stated should not be accepted completely because of doubt that exists in a few areas. First, the sample size was small since the Duluth NYC program was only funded to provide wages for thirty high school dropouts at any one time and no other readily available comparison group could be found. In addition, terminations during the eleven week

treatment period, both self terminations and those by the program, yielded a final sample of only twenty students who had been present during the entire treatment period.

Reasons for terminations of students by the Duluth NYC program, which has responsibility for accepting students into and terminating them from the program, ranged from fighting and lack of attendance to advancing to the Youth Mobility Program because of age restrictions in NYC. Reasons for student's self terminations ranged from getting a full time job to entering the advanced stages of pregnancy.

Whether those terminations were by the students themselves or Duluth NYC, they still reduced the size of the sample. Not only was there a small sample size, but constantly through the treatment period and through the year students were entering and leaving the program. This could have had some effect on the results, because some of the students tested both with the CTP and MHSAE who had been in the program a longer time might already have peaked concerning increases in adjustment or educational achievement before the study began.

In addition to a transient student population, there also was a transient teacher population with fifty percent or more of the teachers leaving SC-NYC and having to be replaced during each academic quarter at UMD. The effect of students interacting with different teachers during successive academic quarters was not possible to examine in this study.

The brevity of the treatment period also casts some doubt on some of the conclusions. To expect changes in adjustment to occur and be measureable to a significant degree in an eleven week span may have been asking too much. This author would like to see the study replicated with a larger sample size and a longer treatment period.

An internal control group was used to determine if significant increases in educational achievement had occurred. No control groups at all were used to determine if the CTP data or attendance data were significant in showing that increases in motivation to continue educational experiences of adjustment had occurred. In both these cases it would have been much more desirable to have had control groups available and to have used a Pretest-Posttest Control Group Design.

Finally, no statistical test of significance was run on attendance data or CTP data to show that significant increases in motivation or adjustment had occurred. Only apparent trends in the data were reported.

#### Interpretation and Implications

Concerning increases in educational achievement, it was found that in all four classes measured there was an increase in the mean post score over the mean pre score for students registered into each course. Of these four classes the comparative increase was only found to be statistically significant in World History. Since the treatment period consisted of eleven weeks and there were two school days per week, students who had perfect attendance were in each class twenty-two hours during the treatment period. This is the equivalent of approximately one month of classes in regular high schools and may have accounted for the small increases found.

There are three SC-NYC students at the present time waiting because of age restrictions to take their GED tests and the majority of the students enrolled are also presently waiting to find out the outcome of the first round of negotiations with local high schools concerning how many high school credits they will receive for their participation in SC-NYC courses during the treatment period. In addition, many students who did not pursue a GED

or high school credit did reach the point of availability for more formal learning.

Concerning increases in motivation to continue the educational experience, it was found that there was a steady trend toward increased attendance on the part of students. It is this author's opinion that as students come into and are exposed to the SC-NYC program they progress through three stages:

1. Students are mainly motivated by money to be in attendance. This is viewed as not bad because not only does it keep students off the streets but it builds up their self concept because they are being productive.
2. Students, after being in the program for approximately one month, begin realizing that the other students, teachers, and staff are friendly, caring people and they then become mainly motivated by coming to UMD and interacting with the other SC-NYC students and UMD students.
3. Some students after becoming motivated to attend because of the friendly, caring environment, start to become motivated by learning, internalizing the feelings and attitudes of their teachers, staff, and some of their peers. At this time homework accomplished and interest in school increases.

The students in general seemed to have realized that they had educational goals and that these could only be attained by returning to some academic facility. The realities of independent living and an uncertain future had turned these high school dropouts to NYC.

The SC-NYC program has a total enrollment of thirty. In this group during the treatment period were sixteen boys and fourteen girls. The figures during the treatment period indicated that the last week's attendance was 70% while the mean average weekly attendance was 77%. It should be remembered that these are the same students who had previous attendance records near zero in public schools and whose average first week attendance was 38%.

