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THE ACADEMIC AND AFFECTIVE EFFECTS OF ACADEMIC-SOCIAL  
ENRICHMENT UPON ELEMENTARY SCHOOL UNDERACHIEVERS  
IN AN URBAN SCHOOL DISTRICT

By

Courtland Christian Lee

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## ABSTRACT

### THE ACADEMIC AND AFFECTIVE EFFECTS OF ACADEMIC-SOCIAL ENRICHMENT UPON ELEMENTARY SCHOOL UNDERACHIEVERS IN AN URBAN SCHOOL DISTRICT

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The purpose of this study was to determine if underachieving students can be more effectively reached through a supplementary academic-social enrichment experience than by traditional in-school classroom procedures alone. The primary objective was to evaluate the effects of an academic-social enrichment program upon the (1) academic achievement, (2) self-concept development, and (3) classroom behavior of elementary school underachievers in grades three through six. A secondary objective was to assess the effectiveness of the program as viewed by classroom teachers and school administrators.

The academic-social enrichment program was conducted in an urban public school system. College student volunteers were selected and trained to serve as tutors.

The population of interest consisted of those children who were found to be achieving below grade level in reading and mathematics proficiency under the federal Emergency School Aid Act (ESAA) guidelines, as measured by the Stanford Achievement

Test. A sample of 48 third-, fourth-, fifth- and sixth-grade students was selected for participation in the enrichment program. These students became the initial experimental group. They were then matched with 48 other students not enrolled in the program on key variables. These students comprised the initial control group. At the end of the treatment period, the total experimental and control groups each contained 35 subjects.

Four elementary schools were selected for the study. The treatment involved the assignment of the tutors to work with the students in small group sessions on reading and mathematics remediation, the development of study skills and the exploration of personal and social concerns.

Changes in achievement, self-concept and classroom behavior were expected as a result of the treatment. The instruments used to measure changes were: the Stanford Achievement Test, the Piers-Harris Children's Self-Concept Scale and the Devereaux Elementary School Behavior Rating Scale.

The following research hypotheses were investigated.

- H<sub>1</sub>      The reading and mathematics achievement of elementary school underachievers who participate in an after school academic-social enrichment program will be higher than the reading and mathematics achievement of those elementary school underachievers who do not participate in an after school academic-social enrichment program.
- H<sub>2</sub>      The reported self-concept scores of elementary school underachievers who participate in an after school academic-social enrichment program will be higher than the reported self-concept scores of those elementary school underachievers

who do not participate in an after school academic-social enrichment program.

- H<sub>3</sub> The teacher-reported classroom behavior ratings of elementary school underachievers who participate in an after school academic-social enrichment program will be higher than the teacher-reported classroom behavior ratings of those elementary school underachievers who do not participate in an after school academic-social enrichment program.

Major statistical hypotheses were cast for each of the research hypotheses. A total of four major statistical hypotheses were investigated. One of them related to reading achievement and another to mathematics achievement. Another major statistical hypothesis was generated for self-concept development. The classroom behavior data involved the investigation of one major statistical hypothesis and seven subhypotheses.

Statistical comparisons were accomplished by the t-test for the difference between correlated means and the t-test for independent groups. The level of significance was set at the .05 level.

In addition to the statistical analysis, the reported opinions of teachers and administrators were assessed to determine the effectiveness of the enrichment experience.

The t-tests indicated no significant differences for achievement or self-concept, and significant improvement for classroom behavior.

## DEDICATION

To my loving parents, Courtland, Sr. and Lillian Lee  
whose blood, sweat, tears and love truly made it happen.

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## CHAPTER I

### THE PROBLEM

#### Need for the Study

The contemporary urban educator is confronted with many challenges. Foremost among these is reversing the trends of failure and frustration which have characterized many of the efforts of urban school systems to facilitate student cognitive and affective development.

In the past two decades this failure has received a great deal of attention. Clark (1965), Kozol (1967), Silberman (1970), Irwin (1973) and Green (1977) have all discussed the problems of urban schools and their effects on students. The federal government has spent considerable time and money studying the urban educational system. Coleman (1966), U.S. Commission on Civil Rights (1967) and (1977), Kerner (1968) and Riles (1970) lead the national exploration into the failures and shortcomings of urban education. These investigations have revealed that the problems are particularly acute for children from minority groups as well as children of low income backgrounds from the majority group.

Recent findings from the National Assessment of Educational Progress (1975) and (1978) reveal that in the basic skill

areas, urban schoolchildren perform at lower rates than their rural and suburban counterparts. Although the gap has become smaller, the academic skills of urban students are still lagging.

In addition to the inadequate development of learning skills, many urban schools are unable to provide for personal and social growth on the part of students. In the last several years reductions in the level of financing for education have resulted in the curtailment of many student support programs and services.

These budgetary cutbacks have had a profound effect on counseling programs. As guidance services are cutback and counselors reassigned to other positions, the importance assigned to affective development and performance diminishes. In many instances students are left with little or no guidance to help them address the personal, inter-personal and social concerns which characterize the childhood and adolescent years. This failure of contemporary urban education is made more critical by the fact that next to the family unit, the school has the greatest impact on the affective growth of children.

In order to begin to confront the challenge of failure in cognitive and affective performance in urban schools, concerned educators must be willing to devise, implement and evaluate innovative strategies and techniques that facilitate positive growth experiences for students within the context of the social and economic realities of the urban educational system. There is

a need for counselors to explore educational and personal-social services which go beyond traditional approaches.

The concern of this study was the development and evaluation of an educational program designed to enhance the learning experience of urban elementary school children. The program supplemented traditional classroom instruction and offered much needed guidance support for children in grades three through six. Fundamentally, the program was an after school academic-social enrichment program, staffed by volunteer nonprofessionals, which focused on the improvement of skills in the areas of reading and mathematics. In addition, through the remediation process, the program sought to facilitate personal, inter-personal and social understanding and development. Special attention was given to fostering positive self-concepts and improving classroom behavior.

#### Purpose of the Study

This study sought to determine if underachieving students can be more effectively reached through an after school academic-social enrichment experience than by regular in-school classroom procedures alone. The primary objective was to evaluate the effects of an after school academic-social enrichment program upon (1) academic achievement, (2) self-concept and (3) classroom social behavior of elementary school underachievers in grades three through six. A secondary objective was to assess the

effectiveness of the program as viewed by classroom teachers and school administrators.

### Hypotheses

Three hypotheses were investigated:

- H<sub>1</sub>     The reading and mathematics achievement of elementary school underachievers who participate in an after school academic-social enrichment program will be higher than the reading and mathematics achievement of those elementary school underachievers who do not participate in an after school academic-social enrichment program.
  
- H<sub>2</sub>     The reported self-concept scores of elementary school underachievers who participate in an after school academic-social enrichment program will be higher than the reported self-concept scores of those elementary school underachievers who do not participate in an after school academic-social enrichment program.
  
- H<sub>3</sub>     The teacher-reported classroom behavior ratings of elementary school underachievers who participate in an after school academic-social enrichment program will be more favorable than the teacher-reported classroom behavior ratings of those elementary school underachievers who do not participate in an after school academic-social enrichment program.

### Definition of Terms

Underachiever is defined as a student in third through sixth grade whom a classroom teacher identifies as achieving below grade level in academic content areas and whose achievement as measured by reading and mathematics scores on the Stanford Achievement Test is below the student's present grade level.

Academic-Social Enrichment Program is defined as an after school educational program designed to enhance the quality of the learning experience for underachieving students in grades three to six by improving reading and mathematics competence, developing study skills and facilitating personal, inter-personal and social development. Each student in the program works in a small group setting with a volunteer nonprofessional tutor on achieving the goals of the program.

Academic-Social Enrichment Tutor is defined as a non-professional person who volunteers his or her services to work with assigned underachieving students in a small group setting. The academic-social enrichment tutor is involved in a helping relationship focusing on improving reading and mathematics skills, developing study skills and fostering personal, inter-personal and social understanding. Using characteristics of the helping relationship as delineated by Rogers (1961), the academic-social enrichment tutors exhibit empathy and warmth for students, are trustworthy in their relationships with children and attempt to be cognizant of the innate potentialities of the children they tutor.

Reading and Mathematics Achievement is defined as the level at which competency in reading and mathematics is empirically demonstrated by raw test scores as converted to grade equivalents. These levels are determined by performance on a

group administered standardized achievement test. The Stanford Achievement Test is the achievement measure used in this study.

Self-Concept as discussed by Kinch (1963) is that organization of qualities that an individual attributes to one-self. In this study the term is defined as the way children feel about themselves in terms of their relationship to self and others. Self-concept is measured by means of a self-report inventory designed to assess how children perceive themselves.

Classroom Behavior is defined as the pattern of personal and interpersonal social behavior exhibited by children in grades three through six within the confines of the elementary school classroom. The manifestation of these behavior patterns is observed and rated by classroom teachers.

Urban School District is defined as the public school system in a midwestern city with a population of 138,000 people. The school system has a population of approximately 26,000 students.

### Theory

The theoretical orientation for this study evolves from Social Psychology, selected dimensions of Social Learning Theory and aspects of the helping relationship as developed by Carl Rogers.

It is argued that self-concept develops as a product of experience and interaction with others. A number of self theorists beginning with James (1892) have discussed the social

nature of self-concept. Basically self-concept is the perception an individual has of himself or herself which emerges from social interaction and in turn influences the behavior of that individual. Research relating to the social nature of self-concept indicates a relationship exists between self-concept and school achievement. Additional empirical evidence supports the idea that student self-concept is related to the image that students perceive significant others hold of them.

With regard to Social Learning Theory, it has been learned that a great deal of human behavior is acquired through the imitation and/or identification with significant others. Indeed, behavioral scientists have attempted to account for processes that lead to similarities in behavior between a subject and a model. The focus of these attempts has centered on the concepts of imitation and identification.

The concept of imitation has developed within a learning theory framework in which behavioral similarities between subject and model are viewed in classical or operant conditioning terms. In addition, imitation refers to the acquisition by the subject of specific behavior patterns of the exemplar.

Identification on the other hand, originated in psychoanalytic theory and generally refers to the taking on of abstract psychological characteristics of a model. The empirical evidence on identification emphasizes the importance of significant others.

Much of the research in this area deals with positive or negative parental identification.

A number of theorists have sought to develop a common theoretical basis for imitation and identification phenomena. One outcome of these endeavors has been the development of a notion of generalized imitation being the basis for identification (Gewirtz and Stingle, 1968). This represents an effort to place all interactions between subject and model into learning theory terms.

Within this context, a basic theoretical tenet of Social Learning Theory is that behavior change can occur vicariously through the observation of social models. Research findings indicate that modeling can be an effective technique for transmitting and modifying behavior, skills and attitudes.

The empirical research and clinical experiences of Carl Rogers led to the development of characteristics of a helping relationship. The basic aspects of this relationship are warmth, empathy and unconditional positive regard on the part of the helper. These characteristics promote growth, development or maturity of the other party.

A major assumption of this study is that an academic-social enrichment tutor can become a significant other in a helping relationship with an underachieving student. In the role of significant other the enrichment tutor is believed capable of influencing achievement, self-concept and behavior.

Further basis for this theoretical orientation is established in Chapter II of this study.

### Limitations

The results from this study are limited to supplementary academic-social enrichment programs, staffed by trained volunteer nonprofessionals, that are concerned with academic and affective progress. Further, generalizations to be drawn are limited to third-, fourth-, fifth-, and sixth-grade public school students who are not achieving at grade level in a school system located in a midwestern urban industrial center with a population of approximately 138,000 people.

Sample size is another important limiting factor in this study. The sample size is 35 subjects in both the experimental and control groups. This heightens the probability of error in statistical calculations. However, the tests of significance that are used are designed for the study of small samples.

The time span for the study may impose a major limitation. Although the academic-social enrichment treatment program was designed to operate for an entire school year, holidays within the school system and term breaks at the cooperating university combined to allow for only six months of actual ongoing activities. Since self-concept development is a gradual process that proceeds over time, the fact that this study was completed in a six month

time period may not have allowed enough time to effectively measure change in self-perception. This time constraint may also be important with respect to the development of socially effective classroom behavior.

The measure of self-concept employed in this study is a self-report inventory, sensitive to the subjective mood swings of children. Authorities such as Combs (1962) question the use of self-report instruments to measure self-concept.

The assumption that classroom behavior is accurately measured may be a possible limiting factor. The behavior ratings gathered for students in both the experimental and control groups are based on subjective teacher evaluations.

Finally it is possible that an academic-social enrichment tutor may not have formed a positive helping relationship. Research by Brookover, Patterson and Thomas (1962) indicates that school personnel may not become significant others. It is possible that some students may not have benefitted from the relationship.

### Overview

The general format of this study is as follows: in Chapter II a review of the literature pertaining to significant others and their influence on self-concept, achievement and behavior as well as the effectiveness of paraprofessionals and nonprofessionals in helping relationships is undertaken. The

time period may not have allowed enough time to effectively measure change in self-perception. This time constraint may also be important with respect to the development of socially effective classroom behavior.

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### Overview

The general format of this study is as follows: in Chapter II a review of the literature pertaining to significant others and their influence on self-concept, achievement and behavior as well as the effectiveness of paraprofessionals and nonprofessionals in helping relationships is undertaken. The

design of the study which includes sampling procedures, method of treatment, statistical hypotheses and method of analysis represents the content of Chapter III. The results of the analysis are reported in Chapter IV. In Chapter V, the summary, conclusions and implications for further research are presented.

## CHAPTER II

### REVIEW OF THE LITERATURE

A review of the literature reveals considerable theoretical background and research evidence bearing on the planning, implementation and evaluation of an academic-social enrichment program staffed by volunteer nonprofessionals that attempts to improve the academic achievement, self-concept and classroom behavior of underachieving elementary school students. There are implications in the literature that significant others can influence an individual's cognitive and affective development.

In this chapter, literature relating to the theoretical basis of and empirical evidence on self-concept development is considered. Specific attention is given to the social nature of self-concept and the importance of others in its development, along with the relationship between self-concept and academic achievement. In addition, the role of significant others in behavior change as it relates to the identification process is examined. Then the nature of helping relationships is explored in conjunction with the training and effectiveness of the non-professional or paraprofessional as a helping resource in counseling and education. Finally investigations of the empirical

evidence relating to the effectiveness of various enrichment programs for underachieving students are described.

### Self-Concept Development

The development of a self-concept has evolved into a major area of study in the behavioral sciences. In this review, the followers of the phenomenological school as well as theory of self as developed by social psychologists have been considered. These theories seem to have gained recent acceptance in the field of education.

From this background on self-concept development has come evidence regarding the effects of achievement on the perception of self. Concerned educators, psychologists and social scientists have investigated possible correlations between self-concept and academic achievement. The results of this research into the effects of achievement on self-concept will be discussed within the context of this study.

### The Social Nature of Self-Concept

There is a large body of theory which relates to the social nature of self-concept and the role that significant others play in the process in which individuals come to perceive themselves (James, 1892; Jersild, 1960; Combs, Richards and Richards, 1976; Rogers, 1951; Sullivan, 1953).

James has laid the basis for self theory. In analyzing the total self, he discusses two major aspects, the "self as

known" and "self as knower." The "self as known" is the social self. It is the image a person has of himself or herself which is based on the social evaluation and perception of others. According to James, in order for the "self as known" to develop, an individual must care about the opinions that others hold of him or her.

In a similar vein, Jersild discusses a self composed of all that goes into a person's experience in his or her individual existence. For him, the self is made up of three parts: the way one perceives one's self; one's conception of his or her distinctive characteristics and attitudinal components that include feelings about self; attitudes of self-esteem and self-reproach. Jersild sees inter-personal relationships as being among the earliest and most influential determinants of an individual's view of self.

Combs, Richards and Richards in discussing the phenomenal self and its development, speculate on the existence of a perceptual field that includes all of the individual's perceptions. The phenomenal self is viewed as all perceptions of self in a given situation regardless of importance to the individual. Those perceptions about the self which are most vital to the person are organized into the self-concept. Combs et al. view the phenomenal self and self-concept in the following way:

The self-concept as a discrete physical entity does not exist. It is an inference which makes it possible for us to deal with a complex function

not directly observable. The physicist infers from the behavior of an atomic pile the existence and relationships of the atoms within or infers from the behavior of his voltmeters or ammeters introduced in the electric circuit the nature and functions of electricity. In the same fashion a person infers from his experiences who he is and what he is. He perceives of himself as tall or short, man or woman, liked or unliked, acceptable or unacceptable, able or unable, depending upon his experiences with the world about him, but most particularly from how people who inhabit that world treat him. All these perceptions contribute to his phenomenal self (Sullivan, 1947) and to his self-concept. (pp. 161-162)

Along this phenomenological line, Rogers has developed a theory of personality that puts the self-concept in a position of control. This personality theory is based on two key elements, experience and the self-structure. Experience includes the immediate field of sensory and visceral experience. This element represents all that is experienced in the phenomenal field.

The self-structure develops from the evaluational interactions with others in the environment. For Rogers this construct is the main element in personality. He states in many instances there can be a discrepancy between the perceived self and the actual experience. This can lead to denial or distortion of experience that is inconsistent with this structure. The final stage in personality development is the basic congruence between the phenomenal field of experience and the self-structure.

Within the context of the social nature of the self-concept, Sullivan specifically emphasizes the role of significant

others in the development of the self-structure. During infancy Sullivan saw the family as the primary influence on the self, as various members attempt to meet the needs of the child. As the child matures, parents are joined by peers and teachers as being significant in meeting needs. These others thus become important in shaping the self-structure.

Research in the area of self-concept development in a social framework has been concerned with the relationships between the evaluations and expectations of significant others and the self-evaluation of the individual. Much empirical evidence bears upon the evaluations of significant others such as parents, peers and teachers as they relate to the development of self-concept.

In a study by Medinnus (1965) the relationship between parent-child relationships and self acceptance was explored. Using a sample of eighteen year old college students, the researcher found that those who were higher in self-acceptance and adjustment as measured by a self-regard inventory were likely to perceive their parents as loving but not neglectful or rejecting.

In another study of the relationship between significant others and self-evaluation, Manis (1955) found a relationship between peer interaction and self-concept. By comparing adjective checklist descriptions of a group of male college students with estimates others made of them, it was discovered that the students' self-concepts were significantly influenced by their

friends' opinions of them, particularly when the friends were perceived in a favorable light.

This type of relationship was further borne out in an investigation relating children's perceptions of their teachers' feelings toward them to their self-perceptions, achievement and classroom behavior conducted by Davidson and Lang (1960). These researchers found that children's perception of their teachers' feelings toward them correlated positively and significantly with self-perception as measured by a checklist of trait names. In addition, the more positive the children's perception of a teacher's feelings, the better their academic achievement and more socially acceptable their classroom behavior as rated by teacher evaluations.

Further findings with children in school settings lend additional support to the importance of significant others in self-concept development. Keller (1963) compared selected aspects of the after-school and home activities of poor Black and white children who attended New York City Public Schools. This investigator learned that there was substantial agreement between the actual perceptions of teachers regarding the self-concept of these disadvantaged students and the children's perception of themselves.

This type of agreement was also found in an investigation of the self and social concepts of disadvantaged Black school beginners in a rural southern community by Long and Henderson

(1968). They reported a connection between positive and negative teacher perceptions of children and children's self-concept as measured by the Children's Self-Social Test.

The dimensions of the social nature of the self-concept are reflected in the work of Cooley (1902). According to him, an individual knows what he or she is like, in part by accurately interpreting the reflected attitudes of those about him or her.

The preceding theoretical discussions and research evidence strongly imply that the development of self-concept is in large part dependent upon social interaction with significant others. Hamachek (1969) has emphasized the importance of significant others on the self-evaluation of individuals while discussing the characteristics of a good teacher:

It comes as no surprise that how we perceive others is highly dependent on how we perceive ourselves. If a potential teacher (or anyone else for that matter) likes himself, trusts himself, and has confidence in himself, he is likely to see others in somewhat the same light. Research is beginning to tell us what common sense has always told us; namely, people grow, flourish, and develop much more easily when in relationship with someone who projects an inherent trust and belief in their capacity to become what they have the potential to become. (p. 348)

### Relationship of Self-Concept and Academic Achievement

In recent years, educators and psychologists have investigated a possible relationship between self-concept and academic achievement. A positive link does appear to exist between the two variables, however several authorities have

questioned whether the development of the self-concept precedes the degree of achievement or whether academic success accounts for the development of a view of self (Wyllie, 1961; Lavin, 1965; Gordon, 1966). Travers (1967), in discussing the self-concept as a condition related to learning, has delineated this theoretical dilemma in the following manner:

The implication is that a learner who has a suitable self-concept will learn more easily in a school situation than one who has an inappropriate self-concept. For example, the statement is commonly made that a person who thinks of himself as stupid is likely to be more poorly motivated in an academic learning situation than a person who thinks of himself as bright. The assumption underlying such a position is that there is a causal relation between the self concept and the rate of learning, though the alternative is also possible that high achievement may produce a positive and constructive concept of the self. (p. 436)

Within this context, there has been a great deal of research conducted in an effort to explore the nature of the association between self-concept and achievement at all levels of education. The empirical evidence has led to some tentative conclusions about a causal relationship between achievement and self-perception.

At the college level, Borislow (1962) conducted an investigation of the relationship between self-evaluation and academic accomplishment. Using a sample of freshman college students, this researcher found that those students with high achievement levels as measured by the Scholastic Aptitude Test,

had more positive self-evaluations of themselves as students than did those students with low achievement levels.

In another attempt to explore this possible relationship, Olsen (1972) discovered a positive link between these two variables in a study of college students enrolled in a compensatory education program. As students moved from the compensatory program into regular college programs, there was a positive change in their self-concepts as measured by the Brookover Self-Concept of Academic Ability Scale. Olsen concluded that if self-concept of academic ability is enhanced, then higher academic achievement will result.