Concerning increases in adjustment it was found that little or no change in personal, social or total adjustment occurred. Although these results may have been due to a relatively short treatment period there still was much variation in personal, social and total adjustment. All students were treated like responsible and capable individuals while in the program and most reacted accordingly. This author believes that a group feeling of belonging was generated and students began assuming responsibility for program success. Students developed a will to succeed and confidence in their ability to do so.

Students generally had problems their first week in the program including non-attendance, anti social behavior and apathy. When they began to develop a feeling of belonging, their attitudes, behavior and school work showed improvement which resulted in the following examples:

1. disciplining of peers began
2. reduction and elimination of thievery occurred
3. two students joined the Mayor's Youth Council wanting to represent high school dropouts
4. one student taught a course in the FREE U
5. one student audited two college courses on Drug Education and did better on tests and papers than the class average

The view expressed in the Review of the Literature that removing students from their home school ranks reduces for many of them the social acceptance that could be gained there is shared by this author. They miss out on the general atmosphere of the regular high school. Students in the program had expressed this same view at times. Maybe it is worth considering integrating a program such as SC-NYC into the regular curricula of the traditional high school or if not the entire program, possibly some of its elements.

In the book, Teaching as a Subversive Activity, Postman and Weingartner (1969) talk about the institution of school and the need for change within our schools:

"School, after all, is the one institution in our society that is inflicted on everybody, and what happens in school makes a difference-- for good or ill. We use the word inflicted because we believe that the way schools are currently conducted does very little, and quite probably nothing, to enhance our chances of mutual survival. Change-- constant, accelerating, ubiquitous--is the most striking characteristic of the world we live in and our educational system has not yet recognized this fact. The institution we call "school" is what it is because we made it that way. It can be changed, we believe, because there are so many wise men who, in one way or another, have offered us clear, intelligent, and new ideas to use, and as long as these ideas and the alternatives they suggest are available, there is no reason to abandon hope."

From these and other statements it can be inferred that educational institutions should and can revitalize themselves in order to keep providing for students needs in a constantly changing world. Although the small numbers involved and the stringent statistical tests did not reveal much change, the writers observations of student behavior, learning, and adjustment lead him to believe SG-NYC can provide one such revitalized program.

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**APPENDICES**

APPENDIX A

NEIGHBORHOOD YOUTH CORPS PROGRAM

REGISTRATION FORM

SPRING QUARTER 1973

Attached is a list of those courses offered in the NYC Program Spring Quarter 1973.

Registration Instructions:

1. For each hour, observe what courses are available. Some hours (11:30 & 2:30) have no choices available.
2. For each hour, now choose one of the courses or the study hall by placing a "X" in the space provided behind it. Remember that you must have 2 required courses out of the 4 that you choose (Required courses have an (R) behind them).
3. Below each hour there is a space provided where you are to write in the reason why you choose the course that you did for that hour.
4. When you have finished 1 - 3 above, wait until you are called to have your Registration Form checked. If you have trouble filling out the Registration form or have questions concerning courses, wait until you are called and then ask the Recorder who will check your Registration Form.

\* \* \* \* \*

You may not get all the classes that you want because of class size restrictions. This and other reasons for your getting the classes that you want can be talked about with the Recorder when you are called to have your Registration Form checked.

Drivers Education "In the car" will be offered starting around May 1, 1973.



APPENDIX B

SC - NYC Program  
PRE-REGISTRATION FORM  
Spring 1973

Name \_\_\_\_\_

Please choose (4) subjects that you would like to take Spring Quarter 1973 in the NYC Program, (2) from the required group and (2) from the elective group, by placing an "X" in the space provided. If you would like to take a course in the Spring Quarter that is not listed then write the name of that course in the space labeled "Other".

This is not registration! You are only indicating which subjects you would like to see offered Spring Quarter in the NYC Program.

Remember that if you do not receive high school credit in the course this quarter you can continue in the course next quarter until you get the credit and then start in a new course.

REQUIRED COURSES

- \_\_\_\_\_ General Math
- \_\_\_\_\_ Algebra
- \_\_\_\_\_ Language Arts
- \_\_\_\_\_ Reading Appreciation
- \_\_\_\_\_ American History
- \_\_\_\_\_ Geography
- \_\_\_\_\_ Biology
- \_\_\_\_\_ Chemistry

ELECTIVE COURSES

- \_\_\_\_\_ Business Education  
(typing, office machines, filing)
- \_\_\_\_\_ Art
- \_\_\_\_\_ Physical Education
- \_\_\_\_\_ Drivers Education  
("In the classroom")
- \_\_\_\_\_ Drivers Education  
("In the car")
- \_\_\_\_\_ Communications Media

Other

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

STUDENTS' COLLEGE--NYC PROGRAM: DROPOUTS DROPPING BACK IN  
APPENDIX C

Eight high school dropouts assemble a one-half hour radio program dealing with causes and solutions for Duluth's high school dropout problem. Seven high school dropouts study cell structure by producing their own wet mount slides. Eleven high school dropouts learn the basic skills of driving so that they can pass their written driver permit test. These courses and others are part of a unique program, the Students' College-Neighborhood Youth Corps program (SC-NYC), which is an alternative learning environment for high school dropouts.

Thanks to Students' College, UMD's new informal organization based on service-experiential learning, and to UMD students who take part in the SC-NYC program as instructors, high school students have a second chance at achieving a formal education in an informal and personalized atmosphere.

UMD students who participate in the SC-NYC program have many challenges facing them.

1. They instruct a student population that school systems have generally not been successful with.
2. They write up their courses in terms of behavioral objectives. In meetings with the Duluth Public School System, this was one of the criteria that was agreed upon in order that high school credit could be made available to SC-NYC students for successful participation in courses.

Instructors receive more in return than UMD or University College (parent organization of the Students' College) credit for teaching in the program. They also get:

1. The satisfaction of doing a job that needs to be done.
2. The experience of teaching in an alternative learning environment where the student receives high school credit. Such experience might give potential teachers an edge when dealing with prospective employers.

What makes the SC-NYC program different from high school? In addition to the informal learning environment, high school students can identify with their UMD instructors, and UMD students in general.

The SC-NYC program began at UMD as the result of a contract between the City of Duluth NYC program, funded by the federal government, and the Students' College. The SC-NYC program has the responsibility of facilitating the education of a maximum of 30 high school dropouts for a minimum of eight hours per week. Of the 32 hours per week during which the 16- and 17-year old students participate in the NYC program, 12 hours per week are spent in classes at UMD in the SC-NYC program, 6 hours each on Tuesday and Thursday. The other 20 hours are spent on a job site which is the responsibility of the Duluth NYC program.

All courses are team-taught, i.e., there are two instructors for each course. The instructors both work in the classroom simultaneously, sharing teaching responsibilities and planning of class sessions.

Classes during Winter Quarter, 1973, included biology, algebra, general mathematics, language arts, reading appreciation, world history, art, communications media, and drivers education (in the classroom). The NYC students also break up into three groups on Tuesday and Thursday for one hour, when they meet with Students Helping and Reaching Everyone (SHARE) to have informal rap sessions. The sessions focus on the NYC students' individual development by dealing each week with a relevant topic previously identified by the NYC students.

Members of the greater Duluth community or any UMD students or faculty interested in obtaining additional information concerning the SC-NYC program should contact the SC-NYC office in the Students' College mobile home at UMD, phone 726-8522.

APPENDIX D

STUDENTS' COLLEGE

NEIGHBORHOOD YOUTH CORPS PROGRAM

"AN ALTERNATIVE LEARNING ENVIRONMENT"  
A PROGRAM CAPABLE OF CHANGE"

JANUARY, 1973

How will the NYC Program be different Winter Quarter 1973 from Fall quarter 1972?

1. Fall Quarter 1972 there was one teacher in most courses. Winter Quarter 1973 there will be two teachers in all courses.

WHY- The students can then get more individual attention and the teachers can spend more time on planning the course.

2. Winter Quarter we will be offering Dynamic Learning Units (DLU) rather than the courses that were offered Fall Quarter.