Below the college level many investigators have explored the possibility of a relationship between these two constructs. One of the most comprehensive studies in this area was undertaken by Brookover, Erickson and Joiner (1967). They studied the relationship between self-concept of ability and academic achievement for a large sample of students from an urban school system. The study was longitudinal, spanning six years and compared student academic performance with self-concept of ability. The findings from the study revealed moderate to high correlations between the two variables over the six year period. An analysis of the achievement of students showed that, although a significant proportion of students with high self-concepts of ability achieved at a relatively lower level, practically none of the students with lower self-concepts of ability achieved at a high level.

In a smaller but similar study at the secondary level, Fink (1962) concluded that a relationship exists between adequacy of self-concept and level of academic achievement. The subjects for this study were members of a freshman class in a rural high school. The researcher divided students into two groups on the basis of grade point average. After administering several self-concept instruments he found that there was a significant difference between the high and low achievement groups with respect to self-concept data. The high achievement group had scored significantly higher on the self-concept instruments.

Shaw and Alves (1963) reached somewhat the same conclusion about the association between these two variables. In a study of bright high school students, these investigators discovered that male underachievers reported more negative self-concepts than achievers and were less self-accepting using Bills Index of Adjustment and Values to measure self-concept.

Likewise, Combs (1964) reported that junior high school boys who were underachievers saw themselves as less adequate than others, saw peers and adults as less acceptable, showed a less effective approach to problem-solving and exhibited less freedom and adequacy of emotional expression than did achievers. Combs makes implicit in his conclusion that there exists some relationship between the organization of the self-concept and achievement.

In another study with junior high school students, Gibby and Gibby (1967) explored the effects of the stress induced by academic failure on children in the seventh grade. They discovered that when an experimental group of children was placed in an academic failure situation, there was a significant difference in self-concept scores between these children and a control group which did not experience failure. The researchers concluded that as a result of academic failure a child regards himself or herself less highly.

The research that has been conducted at the elementary school level also bears out the possibility of a relationship between achievement and self-concept. Coopersmith (1959) in developing an instrument to measure self-esteem and academic-social success and failure with fifth- and sixth-grade children, found significant correlations between self-esteem and academic achievement. These correlations led him to conclude that there was a close congruence between a person's self-evaluation and his or her behavioral expression as manifested in motivation and achievement.

Significant and positive correlations of achievement and self-concept were also discovered among fourth- and sixth-grade boys in a study by Bledsoe (1967). He compared achievement test scores and self-concept scale scores. Although the correlations for the boys in the study were positive and significant,

the correlation of achievement and self-concept for girls was nonsignificant.

Additionally, in a study by White and Howard (1973), it was found that failure to be promoted is related to the self-concept of elementary school students. Using a sample of sixth-grade pupils from urban and rural schools, classified according to the number of times they had failed a school grade, it was learned that students who had experienced no grade promotion failures obtained the highest mean score on the Tennessee Self-Concept Scale. Those students who had experienced one promotional failure had lower mean scores and those students who had experienced more than one failure had even lower mean scores.

In contrast, Williams (1973) found no significant correlations between children's self-concept scores and reading achievement in a study of first grade students. Williams concluded that first grade may be too early to attempt to establish relationships between the two variables.

In an exploration of the factors which are important in the prediction of academic performance, Lavin (1965) reviewed the research conducted at all levels of education which seeks to establish a relationship between achievement and self-evaluation. He concluded from this type of research, that the self-concept in terms of the whole individual and his or her interaction with others is positively related to academic performance.

From this review of the research on achievement and self-concept it appears that some type of relationship exists between the two variables. Although much empirical evidence has shown positive significant correlations to exist between achievement and self-evaluation, as stated earlier, it has not been firmly established at any level of education whether this is a causal relationship. However, it appears that if academic success is attained there is a resultant rise in self-evaluation. Conversely in many instances, those students who have high levels of self-esteem seem to perform at higher achievement levels.

The issues involved in establishing a relationship between achievement and self-concept and the research conducted at all levels of education in this area is underscored by the recommendations of several educators (Clark, 1963; Gordon and Wilkerson, 1966; Fantini and Weinstein, 1966). They have advocated that a fundamental objective of any compensatory education program should be the enhancement of self-concept.

#### Significant Others, Identification and Behavior Change

Although a great deal of human learning takes place through direct training, much of an individual's behavior repertoire is acquired through the imitation of and/or the identification with significant others. Sanford (1955) has suggested that an individual may respond to the behavior of other people or objects by imitating in fantasy or reality the same

behaviors himself/herself and that one may strive to behave in a way that is exactly like that of a model.

Psychologists and other behavioral scientists have sought to develop a theoretical basis to account for processes that lead to similarities in behavior between a subject and a model. The focus of these attempts has centered on the concepts of imitation and identification. Although it is apparent that the two terms refer to related phenomena, they are not synonymous.

The concept of imitation has developed within a learning theory framework. Several behavioral theorists have attempted to explain the process of behavioral similarity between subject and model (Miller and Dollard, 1941; Mowrer, 1950; Bandura, 1969).

Miller and Dollard have suggested that imitation is based on an individual's capacity to learn to imitate along with environmental conditions that have positively reinforced him or her for such learning. Modeled behavior is learned in a trial-and-error fashion when an external reinforcer rewards randomly occurring similarity and punishes dissimilarity or when copying is followed by the same reinforcer that followed the model's response.

Further Mowrer has stated that imitation of a model occurs because cues from the model's behaviors have acquired reinforcing value through their pairing with primary reinforcers and through generalization their imitation acquires secondary reinforcement value for the copier and is thereby maintained.

Therefore, imitation is learned through a process of self-contained instrumental learning without direct reinforcement for imitation.

Bandura's theoretical approach differs slightly in that it encompasses aspects of social learning theory. For Bandura, imitative behaviors are acquired through the process of observational learning, in which matching behaviors are acquired by an observer through exposure to a model's response independent of the observer's overt response or of its reinforcement. He assumes that stimuli from the model's behavior elicit perceptual responses in the observer that become associated on the basis of the temporal contiguity of the stimuli provided by the environment. After repeated contiguous stimulation, these perceptual responses come to form verbal or imagined representations of the stimuli involved. These representational systems provide cues which elicit or are discriminative for overt responses corresponding to those of the model.

Whereas imitation is a learning theory concept, identification originated in psychoanalytic theory. Freud (1935) has distinguished between primary and secondary identification. Primary identification refers to the initial, undifferentiated perception of the infant in which an external object is perceived as part of the self, while secondary identification begins after the child has discriminated a world of objects separate from the self. Freud (1933) regarded identification as a process in which

one ego becomes like another one which results in the first ego behaving in the same way as the second one.

Although it is primarily a psychoanalytic term, attempts have been made to place the concept of identification into a learning theory framework with imitation as its basis (Kagan, 1958; Gewirtz and Stingle, 1968). As an example, Kagan has defined identification as an acquired cognitive response within an individual. The content of this response is that some of the attributes, motives, characteristics and states of a model are part of an individual's psychological organization. He assumed that an individual may identify with a model to experience or obtain positive goal states which he or she perceives that a model commands. Kagan further posited three other assumptions about the acquisition and maintenance of an identification. First, the wish to command the goal states of a model leads to the desire to possess the characteristics of the model, because an individual believes that if he or she were like the model it would lead to command of the desired goals. Second, the identification response is reinforced each time an individual perceives or is told that he or she is similar to a model. Finally, in order for the identification belief to be maintained, an individual must not only perceive congruence between himself or herself and the model, but must also experience some of the desired goal states of the model.

Kagan has also asserted that an individual's desire to command certain goal states motivates identification with a model. He proposes that the two important goal states that an individual desires to command are a feeling of power or mastery over the environment and love and affection from the social exemplar.

Further emphasis is given to the learning theory basis of identification by Gewirtz and Stingle, who have stated that the learning of generalized imitation is the basis for identification. According to these theorists, the degree to which an individual is identified with a particular model is largely determined by the value to him or her of the reinforcers contingent upon imitation of the exemplar. The identification will also be a function of the amount of exposure to other potential models and reinforcement for imitating them, the frequency of reinforcement for original, nonimitative behaviors and the value of the reinforcers provided for each of these behavior classes. Gewirtz and Stingle concluded that since identification phenomena involve systematic changes in behavior effected by recurring environmental conditions, a learning analysis is appropriate. Additionally, under a systematic learning approach, the relevant behaviors of identification are subject to acquisition, discrimination and extinction according to well-established laws of behavior.

Although not synonymous, the concepts of imitation and identification both relate to the theoretical notion that

observation of and experience with a significant other can influence behavior skills and attitudes. Empirical evidence relating to both areas lends credence to this notion.

Several studies on the dynamics of parental identification in children support the idea that interaction with significant others can influence cognitive or affective states. Sears (1953) found in a study on doll play activities among five year olds, that boys whose fathers were highly rewarding and affectionate adopted the father-role in such play.

In a related study, Levin and Sears (1956) discovered that five year old boys who were highly identified with an aggressive male model, in most cases a father who frequently punished them, showed the highest levels of aggression in experimental doll play situations.

Identification processes were further investigated using older subjects by Payne and Mussen (1956). They hypothesized that the degree to which boys identified with their fathers is related to the degree to which they perceive them as rewarding. In addition, a high degree of father identification is conducive to adequate social and emotional adjustment. With a sample of high school boys, the researchers found high correlations between father-identification scores and measures of reward value of the father. They concluded that the boys who feel comfortable in their relationships with their fathers

develop a positive identification with them as opposed to boys who experience less favorable parent-child relationships.

Finally in a study of identification learning using three person groups representing prototypes of the nuclear family, Bandura, Ross and Ross (1963) learned that nursery school children imitated the behavior of those adult models they identified as possessing rewarding power in the family. The three investigators concluded from the imitative behavior observed, that identification learning can produce innovation of social behavior.

Within the realm of imitation learning, research findings also suggest that the actions or behaviors of a model can influence the behavior of another individual. The imitation of social models has been shown to be an effective means of acquiring new behaviors, skills or attitudes.

Much of the research on modeling has been conducted in the school setting using social exemplars in various attempts to influence academic performance, classroom behaviors and social interaction skills on the part of observing subjects. In one such study which focused on classroom behavior, Csapo (1972) used normal primary school children to be models of appropriate classroom behavior to a sample of emotionally disturbed classmates. Each model sat next to an emotionally disturbed subject in a classroom and demonstrated socially acceptable behaviors

for a fifteen day period. At the end of the treatment period, each subject exhibited fewer inappropriate behaviors and more appropriate ones.

In another study of this nature, Goodwin and Mahoney (1975) found that the aggressive behavior of hyperactive, impulsive elementary school boys could be modified with the use of social models. The subjects were exposed to a young boy serving as a model, who was coping with aggressive behavior by means of covert coping self-statements. This exposure to the social exemplar led to a decrease in aggressive behavior and improved classroom behavior on the part of the subjects.