A "Course" has a beginning and an ending.

If the student has not learned enough by the ending date then he/she is said to have flunked the course.

In the DLU, the teachers will be responsible for dividing the course into learning modules and then keeping track of which students have successfully completed the learnings involved in each module.

When a student completes all the modules then he completes the DLU.

A student continues in the DLU until he completes all the modules.

#### EXAMPLE

Biology may have as one of its modules, dissecting a worm and learning what the function is of each basic body system.

When the student has successfully dissected a worm and knows the basic body functions then he/she is noted to have completed that Biology module.

WHY- The NYC Program can eliminate failure and instead concentrate on learning. The students will also be more aware of the learning objectives of a course.

3. Teacher Aides were not available Fall Quarter 1972 to assist Instructors. Winter quarter 1973 teacher aides will be available.

WHY- The students will be able to receive more individual help in the classes. The teachers will have more time available to plan the course modules and assist individual students in accumulating the learning in the modules.

4. Fall Quarter 1972 teacher inservice meetings were held once a week with NYC instructors and the Student Coordinator attending.

Winter Quarter 1973, teacher inservice meetings will also be held once a week with the current NYC instructors and the Student Coordinator attending. "Core Instructors" will also attend the inservice meetings. This group will be composed of previous teachers in the NYC Program who are returning and going to be teaching Winter Quarter 1973, and those who previously taught in the NYC Program but were not able to continue teaching, but are willing to fill the role of a consultant to the current teachers.

WHY- The UMD students who have previously taught in the NYC Program have accumulated much knowledge concerning teaching in an Alternative Learning Environment that they would like to share with the new NYC Instructors.

5. There was no High School credit for successful participation in NYC courses Fall Quarter 1972. Hopefully, there will be High School credit available for successful participation in NYC courses Winter Quarter 1973. (It depends on current meetings with the Duluth Public School Administration.)

WHY- Those students who work hard and learn should get recognition for it in the form of High School credit.

## APPENDIX E

### SC-NYC-SHARE RAP SESSION

#### Group Goals

There are three SC-NYC-SHARE rap groups. Every Tuesday the three groups combine as one large group for a presentation by a speaker on a relevant topic that has been previously chosen by the NYC students. The purpose of the speakers is to present the topic in an interesting and beneficial way to the students.

The second meeting on Thursday is held in three small groups with two leaders per group. The primary purpose here is to establish a comfortable atmosphere within which each student has the opportunity to interact with other students and SHARE leaders. This provides a more "feeling" level rather than the indifferent levels that they may experience in their lives and possibly in their day at U.D. Interacting at this level, the students learn how to express their own feelings and accept the feelings stated by others. Through the use of positive reinforcement, DGE's and group conversations, this is hopefully accomplished. The SHARE leaders are also responsible for being aware of individual problems and for taking the best course of action in dealing with them.

A secondary benefit of the small groups is to obtain feedback on the students' classes and the overall program. This feedback enables NYC to construct a program that is continually beneficial to the students by being aware of their needs.

The group leaders may earn one credit lower division per quarter from their work with SC-NYC through Students' College.

SHARE Coordinator's Job Description

1. Keep SHARE Advisor, SC-NYC Director and Coordinator informed of what is being planned and what activities are presently going on with NYC-SEARE and also let them know how they can be of help to the program.
2. Attend weekly NYC staff meetings and give report on what SHARE groups are doing.
3. Be responsible for having one SHARE group leader at weekly in-service instructors' meetings.
4. Be responsible for planning with leaders a worthwhile program for the NYC students.
5. Be responsible for lining up the appropriate people for the training of group leaders.
6. Be responsible for interviewing and selecting new group leaders.
7. Be responsible for dividing the NYC students into the rap groups and also assign new NYC students to groups.
8. Be responsible for having group leaders fill out logs on all group meetings with students, collecting these logs for a check at mid-quarter, and turning these logs in to NYC at the end of the quarter for records and reference purposes.
9. Be responsible for arranging credit for group leaders.