Several investigators have studied the effects of modeling on social interaction skills in the classroom. As an example, Hosford and Sorenson (1969) employed a modeling technique to help fourth-, fifth- and sixth-grade students participate more readily in classroom discussions. Students who were identified as having problems participating in class discussions were exposed to a film and audio model who was being reinforced by a counselor for suggesting ways that would help him speak up more effectively in class. Hosford and Sorenson learned that this exposure to the model significantly improved participation in classroom discussions on the part of the students. The two researchers concluded that it was feasible to develop and use modeling procedures in the classroom setting with elementary age children.

In a final study, Randolph and Saba (1973) discovered that social exemplars who were rewarded for positive work habits and attitudes in school were responsible for producing imitative responses in a sample of fifth- and sixth-grade students. After experience with the models there were significant changes in on-task behaviors, grade point averages and attitudes toward school on the part of the children in the study.

This review of the literature in the areas of identification and imitation seems to imply that significant others are important in the formation of patterns of behavior as well as the development of attitudes. Research has shown that interaction between a social exemplar and an observer is effective in redressing deficits in social or cognitive skills and in fostering positive attitudes.

### Helping Relationships

An academic-social enrichment experience involves a relationship in which a tutor is concerned with facilitating the cognitive and affective development of a student. This experience serves as a basic helping relationship.

Many human interactions serve as helping relationships. According to Snygg and Combs (1959) the most casual kinds of human interactions may serve to bring about important changes in perception. In more formal terms, they have argued that psychological treatment has been carried on in varying degrees

as part of the roles of parents, teachers and clergy for many years. They state further that even ordinary situations involving two or more people often evolve from each seeking to satisfy his or her own need, that of enhancement of self.

For Rogers (1961) a helping relationship is one in which one of the parties is attempting to promote the growth, development or maturity of the other party. Through a summarization of empirical research and his own clinical experience, Rogers has identified a set of characteristics that are necessary for a person undertaking a helping relationship. A helper should:

- (1) be trustworthy in the presentation of self; that is he or she should be dependably real and not attempt to cloak personal feelings;
- (2) be capable of expressing his or her feelings;
- (3) permit himself or herself to experience warmth, caring, liking and respect in his or her attitudes for the person with whom he or she is involved;
- (4) hold his or her feelings separate from those of the person with whom involved;
- (5) permit the person with whom he or she is involved to develop a personality quite apart from his or her own; that is the person with whom he or she is working should be free to model his or her own personality;
- (6) attempt to give empathic understanding;
- (7) receive the person with whom he or she is involved unconditionally;
- (8) be sensitive enough that his or her behavior will not pose an external threat;
- (9) free the person with whom he or she is involved from as much external evaluation as possible;

(10) accept the whole potentiality of the person with whom he or she is involved; that is, not accept his or her potential as fixed.

All of these characteristics probably cannot be found in any one person serving in a helping relationship. However, Rogers contends that anyone working in the field of human relations should attempt to develop them.

Gunnings (1976) has also outlined the dimensions of a helping relationship. This type of relationship is based on mutual acceptance and trust. In defining a role for the counselor in the systemic problem-solving process, Gunnings states that a counselor must not only be able to empathize with a client, but translate this empathy into action by serving as a client-advocate. A basic tenet of this client-advocacy is that the helper have a thorough knowledge of and respect for the lifestyle, values, needs and resources of the helpee in order to effectively intervene into his or her life.

There is a growing body of evidence which suggests that all human contact between persons designated as helpers may have facilitative effects upon those persons in need of assistance. Research in the areas of guidance and counseling as well as findings from teacher-student relationships emphasizes the importance of the helping relationship.

Within the areas of counseling and psychotherapy there has been much discussion of the facilitative effects of the

helping relationship (Rogers, 1961; Truax and Carkhuff, 1967; Carkhuff and Berenson, 1977). For these theorists and clinicians, the highest levels of counselor empathy, positive regard, genuineness and concreteness in counselor-client interactions elicits the greatest constructive client gains.

Research on the facilitative conditions in the counseling process has yielded important information on the dimensions of helping relationships. For example, Barrett-Lennard (1962) in a study which attempted to connect cause and effect in the therapy process, discovered significant positive correlations between the counselor-client relationship variables of empathic understanding, level of regard, unconditionality of regard, congruence and willingness to be known on the part of the counselor and indices of client personality change during the period of therapy. With young adults at a college counseling center as subjects, this investigator in part concluded that the degree to which the relationship variables are present in the counseling situation may account for the generation of client change.

In a similar research effort which focused on the relationship between hypothesized therapeutic conditions and depth of client inter-personal exploration, Truax and Carkhuff (1964) learned that the variable concreteness, or specificity of expression on the part of the therapist, was significantly correlated with several criterion measures of inter-personal

exploration for a sample of hospitalized mental patients. Truax and Carkhuff concluded that concreteness functions to insure emotional proximity, enhance the accuracy of the therapist's response and encourage specificity in the client's efforts. These researchers imply that this variable may outweigh the contributions of others in effective therapy.

Waskow (1963), in a related study, found somewhat different results. The hypothesis of this study was that the degree of counselor acceptance, interest, nonjudgementalness and expressiveness is directly related to the degree to which the client, fairly early in counseling, both discusses and expresses his feelings. With tape recordings of twenty-eight counseling interviews, two for each of fourteen client-counselor pairs, ratings were made on the basis of interview material. The researcher found significant relationships between counselor judgementalness and client discussions of feelings. These relationships were in a direction opposite to that predicted. After further study, Waskow concluded that although a client may learn to talk about his feelings with a judgemental counselor, he may not learn from this person that the counseling is safe for further experiencing and expressing of feelings that are necessary for therapeutic gain to occur.

Several studies have been undertaken which reflect the nature of the helping relationship as it relates to teacher-student interaction in the classroom. This research has indicated that

the more accurately a teacher's understanding of his or her pupils, the higher the commitment to eliciting their full potential and the better the communication of this understanding and respect to them, the more the students learn. As one example, elements of the helping relationship were involved in a study by Flanders (1951). This investigator sought to determine the interplay between anxiety and achievement resulting from pupil-teacher interaction. Two experimentally produced climates characterized as learner-centered, where the teacher was acceptant and supportive of the student and another termed teacher-centered, in which the teacher was directive, demanding and deprecating toward the student were developed. As a result of the data, Flanders concluded in part that teacher-centered patterns of behavior led to hostility to the self or teacher, aggressiveness, withdrawal and emotional disintegration. However, learner-centered patterns of behavior elicited a problem-solving orientation, decreased interpersonal anxiety and led to emotionally readjusting and integrative behavior.

Findings of the same nature were reported by Truax and Tatum (1966). They hypothesized that children enrolled in a preschool educational program who receive a relatively high level of therapeutic conditions, including empathy, warmth and genuineness will show a greater change from initial to later preschool socialization adjustment than those children receiving relatively low amounts of these conditions from their teachers.

Using a relationship inventory and observer ratings to measure the degree of empathy, unconditional positive regard and genuineness on the part of teachers, the researchers found significant differences between those children receiving high levels of the therapeutic conditions and those receiving low levels. Those children who received the greatest amount of empathy and unconditional positive regard from teachers, showed a greater overall school adjustment, a greater positive change toward better adjustment to peers and teachers.

Likewise, in a study of eighth grade students, Webb (1971) learned that insecure, school-problem as well as problem-free students demonstrated fewer educationally negative responses in areas which included insecurity, school problems, attitudes toward teachers, course satisfaction and achievement when placed with teachers rated as highly sensitive, than did a parallel group of students placed with teachers of less sensitivity. A sensitive teacher was defined as one who was understanding, helpful and concerned with individual differences among students. Webb concluded that a humanistic, person-oriented teacher with strong cognitive abilities would be ideal for maximizing student development.

Aspy and Roebuck (1972) provide another example of this type of research. They investigated the relationship between teachers' classroom behavior and their students' levels of cognitive functioning with a sample of female elementary school

teachers. Each teacher's performance was evaluated using Carkhuff's scales for empathy, congruence and positive regard, Flanders' interaction analysis and the level of cognitive functioning achieved by students. An analysis of the relationship between student levels of cognitive functioning and teacher classroom behavior variables indicated that levels of positive regard provided by the teacher were significantly different for the two groups of teachers. The teachers whose students attained the highest levels of cognitive functioning provided significantly higher levels of positive regard than did those teachers whose students did not attain high levels. From this, Aspy and Roebuck concluded that a teacher's increased positive regard for students is translated into classroom behavior which elicits higher levels of cognitive functioning from students.

Hamachek (1968) has underscored much of the research on teacher characteristics conducive to an effective helping relationship in an educational setting. In a study of the research in this area he found that teachers who are superior in encouraging motivation and learning in students seem to exhibit more of the following characteristics:

- 1) Willingness to be flexible, to be direct or indirect as the situation demands.
- 2) Capacity to perceive the world from the students' point of view.
- 3) Ability to personalize their teaching.
- 4) Willingness to experiment, try out new things.
- 5) Skill in asking questions (as opposed to seeing self as a kind of answering service).
- 6) Knowledge of subject matter and related areas.

- 7) Skill in establishing definite examination procedures.
- 8) Willingness to provide definite study helps.
- 9) Capacity to reflect an appreciative attitude (evidenced by nods, comments, smiles, etc.).
- 10) Conversational manner in teaching - informal, easy style. (p. 15)

The research evidence from counseling and psychotherapy along with that from teacher-student relationships provides a context for developing the concept of the helping relationship. Research in counseling suggests that high levels of core facilitative conditions enable counselors to provide an atmosphere in which a client can demonstrate constructive movement in appropriate self-exploration. Following the same lines, a constructive learning experience in the classroom relies on the ability of the teacher to create an atmosphere that is conducive to the optimum utilization of a child's learning capacities.

From this exploration of the literature relating to the nature of helping relationships, it can be inferred that an academic-social enrichment program that encompasses facilitative conditions will impact upon cognitive and affective development. Those academic-social enrichment tutors who provide a warm, empathic, genuine and concrete atmosphere in their interactions with children should develop the most effective helping relationships.

Use of Nonprofessionals and  
Paraprofessionals in Counseling and  
Educational Helping Relationships

There is a growing body of knowledge which points to the effectiveness of nonprofessional and paraprofessional resources in facilitating helping relationships. This evidence directly relates to the training and use of volunteer nonprofessionals in an academic-social enrichment program.

The paraprofessional movement has developed as a direct consequence of the steadily increasing demand for human services and the shortage of professionally trained personnel to provide the needed assistance. Gartner and Riessman (1974) have identified five major reasons that are instrumental in the development of this movement: (a) Consumers, particularly the poor and minorities, were troubled by the inadequacies of traditional service delivery and by the reluctance of professionals to understand their physical and psychological needs. (b) There was a recognition that the poor were locked out of achieving professional status by traditional credentialing paths. (c) Paraprofessionals became a bridge between the poor and minority communities who were highly critical of human service professionals and these professionals. (d) There was a need for jobs and the traditional private sector was not providing them so the idea that community people could begin working with very minimal training was used to generate needed jobs. (e) In terms of service delivery in poor neighborhoods there was a

shortage in human power that paraprofessionals could fill.