APPENDIX F

DATE: February 17, 1973  
TO: SC-NYC Instructors and Staff  
FROM: Rick Kolu  
SUBJECT: A-V Materials

I am pleased to inform you that the Duluth Public School System has again come to the aid of the SC-NYC program by making their A-V materials available to us. Recent conversations with Mr. Lynch, Assistant Superintendent for Instruction, and Mr. Mesedahl, Supervisor of Audio-Visual Services, produced this pleasant event.

The agreement that the SC-NYC program has with Audio-Visual Services stipulates:

1. A-V materials will be reserved by telephone.
2. The SC-NYC program will pick up and drop off materials at the Barnes Ames Building at Lake Avenue and Second Street. (Essential to our continued use of A-V materials is the prompt pick-up and return of materials.)
3. Rick Kolu will have the final responsibility for all A-V materials used by the SC-NYC program. (This means that if something gets destroyed or lost it's my neck that gets chopped.)

There are now located in the SC-NYC office:

1. Subject area catalogs for--
  - A. Fine Arts
  - B. Technology
  - C. Language Arts
  - D. Education Guidance & Psychology
  - E. Health, Physical Education and Recreation
  - F. Science
  - G. Math
2. Numerical Descriptive Catalogs
3. Supplemental Catalog

Feel free to use any of these catalogs to find appropriate material for your class, but please do not for any reason remove any catalog from the SC trailer because they must eventually be returned. Reserving of A-V materials and equipment will be done by the SC-NYC staff (Steve, Wanda or Rick) unless other arrangements have been made.

I sincerely hope that the availability of A-V materials will make your students and your own learning experience better.

R. K.

dbm

APPENDIX G

TO: N.Y.C. Instructors  
FROM: Rick Kolu, Director  
DATE: January 13, 1973  
SUBJECT: High School Credit

I am pleased to inform you that the meetings between the NYC Staff and the Duluth Public School system administrators have ended and that the goal of those meetings, high school credit being made available to NYC students, has been achieved. With the assistance of Eugene Lynch, Duluth Assistant Superintendent for Instruction, students in the SC-NYC Program can now receive high school credit for their successful participation in our courses.

The following criteria have been established in the crediting process:

1. Student attendance - records will be kept concerning the student's attendance in classes.
2. Behavioral objectives - the NYC teacher will write up his class lesson plans in terms of Dynamic Learning Units (DLU) and maintain a record of which students have completed them.
3. Competency testing - the NYC student, when both he and the NYC instructor feel he is ready, he will take the Minnesota High School Achievement Examination, a yearly standardized subject matter achievement test (different tests for different subjects). In a letter recently received from the State Department of Education it was stated, "All students who score at the 15th percentile or above are recognized as having achieved a passing score."

In order for the NYC Student to receive credit, certified high school teachers will fill a consultant role with the UMD - NYC instructor who is teaching a course similar to what they are teaching in high school. This role will include:

1. Recommending books and supplies.
2. Assisting in the formulation of a course syllabus.
3. Meetings with the UMD-NYC instructor concerned with lesson planning, general classroom information, etc, including
  - one meeting in the high school teachers classroom
  - one meeting in the NYC instructors classroom

The culmination of the crediting process will be a meeting between a staff member of the NYC program and a staff member (Counselor, Assistant Principal) from the high school that the student wishes to receive high school credit from. During that meeting credit will be negotiated based on the three criteria and the NYC instructors/high school teacher relationship.

Although many of the NYC students are still "turned off" to formal education, I believe that high school credit being made available to them may be enough to turn some of them back on to education, given our informal environment. It is now up to the instructors and staff of the NYC Program to assist the NYC student in every way possible to achieve that high school credit.

APPENDIX H

DATE April 13, 1973  
TO: NYC Students and Staff  
FROM: Rick Kolu  
SUBJECT: Trip to Environmental Learning Center, April 19, 1973

On Thursday, April 19, 1973, the students and staff of the SC-NYC Program will be taking a trip to the Northeastern Minnesota Environmental Learning Center at Isabella, Minnesota.

We will be leaving at 7:00 a.m. from Ordean Court at UMD and at 7:15 a.m. from the Sacred Heart Church on Second Avenue West and Fourth Street ... where NYC is now located. The "use fee" for the Environmental Learning Center is \$3.00 for each student and \$4.00 for each adult. Lunch and supper are included in this fee. The "use fee" and travel expenses will be paid by the SC-NYC Program.

SC-NYC students and staff will need warm clothes and boots suitable for walking around in the north woods on a spring day.

Jack Pichotta, Environmental Learning Center Program Director, who was with us on Thursday, April 12, at the special Group Meeting informed us that teachers would be provided and that the curriculum is focused on "learning units." After a vote it was decided that each student and staff member could be involved in one unit in the morning and one in the afternoon, each unit lasting approximately three hours.

The units offered in the morning will be 1) aquatic and animals; and those offered in the afternoon will be 2) trees and "stump."

A tentative schedule for the day will be:

7:00 - 7:15	Leave Duluth
8:30 - 9:00	Arrive Environmental Learning Center
9:00 - 12:00	First learning unit
12:00 - 1:30	Lunch
1:30 - 4:30	Second learning unit
4:30 - 5:30	Supper
Approx. 7:00	Arrive in Duluth

Staff members will be responsible for washing lunch dishes and students will be responsible for washing supper dishes.

Jack Pichotta emphasized two things at that special Group Meeting:

- 1) He and his staff feel that they have much to offer those SC-NYC students and staff involved and that we will all have a very worthwhile day.
- 2) We will be learning about the environment all day long and, as a result, it is very important that we do not desecrate it (rip it off in any way); therefore—

Trip to Environmental Learning Center,  
April 17, 1973

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--Please don't tear branches or leaves off trees, kill animals,  
fish, etc.

--No smoking is allowed

I feel we have a great opportunity to understand nature, the environment  
and ourselves better as a result of this trip. I am enthusiastically  
looking forward to it and hope you are also.

R. K.

RK:dbm

January 8, 1973

APPENDIX I

Mr. Rick Kolu, Director  
UMD-NYC Program  
Student's College  
University of Minnesota, Duluth  
Duluth, Minnesota 55812

Dear Mr. Kolu:

Your letter of December 15, 1972, directed to Phillip Broen has been referred to me for response. I shall attempt to respond to your questions concerning the Minnesota High School Achievement Examinations in the order you have given them.

- 1) How is the Minnesota High School Achievement Examination used by other nonaccredited schools for determining whether credits will be granted to students?

They are used to validate the student's work in the basic subject matter areas, such as language arts, mathematics, social studies, and science.

- 2) What is the cutoff score used by these schools for each individual test?

All who score at the 15th percentile or above are recognized as having achieved a passing score.

- 3) Are there any recommendations that the Minnesota State Department of Education has made to schools concerning use of the Minnesota High School Achievement Examination?

Accredited schools are not required to use these examinations. They are free to carry the type of program they feel best meets their individual needs or requirements. They may use the exam specified for nonaccredited schools if they wish. The number of schools using this program has increased over a period of years. The continued purpose in the use of these tests is that they serve as an aid to the improvement of instruction and subject matter achievement. We would encourage and recommend their use by schools for the above stated purposes. The tests are in no way intended to confine or restrict the curriculum or serve as a measure of the teacher's effectiveness.

The above statements are made to all schools when they are notified relative to the availability of the Minnesota High School Achievement Examination Program.

Mr. Rick Kolu  
January 8, 1973  
Page 2

- 4) Does the Minnesota High School Achievement Examination have to be given on a specific date or by a specific person, or are there any restrictions put on its use by the Minnesota Department of Education?

A new form of the examination is given each year. The new form is offered for use on an established schedule. Other forms used previously can be used at any time. Responsibility for regulations and rules pertaining to the administration of the examinations is placed with the superintendent or head of the school.

I trust the above answers will be helpful to you in clarifying concerns relative to the Minnesota High School Achievement Examinations. If I may be of further service, please feel free to contact me.

Sincerely yours,



Donald L. Clauson, Director  
Curriculum Development

DLC:emd