According to Pearl (1974) the accomplishments of the paraprofessional movement are many and significant. In almost every variety of human service their presence has been felt and almost always to the good. Two areas of human service where this presence has impacted are the fields of counseling and education.

With regard to the delivery of guidance and counseling services, Brown (1974) reports that the movement to use paraprofessionals has emerged as a direct response to the steadily rising demand for counseling services and the shortage of professionally trained personnel capable of delivering these services. Indeed many investigators have reported on the significant contributions made by paraprofessionals and nonprofessionals in many aspects of the counseling process. Carkhuff and Truax (1965), Cowen, Gardner and Zax (1967), Carkhuff (1968), Sobey (1970) and Truax and Lister (1970) have all demonstrated the effectiveness of paraprofessionals in ongoing programs designed to achieve specified counseling objectives in a mental health setting. Gordon (1965), Reiff and Reissman (1965) and Gartner (1969) have presented evidence supporting the use of nonprofessional counselors in community and anti-poverty programs. In the academic setting, Brown (1965), Guernsey (1969), Brown, Wehe, Halsam and Zunker (1971) and Persons, Clark, Persons,

Kadish and Patterson (1973) have all explored the use of non-professional counselors in schools and on college campuses. The general conclusion from their research, is that paraprofessional counseling is effective, acceptable and practical within an educational context.

As the use of paraprofessionals in the field of counseling has increased, considerable emphasis has been directed toward the training of such personnel and the type of skills needed to be effective in helping relationships (Riessman, 1967; Cavins, 1969; Truax, 1970; Foxley, 1972). A statement of policy by the American Personnel and Guidance Association (1967), has delineated the areas of importance in the preparation of support personnel in counseling. The policy in part suggests that support personnel should receive brief, but concrete pre-service as well as in-service preparation on a carefully planned basis.

In light of this policy statement, many successful paraprofessional training approaches and models have been reported (Klein, 1967; Carlson, Cavins and Dinkmeyer, 1969; Pierce and Norrel, 1970; Persons, Clark, Persons, Kadish and Patterson, 1973; True and Young, 1974). These support personnel development approaches emphasize the importance of short-term, specific training conducted by counselors or other mental health professionals.

The literature suggests that selected support personnel with suitable training offer a unique dimension in any counseling setting. With increasing demand for counseling services the use of nonprofessional and paraprofessional workers has become an important and effective method of maximizing service delivery. With respect to this fact, Durlak (1973) assesses the current status and future direction of the use of support personnel in mental health delivery systems:

The plain and simple truth is that future delivery of more appropriate mental health services to the general population will be ultimately related to the mental health professional's ability to make maximum and judicious use of nonprofessional manpower in direct service roles. (p. 301)

As with counseling and personnel services, the use of paraprofessional has met with much success in the field of education. Riessman and Gartner (1969) in reviewing the empirical evidence relating to the effects of paraprofessionals on student learning, have concluded that educational aides can have an impact on skill development and that their continued use and further training can produce an even greater effect.

Several specific studies are indicative of the impact that the paraprofessional can have on the educational process. For example, Rist (1971), in a study that explored the effects of the combination of Black studies and the use of paraprofessionals on the reading achievement of Black seventh grade students in an urban school, found that those students who were exposed

to a reading program using Black studies materials and employing paraprofessionals, made significant gains in reading progress as opposed to those students who were not in the program. Rist concluded in part that the continued use of paraprofessionals may provide the necessary ingredients for the formulation of a successful reading program in urban schools.

Along these lines, Frelow, Charry and Freilich (1974) conducted a study using teaching assistants in educational programs for a sample of second-and third-grade students. It was observed that after the introduction of these paraprofessionals into the classroom, students made significant progress in reading and mathematics skills compared with previous expectancies. In addition, contact with the paraprofessionals also had an effect on the classroom behavior of the students. The children were viewed as free of behavioral problems after interactions with the teaching assistants as measured by a rating scale which included twelve dimensions of social and emotional growth.

Additionally, in an investigation that includes aspects of both counseling and education, Lawrence (1972) investigated the effects of an individual counseling program conducted by nonprofessionals on elementary school children with retarded reading skills. This researcher learned that those children who received counseling from the nonprofessional staff showed

a significant rise in reading achievement over those children who did not receive counseling.

This collective evidence from counseling and education highlights the growing importance of exploiting the vast potential of the nonprofessional or paraprofessional and incorporating this resource into the helping relationship. It is apparent that with appropriate training, volunteer nonprofessionals can have a significant effect on the cognitive and affective development of children in an academic-social enrichment program.

#### Findings from Academic-Social Enrichment Programs

In reviewing the literature, it is apparent that there has been little research undertaken in the area of academic-social enrichment programs. A great deal of research evidence however, has called attention to the effects of enrichment and tutorial experiences on academic performance. Ellson, Barber, Engle and Kampwerth (1965), Tannenbaum (1968), Shaver and Nuhn (1971), Bradfield, Gray and Foster (1973) and Elliot (1977) have reported that educational experiences which supplement classroom instruction on the elementary and secondary levels are effective in raising pupil achievement levels. This type of evidence was also found on the college level with studies by Menges and Marx (1972) and Beaman, Fraser, Diener and Endresen (1977).

Considering these findings, many educators have advocated increasing the labor supply in schools to give each

student remedial assistance where needed. Several experts have urged the use of volunteer youth as a supplemental educational resource. For instance, Janowitz (1971) has pointed out the fact that present approaches to improving urban education, including federal spending, offer little evidence that in-school programs are effective in teaching basic skills or developing self-esteem. This author has proposed increasing the manpower supply in schools to include young volunteers who can give intensive attention to students in need of academic enrichment. Salzman (1965) has stated that important contributions can be made to the educational development of children with retarded skills by other young people whose life experiences provide a basis for empathy with these children. The volunteers' ability to understand and communicate with low achieving students can compensate for their lack of higher education and knowledge of instructional methods.

In light of this, a number of studies have attempted to assess the effectiveness of academic enrichment programs which have educational roles for volunteer youth. In one such investigation, Duff and Swick (1974) explored the use of upper primary students as tutors for lower primary students. They attempted to find out the effects of an enrichment program, which used the older children as tutors, on the reading and self-concept scores of both tutor and tutee. The researchers discovered that the older students facilitated positive gains in reading achievement

while self-concept gains were not significant. Duff and Swick concluded in part from the analysis of the data that a pupil-tutoring program was an effective organizational and instructional strategy for the improvement of reading performance.

Cloward (1971), in another study in this area, used high school students as volunteer tutors with fourth- and fifth-grade children who were reading below grade level. Cloward found that students who were exposed to the high school tutors made greater gains in reading skills than those students who did not receive tutoring. He also learned that there were no differences in before and after program measures of school marks, attitudes toward school, educational aspirations or social values even when the degree of reading improvement was considered. A basic conclusion of this study is that to be effective, tutors do not need extended formal education or extensive training in reading pedagogy.

Several researchers have explored the use of college student volunteers in academic enrichment programs. Their findings and conclusions relate directly to the present investigation.

A study involving a tutorial project that used college volunteers to assist secondary school students in reading and mathematics was conducted by Baun (1965). He found that reading achievement gains were significantly greater for tutored students than for those students who received no tutoring. Baun's

findings make implicit the fact that educational enrichment experiences can have effects on the cognitive and affective development of both students and tutors.

In contrast, Gordon, Curran and Avila (1966) reported on a tutorial project designed to improve pupil attitudes toward school and to improve self-concepts. In this experiment, college sophomores were assigned to tutor a sample of elementary and junior high school students who were having learning difficulties. Gordon et al. measured behavior change by having teachers complete a pupil behavior instrument at the beginning and end of the tutorial program. A self-concept instrument was administered to students before starting and at the completion of the tutorial experience. An analysis of the data failed to exhibit differences for the tutored group on several behavioral dimensions as opposed to an untutored control group. Additionally, there were no significant differences between the pretest and posttest scores of the tutored group with relation to self-concept.

Likewise, Olsen (1969) in a study of the effects of a college student volunteer enrichment tutoring program upon the self-concept, achievement and measured intelligence of elementary school male underachievers, found that this type of educational experience did not significantly influence the composite self-concept, total achievement or total measured intelligence of the subjects in the experimental program. Olsen concluded that although the enrichment program did not appear to have a

significant positive effect on the measured variables, there were no apparent negative effects of the tutoring. He continued that subjective data from classroom teachers on self-concept and educational achievement imply that enrichment tutoring can have positive effects on the self-concept development and educational achievement of participating students.

From the evidence presented, it appears that continued research is needed on the effects of academic-social enrichment programs on cognitive and affective development. The literature has revealed however, an important role for the young volunteer in the remedial education process. Academic-social enrichment tutors can have some impact upon the learning experiences of underachieving students.

### Summary

Since the primary purpose of this present study was to analyze the effects of an academic-social enrichment program upon the academic achievement, self-concept and classroom behavior of underachieving elementary school children in an urban school district, this review of the literature has incorporated several relevant areas of concern. The salient findings of the review are related in the following paragraphs.

Many theorists concerned with the development of self-concept assert that an individual's self-perception arises out of interactions with others. Social interaction then, is a major

element in the evaluation of the self. With respect to this, there are positive relationships between self-concept and the perceptions held by significant others. Perceived positive regard from significant others leads to positive self-regard. Research has found that parents, peers and school personnel can be significant others with important influence on the self-perceptions of students.

Empirical evidence appears to support the contention of many investigators that there is also a positive relationship between self-concept and academic achievement. For minority and disadvantaged students, self-concept enhancement is advocated as an important part of compensatory education programs.

The effects of social exemplars on behavior were examined within the context of social learning theory as it relates to identification with significant others. Much human learning occurs through imitation or identification. An individual may respond to the behavior of other people by imitating the same behavior himself or herself and striving to behave in a way that parallels that of a model. Empirical evidence in the area of identification and imitation has demonstrated that the observation of or the experience with a significant other can influence behavior, skills and attitudes.

The characteristics of a positive helping relationship were explored. These included aspects of Roger's client-centered approach to counseling. Basically a helper is congruent,

approaches the other person with unconditional positive regard and empathic understanding. Elements of the helping relationship were underscored by research in the fields of counseling and education. Research findings suggest that counseling relationships and teacher-student interactions that are characterized by high levels of core facilitative conditions lead to constructive client self-exploration and optimum utilization of student learning capacity.

The use of paraprofessionals and nonprofessionals in the delivery of guidance and counseling services and in the field of education was studied. The paraprofessional movement has developed as a direct consequence of steadily increasing demands for human services and the shortage of trained professionals to meet these demands. Research evidence from mental health and academic settings reveals that with appropriate training, volunteer nonprofessionals and paraprofessionals can have a significant impact on cognitive and affective development.

A number of academic-enrichment or tutorial programs have been examined. Many of these programs have a place for volunteer youth as tutors. However, the findings from these programs imply that continued research is necessary to explore the effects of an academic-social enrichment experience on underachieving students.

## CHAPTER III

### DESIGN OF THE STUDY

This research was designed to study the effectiveness of an academic-social enrichment program. In this chapter, the setting, the recruitment and training of volunteers to perform as academic-social enrichment tutors, the program description, the characteristics of the population and sample as well as the description of the research procedures are presented.

#### Setting

The setting for this study was the Lansing School District, which is located in the capital of the state of Michigan. Lansing is a midwestern urban industrial center with a population of 138,000 people. The public school system has a student population of approximately 26,000. Of this total population, 17% are Black, 13% Hispanic, 8% Native American and 2% Oriental.

The Lansing public school system experiences many of the concerns which confront urban education. Among these are low educational achievement, racial imbalance, a high concentration of lower middle and lower income students coupled with continuing struggles to improve the quality of education for all students in the system.

As a response to these problems, the Lansing School District received federal funding under the Emergency School Aid Act (ESAA) to develop compensatory academic programs for students who meet three major criteria: (1) they are minority students or low income students from the majority group, (2) they live in an ESAA cluster area in Lansing and (3) they are below grade level in reading and mathematics achievement as measured by standardized testing. There are 5,500 students in the Lansing school system who are eligible to receive assistance under these guidelines. These students attend twenty target schools which have been grouped into six cluster areas within the district.

For the purpose of this study, four schools were chosen from several of these cluster areas. These schools were selected for their proximity to the Michigan State University campus and their high percentages of ESAA target children.

The academic-social enrichment program was conducted in conjunction with the ESAA programs. The program operated out of the four target schools as part of their ongoing after school community education programs and activities. The academic-social enrichment experience represented a cooperative effort of the Lansing School District and the Urban Counseling Mental Health Program of the Department of Counseling, Personnel Services and Educational Psychology in the College of Education at Michigan State University.

Recruitment and Training of Volunteers  
to Perform as Academic-Social  
Enrichment Tutors

After consultation with ESAA administrators in the Lansing School District, the recruitment of volunteer academic-social enrichment tutors began. A variety of organizations on the Michigan State University campus were approached regarding the participation of their members in the academic-social enrichment program. The organizations which were contacted included: Black fraternities and sororities, residence hall minority advisory staffs, the Office of Volunteer Programs and the undergraduate teacher-training programs in the College of Education. Potential volunteers were interviewed before selection for the program. The following guidelines were followed in selecting volunteers:

(1) they had to be in good academic standing; (2) they had to be willing to make a commitment to work with underachieving students in pupil-centered relationships for at least two academic terms; and (3) they had to exhibit the maturity and emotional balance necessary for working with young children. They received academic credit for their participation in the program through the Urban Counseling Mental Health Program.

Before beginning their work with the children, the tutors underwent a comprehensive two-phase training program. The first part of this training was conducted by the members of the Instructional Development Team of the Lansing School District. This involved orienting the tutors to the Instructional Management

System, an academic program developed for use in the Lansing school system. The Instructional Management System is a criterion-referenced educational system which enables student academic growth in mathematics and reading to be monitored and evaluated according to specific skills mastered.

The second phase of the training was conducted in conjunction with the Urban Counseling Mental Health Program at Michigan State University. This included aspects of human relations training and humanistic education skills development, as they relate to self-concept development. The purpose of this training was to develop and reinforce empathy on the part of the tutors that would be necessary to more effectively enhance self-concept and facilitate positive classroom behavior changes on the part of children in the program. In the training sessions the volunteers were exposed to self-concept enhancing activities and techniques developed by Canfield and Wells (1976). In addition, they were introduced to a program of activities designed to help children better understand their social-emotional behavior. These activities entitled Developing Understanding of Self and Others (DUSO) were developed by Dinkmeyer (1970) and are used on a limited basis with some children in the guidance program in the Lansing school system. The DUSO activities make use of a listening, inquiry, experiential and discussion approach to guidance. A variety of activities include role playing, group discussion, supplementary reading suggestions and art. The total

program is organized around eight major themes: (1) Understanding and accepting self; (2) understanding feelings; (3) understanding others; (4) understanding independence; (5) understanding goals and purposeful behavior; (6) understanding mastery, competence and resourcefulness; (7) understanding emotional maturity and (8) understanding choices and consequences.

The DUSO program is designed to be used effectively by anyone working with children, without special training. It is intended to provide experiences through which children can learn more words for feelings, understand the dynamic relationship between feelings, goals and behavior as well as begin to talk freely about feelings, goals and behavior.

The tutors were instructed on how to incorporate these affective skill-building activities into the cognitive remediation process. They were shown for example, how to combine an exploration of feelings into a remedial writing exercise or how to plan reading work around material that dealt with understanding of self and others.

Another important aspect of this part of the training involved developing the skills needed to produce viable contacts with the families of the children the volunteers worked with. This was done in an effort to develop family resources that could facilitate cognitive and affective development on the part of the children in the program. The basis of this training focused on the Systemic Family Model as developed by Gunnings (1976).

This model analyzes the family unit as an operational system, with each family member seen as a subsystem. According to Gunnings, each family member or subsystem, has strengths which if effectively developed and incorporated into the family system, will contribute to its overall positive functioning. The volunteers were urged to meet with the parents/guardians of the students they worked with to share the cognitive and affective aspects of the remediation process with them. This was done in an effort to assist parents/guardians in assuming a greater and more knowledgeable role in their children's total school experience.

This initial training was supplemented by periodic workshops and ongoing in-service for the tutorial staff throughout the duration of the program. This provided opportunities to further explore both academic and affective skill building techniques.

#### Program Description

This academic-social enrichment program was called the Homework Helper Program. It was conducted in the selected schools four days a week (Monday-Thursday) between the hours of 3:00 p.m. and 5:00 p.m.

Each child was recommended to the program on the basis of the ESAA guidelines and a teacher evaluation. They were then assigned to a volunteer academic-social enrichment tutor who worked with them in a small group setting (no more than two

children/tutor) for one and a half to two hours, two days a week at each school.

The first portion of each session was spent completing homework assignments. The tutors were responsible for monitoring the completion of assignments and acting as resource persons, checking for errors and neatness.

The second part of each session was divided into two parts. First, time was spent improving reading and mathematics skills. This was facilitated with the use of programmed instruction materials, individualized learning packets and reading and mathematics games. Next the tutors spent time exploring with their students, personal, inter-personal and social concerns as they related to developing skills to better understand themselves and others in both the home and school settings. The tutors provided children with opportunities to develop the ability to: (1) demonstrate positive feelings about themselves; (2) explore personal attitudes and feelings; (3) understand the attitudes and feelings of others; (4) function successfully as an individual and as part of a group; and (5) demonstrate personal and socially responsible behavior. This was accomplished through the use of the DUSO materials, self-concept enhancing games and activities in addition to small group discussions which focused on attitudes and feelings.

The tutors were responsible for making bi-weekly progress reports to classroom teachers. A reporting form allowed the

tutors to report to the teachers, as well as giving teachers the opportunity to recommend areas of concentration for each student.

Another task which the tutors were expected to perform was making periodic contact with the parents/guardians of each child in the program. Letters to parents and home visits were required of all tutors. The tutors shared with the parents/guardians each child's progress in the program. In addition, they assisted in facilitating the development of helping skills on the part of the parents/guardians.

The tutorial staff was under the constant and direct supervision of graduate supervisors from the Urban Counseling Program. The supervisors coordinated the program activities at each school. They were responsible for making monthly reports to both the Lansing School District and the Urban Counseling Program on the progress of the Homework Helper Program.

#### Population and Sample

The population of interest for this study consisted of those children in the Lansing public elementary schools who were found to be achieving below grade level under the ESAA guidelines. This population was comprised of approximately 5,500 students who were from a minority group or low income members of the majority group, who were below grade level in reading and mathematics achievement and who lived in a specified ESAA cluster area in Lansing.

Due to the administrative structure within the Lansing School District and the unique nature of the Homework Helper Program, random sampling and assignment was not feasible. Therefore, a modified sampling procedure was employed. The ESAA students from the four schools that were targeted for the study were identified. From the list of these children in each school, classroom teachers were asked to select those children who, based on a combination of achievement test data and their own evaluation of academic and social status, they felt could benefit from an academic-social enrichment experience of this type. These children and their parents/guardians were then contacted regarding possible participation in the Homework Helper Program. A total of 48 students from the four schools expressed interest in the program. These 48 children comprised the initial experimental group and were enrolled in the Homework Helper Program.

These 48 students were then each matched with another child from the ESAA lists on several variables. These variables were: age, sex, grade level and composite teacher academic and social evaluations. These 48 children comprised the initial control group. They were involved in traditional in-school remedial instruction and guidance experiences conducted by teachers and other professional staff.

The composition of the initial experimental and control groups by grade levels is shown in Table 3.1.

Table 3.1  
Initial Composition of Experimental  
and Control Groups

Grade Level	Experimental Group	Control Group	Total by Grade Level
Grade 3	24	24	48
Grade 4	12	12	24
Grade 5	6	6	12
Grade 6	6	6	12
Total	48	48	96

Over the period of the program, 13 members of the initial group were dropped from the experimental treatment. This attrition was due to movement from the school district, conflicting after school activities or administrative decisions that certain children were disruptive to the operation of the program and should be excluded from participation for the good of the program. As each of these children were dropped from the experimental group, their match in the control group was also dropped from the study.

The final analysis of the data included a total of 35 students in both the experimental and control groups. A summary of the composition of the experimental and control groups included in the analysis is presented in Table 3.2.

Table 3.2  
Composition of Experimental and  
Control Groups for Analysis

Grade Level	Experimental Group	Control Group	Total by Grade Level
Grade 3	18	18	36
Grade 4	8	8	16
Grade 5	5	5	10
Grade 6	4	4	8
Total	35	35	70

### Experimental Design

The experimental design selected for this study was the nonequivalent control group design delineated by Campbell and Stanley (1963). In this design the experimental and control groups were both given a pretest and posttest. However, the two groups did not have pre-experimental sampling equivalence. Random assignment to experimental and control groups from the population was not possible.

According to Campbell and Stanley, even if the pretest scores of the experimental and control groups are not equivalent, this design is superior to a one group pretest-posttest design. The more similar the experimental and control groups are in their selection and the more this similarity is reflected

in pretest scores, the more control over ambiguous results this design provides as opposed to a one group pretest-posttest design.

After the experimental and control groups were established, observations of a measured form were taken. Once the observations were taken, the experimental group received the treatment and the control group continued in the usual manner. Observations were taken on both groups at the end of the treatment period.

### Data and Instrumentation

Three major instruments were used to collect data for this study. These instruments measured change in students as a result of the academic-social enrichment experience. Two other instruments were employed to assess the opinions of teachers and administrators regarding the effectiveness of the Homework Helper Program.

### Measure of Academic Achievement

The 1973 edition of the Stanford Achievement Test (SAT) was used to measure achievement in reading and mathematics. For the purposes of this study, the following achievement batteries following achievement batteries were used:

Primary II	- Covers grades 2.5 to 3.4
Primary III	- Covers grades 3.5 to 4.4
Intermediate I	- Covers grades 4.5 to 5.4
Intermediate II	- Covers grades 5.5 to 6.9

The Primary II and III and Intermediate batteries of the SAT are composed of subtests in word meaning, paragraph meaning, spelling, vocabulary, word study skills, arithmetic

computation and arithmetic applications. Raw scores are converted into grade scores, percentile ranks and stanines. A total achievement raw score is calculated by combining the raw scores of the subtests and then converting them into the three types of norms for reading and mathematics.

The Technical Supplement (1973) provides split-half reliability coefficients for each test in every battery. The median of the split-half reliabilities for grades three through six are: .91, .91, .89 and .90. According to Buros (1971), the SAT is among the best achievement batteries available for measuring academic growth below the high school level.

#### Measure of Self-Concept

The Piers-Harris Children's Self-Concept Scale entitled "The Way I Feel About Myself," was used to study self-concept development. This is a self-report instrument designed for children over a wide age range.

The scale consists of eighty first person declarative statements that children respond "yes" or "no" to, e.g., "I can be trusted." Half of the statements are worded to indicate a positive self-concept and slightly more than half to indicate a negative self-concept. The instrument can be administered in 15 to 20 minutes and requires approximately third grade reading ability. It can be easily completed in a group setting.

Buros (1971) reports that the internal consistency of the scale ranges from .78 to .93 and retest reliability from .71 to

.77. Correlates with similar scales are around .65 and the instrument has both teacher and peer validity coefficients of approximately .40. Piers and Harris (1969) emphasize the use of the scale in research studies of change in self-concept.

The structure of the scale was examined by means of a multiple-factor analysis. Six factors were found large enough to be interpretable:

1. Behavior
2. Intellectual and School Status
3. Physical Appearance and Attributes
4. Anxiety
5. Popularity
6. Happiness and Satisfaction

The authors caution however, that information from cluster scores is tentative and further research is necessary.

Since the scale required third grade reading ability, children with reading difficulties could experience problems completing the scale. Considering these difficulties among students in the study, the instructions and items were read aloud by teachers or tutors to many students when administering the scale.

### Measure of Classroom Behavior

The Devereaux Elementary School Behavior Rating Scale (DESB) was used to study classroom behavior. This scale was developed for use by elementary school teachers to evaluate and communicate the social behavior problems of children in their classes. It is geared toward evaluating particular overt behaviors

that interfere with academic performance. The scale is administered by someone who has ongoing contact with a child in the classroom and who has had at least a month's experience with a child before making an evaluation.

Spivack and Swift (1967) report that the DESB has many uses. Among these are measuring change in behavior through time as a function of any remedial program and as a research device for obtaining a reliable measure of behaviors that appear in the classroom setting and are related to learning.

A child is rated on 47 different behaviors in terms of the relative frequency with which they occur. These behaviors are grouped into 11 different factors which contain between three and five items. The factors include:

1. Classroom Disturbance
2. Impatience
3. Disrespect - Defiance
4. External Blame
5. Achievement Anxiety
6. External Reliance
7. Comprehension
8. Inattentive - Withdrawn
9. Irrelevant - Responsiveness
10. Creative Initiative
11. Need for Closeness to the Teacher

All of the items in a factor tap a common dimension of classroom behavior that is related to academic achievement or social adjustment.

For the purpose of this study, seven of the eleven factors were of interest: Classroom Disturbance, Impatience, Disrespect-Defiance, External Blame, External Reliance,

Inattentive-Withdrawn and Irrelevant-Responsiveness. These factors focus on classroom behavior as it relates to personal, interpersonal or social adjustment.

Buros (1971) has found that the DESB is a sophisticated and carefully developed scale. The behaviors for rating are clearly described and the instructions for rating are carefully given.

The manual for the scale gives test-retest correlational data for each of the factors. The median correlational coefficient is .87. As a further refinement, the test-retest correlation for each item comprising the DESB reveals a median correlation of .76 with a quartile range of .72 to .82. The Standard Errors of Measurement range from 1.1 to 3.1, suggesting that the scores obtained on a child at any one point in time are reasonably accurate estimates of the "true" scores for that child at a particular time.

Pretest data was collected in the fall of 1978. The posttest data was collected near the end of the school year in May, 1979.

#### Teacher and Administrator Opinion

In addition to the three major parts of the data collection, a survey was completed by 14 of the 16 teachers who had students in the Homework Helper Program. Another survey was completed by the four principals whose schools were involved in

the study. The Teacher Survey and the Principal Survey were developed jointly by the Urban Counseling Mental Health Program at Michigan State University and Evaluation Services of the Lansing School District. The surveys were designed as instruments to assess the effectiveness of this academic-social enrichment experience from the point of view of teachers and administrators.

### Statistical Hypotheses

The following hypotheses were generated and tested to determine if the academic-social enrichment program was effective in improving academic achievement, self-concept development and classroom behavior.

#### Null Hypothesis 1

There will be no significant difference in reading achievement gain between tutored and non-tutored students as measured by SAT grade equivalents.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

#### Alternative Hypothesis 1

The reading achievement gain of tutored students will be significantly greater than the reading achievement gain of non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

#### Null Hypothesis 2

There will be no significant difference in mathematics achievement gain between tutored and non-tutored students as measured by SAT grade equivalents.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 2

The mathematics achievement gain of tutored students will be significantly greater than the mathematics achievement gains of non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

Null Hypothesis 3

There will be no significant difference in self-concept score pretest to posttest differences between tutored and non-tutored students as measured by Piers-Harris Children's Self-Concept Scale scores.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 3

The self-concept score pretest to posttest differences of tutored students will be significantly greater than the self-concept score pretest to posttest differences of non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

Null Hypothesis 4

There will be no significant difference in classroom behavior rating pretest to posttest differences between tutored and non-tutored students as measured by composite DESB ratings.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 4

The classroom behavior rating pretest to posttest differences of tutored students will be significantly greater than the classroom behavior rating pretest to posttest differences of non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

In addition to the major statistical hypothesis for classroom behavior, seven statistical subhypotheses were developed

for those behavior factors of interest in this study: (41) classroom disturbance, (42) impatience, (43) disrespect-defiance, (44) external blame, (45) external reliance, (46) inattentive-withdrawn and (47) irrelevant-responsiveness.

Null Hypothesis 41

There will be no significant difference in the decrease of classroom disturbance between tutored and non-tutored students as measured by DESB classroom disturbance ratings.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 41

The decrease in classroom disturbance for tutored students will be significantly greater than the decrease in classroom disturbance for non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

Null Hypothesis 42

There will be no significant difference in the decrease in impatient behavior between tutored and non-tutored students as measured by DESB impatience ratings.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 42

The decrease in impatient behavior for tutored students will be significantly greater than the decrease in impatient behavior for non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

Null Hypothesis 43

There will be no significant difference in the decrease of disrespectful-defiant behavior between tutored and non-tutored students as measured by DESB disrespect-defiance ratings.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 43

The decrease of disrespectful-defiant behavior for tutored students will be significantly greater than the decrease of disrespectful-defiant behavior for non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

Null Hypothesis 44

There will be no significant difference in the decrease of external blaming behavior between tutored and non-tutored students as measured by DESB external blame ratings.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 44

The decrease of external blaming behavior for tutored students will be significantly greater than the decrease of external blaming behavior for non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

Null Hypothesis 45

There will be no significant difference in the decrease in external reliance between tutored and non-tutored students as measured by DESB external reliance ratings.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 45

The decrease in external reliance will be significantly greater for tutored students than the decrease in external reliance for non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

Null Hypothesis 46

There will be no significant difference in the decrease of inattentive-withdrawn behavior between tutored and non-tutored students as measured by DESB inattentive-withdrawn ratings.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 46

The decrease of inattentive-withdrawn behavior for tutored students will be significantly greater than the decrease of inattentive-withdrawn behavior for non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

Null Hypothesis 47

There will be no significant difference in the decrease of irrelevant-responsiveness between tutored and non-tutored students as measured by DESB irrelevant-responsiveness ratings.

$$H_0: \bar{X}_1 - \bar{X}_2 = 0$$

Alternative Hypothesis 47

The decrease in irrelevant-responsiveness for tutored students will be significantly greater than the decrease in irrelevant-responsiveness for non-tutored students.

$$H_1: \bar{X}_1 - \bar{X}_2 > 0$$

The following legend holds true for each of the hypotheses:

$X_1$  = Mean of differences for tutored group (Posttest - Pretest)

$X_2$  = Mean of differences for non-tutored group (Posttest - Pretest).

### Analysis of the Data

The achievement and behavior data were analyzed using the t-test for the difference between correlated means. This procedure was chosen because the matching of students in pairs between the experimental and control groups resulted in each member of one group being nearly identical to his or her pair-mate in the other group with respect to the matching factors. This matching led to consequent dependence within the pairs. The t-test was conducted on the correlated means of the differences from pretest to posttest in achievement and behavior for the experimental and control groups.

The self-concept data was analyzed with the t-test for independent groups. This procedure was used because it was found that in spite of the matching, there was a negative correlation between the experimental and control group means of the differences from pretest to posttest for self-concept development. According to Glass and Stanley (1970), a negative relationship between such pairs increases the size of the standard error of the difference between two means. When this occurs there is a distinct disadvantage to using a dependent t-test, as significant differences would be considered nonsignificant. The t-test was

conducted on the independent means of the differences from pretest to posttest in self-concept for the experimental and control groups.

An additional factor in the analysis is that the scores of individual students in each tutor-student group were not independent of each other. The achievement scores, self-concept scores and behavior ratings of each student in the experimental program were related to a specific academic-social enrichment tutor. Each of these scores and ratings are dependent on the effectiveness of that particular tutor. Therefore, the unit of analysis that was used was the specific group of students that were assigned to a particular tutor. These tutoring groups were independent of each other. The non-tutored group was organized into matching units of analysis by placing the control students into groups that corresponded to the ones in which their pair-mates in the experimental group had been assembled.

The 35 subjects in both the experimental and control groups were organized into 20 such units for the analysis. Each unit was related to one of the 20 tutors. There were 15 two student groups and five groups that contained only one student. The analysis was conducted on the aggregated data from each of these 20 units.

Eleven t-tests were conducted, one for reading achievement, one for mathematics achievement, one for self-concept development and eight relating to classroom behavior. The statistical level of significance was set at the .05 level.

### Teacher and Administrator Responses

Several of the responses of teachers and administrators to the surveys assessing the effectiveness of the Homework Helper Program were detailed as part of the analysis. These responses were incorporated into the discussions of the hypotheses for which they seemed appropriate.

### Summary

In this chapter the design of the study was described. The research design selected for this investigation was a non-equivalent control group design.

The setting for the academic-social enrichment program was the Lansing School District located in the capital of the state of Michigan. Undergraduate student volunteers from Michigan State University were selected and trained to serve as academic-social enrichment tutors. The sample selected for participation in the academic-social enrichment program contained underachieving students from the third-, fourth-, fifth- and sixth-grades. The treatment involved the volunteer tutors and the students assigned to them, working in small group sessions on reading and mathematics remediation, the development of study skills and the exploration of personal and social concerns as they relate to developing skills to better understand self and others.

Instruments designed to assess educational achievement, self-concept and classroom behavior were administered prior to

and after treatment. At the end of the program, teachers and principals involved with the academic-social treatment completed surveys evaluating the effectiveness of the program.

Eleven statistical hypotheses concerned with reading and mathematics achievement, self-concept development and classroom behavior were generated and tested. The procedures used to analyze the data included the t-test for the difference between correlated means and the t-test for independent groups for the statistical treatment of the data, as well as a listing of the responses of teachers and administrators to surveys relating to the effectiveness of the program. All hypotheses were tested at the .05 level of significance.

## CHAPTER IV

### ANALYSIS OF RESULTS

In Chapter IV the findings from the analysis of the experimental data are reported. Research hypotheses relating to academic achievement, self-concept development and classroom behavior were stated in Chapter I. For each of these, statistical hypotheses were tested. Two statistical hypotheses were tested in the area of academic achievement. In addition, a statistical hypothesis concerned with self-concept development was inspected. In the area of classroom behavior, one major statistical hypothesis and seven subhypotheses were considered. In all, eleven statistical hypotheses were generated and tested.

Teacher and principal opinions as reported by responses to items included in the Homework Helper Program surveys were analyzed with respect to the academic achievement, self-concept development and classroom behavior of the students who participated in the program. This analysis was incorporated into the investigations of the statistical hypotheses for which they seemed appropriate.

The analysis of the data is presented in the following manner: (1) analysis of the academic achievement data; (2)

analysis of the self-concept data; and (3) analysis of the classroom behavior data.

### Analysis of the Academic Achievement Data

The research hypothesis which predicted the effects of academic-social enrichment tutoring on the reading and mathematics achievement of underachieving students was converted into two statistical hypotheses. One of these was concerned with total reading achievement as related by the total reading battery of the Stanford Achievement Test (SAT). The other statistical hypothesis dealt with total mathematics achievement as related by the total mathematics battery of the SAT. Raw scores were converted to grade equivalents and comparisons between the experimental and control groups were made.

The null and alternative forms for Statistical Hypothesis 1 were:

#### Null Hypothesis 1

There will be no significant difference in reading achievement gain between tutored and non-tutored students as measured by SAT grade equivalents.

#### Alternative Hypothesis 1

The reading achievement gain of tutored students will be significantly greater than the reading achievement gain of non-tutored students.

The null and alternative forms for Statistical Hypothesis 2 were:

#### Null Hypothesis 2

There will be no significant difference in mathematics achievement gain between tutored and non-tutored students as measured by SAT grade equivalents.

### Alternative Hypothesis 2

The mathematics achievement gain of tutored students will be significantly greater than the mathematics achievement gain of non-tutored students.

A t-test for the differences between correlated means was conducted for each of these two statistical hypotheses. The results of the analysis of the academic achievement data are presented in Tables 4.1 and 4.2.

The obtained t value of .19 in Table 4.1 is not statistically significant at the .05 level. Therefore, the null hypothesis regarding reading achievement was not rejected.

As indicated in Table 4.2, the obtained t value of .05 with 19 degrees of freedom is not significant at the .05 level. The null hypothesis relating to mathematics gain was not rejected.

Tables 4.3 and 4.4 show the mean grade equivalents for reading and mathematics achievement by grade level for the experimental and control groups.

### Teacher and Administrator Opinions Relating to Academic Achievement

Teacher responses to Items Three and Four of the Teacher Survey were analyzed in an effort to further assess the effects of academic-social enrichment tutoring on the academic achievement of the participating students. Seven of the 14 teachers responded to Item Three, "Did the Homework Helper Program assist you in meeting the individual needs of students in your classroom?" in a

Table 4.1

t-Test for Differences Between Correlated Means:  
Reading Achievement

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1 Tailed Probability
Experimental Group Reading Grade Equivalent Differences (Post-Pre)	20	.9675	.587	.198	.19	19	.426
Control Group Reading Grade Equivalent Differences (Post-Pre)		.9300	.759				

Table 4.2

t-Test for Difference Between Correlated Means:  
Mathematics Achievement

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1 Tailed Probability
Experimental Group Mathematics Grade Equivalent Differences (Post-Pre)	20	1.0050	.634	.152	.05	19	.4805
Control Group Mathematics Grade Equivalent Differences (Post-Pre)		.9975	.357				

Table 4.3  
Mean Reading Grade Equivalents  
by Grade Level

Grade	Mean	Experimental Group	Control Group
3	Pretest	1.7	1.8
	Posttest	2.5	2.7
4	Pretest	2.4	2.4
	Posttest	3.4	3.9
5	Pretest	2.9	3.1
	Posttest	4.4	3.8
6	Pretest	4.0	3.9
	Posttest	5.0	4.0

Table 4.4  
Mean Mathematics Grade Equivalents  
by Grade Level

Grade	Mean	Experimental Group	Control Group
3	Pretest	2.2	2.2
	Posttest	3.3	3.2
4	Pretest	2.9	3.0
	Posttest	3.9	4.3
5	Pretest	3.6	3.6
	Posttest	4.2	4.2
6	Pretest	4.8	4.7
	Posttest	4.9	5.4

manner that could be related to academic achievement. These responses were:

- Yes "Tutor helped with spelling."
- Yes "Helped some with spelling."
- Yes "Increased instructional time and practice on skills helped \_\_\_\_\_ become more prepared for her class."
- Yes "Helped with skills."
- Yes "Extra help showed on math tests. \_\_\_\_\_ was able to catch up on her assignments in reading."
- No "Very little work was accomplished. Most assignments were never returned or completed."
- Yes "I feel it provided my students with the extra time one on one I could not always give in class."

Item Four asked teachers to indicate the number of students who showed improvement as a result of their participation in an academic-social enrichment experience. Six of the 14 teachers responded to this item, resulting in the following totals for items related to academic achievement:

As a result of the Homework Helper Program, please indicate the number of students who have shown improvement in the following areas:

Reading skills	<u>4</u>	General quality of	
Math skills	<u>9</u>	schoolwork	<u>11</u>

One principal responding to Item Five on the Principal Survey, "The most noteworthy aspects of the Homework Helper Program were:" stated: "Participants were provided with extra help in the basic skill areas."

### Analysis of the Self-Concept Data

The research hypothesis which predicted the effects of an academic-social enrichment experience on self-concept development was converted into a statistical hypothesis. This hypothesis was concerned with total self-concept as related by the total self-concept score of the Piers-Harris Children's Self-Concept Scale. The total raw scores from the scale were used for the comparison of experimental and control groups.

The null and alternative forms of Statistical Hypothesis 3 were:

#### Null Hypothesis 3

There will be no significant difference in self-concept score pretest to posttest differences between tutored and non-tutored students as measured by Piers-Harris Children's Self-Concept Scale scores.

#### Alternative Hypothesis 3

The self-concept score pretest to posttest differences of tutored students will be significantly greater than the self-concept score pretest to posttest differences of non-tutored students.

A t-test for independent groups was conducted for the statistical hypothesis. The results of the analysis of the self-concept data are presented in Table 4.5.

In Table 4.5, the comparison of experimental and control group pretest-posttest differences yielded a t-value of .97 with 38 degrees of freedom. This was not significant at the .05 level. With respect to this, the null hypothesis for self-concept pretest to posttest score differences was not rejected.

Table 4.5  
t-Test for Independent Means:  
Self-Concept

	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group Self-Concept Score Differences (Posttest-Pretest)	20	4.825	8.045	1.799			
Control Group Self-Concept Score Differences (Posttest-Pretest)		2.550	6.809	1.523	.97	38	.17

### Teacher Opinions Relating to Self-Concept Development

Teacher responses to Item Three of the Teacher Survey were analyzed in an effort to further assess the effects of the academic-social enrichment experience on the self-concept development of the participating students.

Four of the 14 teachers responded to Item Three in a manner that could be related to self-concept development:

Did the Homework Helper Program assist you in meeting the individual needs of students in your classroom?

Yes "Self-concepts showed good improvement."

Yes "I feel it provided my students with the extra time one on one I could not always give in class."

Yes "\_\_\_\_\_'s attitude improved."

Yes "As the year went on, \_\_\_\_\_ seemed to become a happier child. I feel that her participation in your program had something to do with this. She looked forward to going to the program each afternoon."

### Analysis of the Classroom Behavior Data

The research hypothesis which predicted the effects of an academic-social enrichment program on classroom behavior was converted into one major statistical hypothesis and seven statistical subhypotheses. The major statistical hypothesis was concerned with composite classroom behavior as related by the ratings of the seven personal-social behavior factors of the Devereaux Elementary School Behavior Rating Scale (DESR). The

subhypotheses were concerned with classroom disturbance as related by classroom disturbance ratings of the DESB; impatience as related by impatience ratings of the DESB; disrespect-defiance as related by the DESB disrespect-defiance ratings; external blame as related by the DESB external blame ratings; external reliance as related by the DESB external reliance ratings, inattentive-withdrawn ratings as related by the DESB; and irrelevant-responsiveness as related by irrelevant-responsiveness ratings of the DESB. The rating raw scores from the scale were used for comparisons of the experimental and control groups.

The null and alternative forms of Statistical Hypothesis 4 were:

Null Hypothesis 4

There will be no significant difference in classroom behavior rating pretest to posttest differences between tutored and non-tutored students as measured by composite DESB ratings.

Alternative Hypothesis 4

The classroom behavior rating pretest to posttest differences of tutored students will be significantly greater than the classroom behavior rating pretest to posttest differences of non-tutored students.

The null and alternative forms of Statistical Sub-hypotheses 41 to 47 were:

Null Hypothesis 41

There will be no significant difference in the decrease of classroom disturbance between tutored and non-tutored students as measured by DESB classroom disturbance ratings.

Alternative Hypothesis 41

The decrease in classroom disturbance for tutored students will be significantly greater than the decrease in classroom disturbance for non-tutored students.

Null Hypothesis 42

There will be no significant difference in the decrease in impatient behavior between tutored and non-tutored students as measured by DESB impatience ratings.

Alternative Hypothesis 42

The decrease in impatient behavior for tutored students will be significantly greater than the decrease in impatient behavior for non-tutored students.

Null Hypothesis 43

There will be no significant difference in the decrease of disrespectful-defiant behavior between tutored and non-tutored students as measured by DESB disrespect-defiance ratings.

Alternative Hypothesis 43

The decrease of disrespectful-defiant behavior for tutored students will be significantly greater than the decrease of disrespectful-defiant behavior for non-tutored students.

Null Hypothesis 44

There will be no significant difference in the decrease of external blaming behavior between tutored and non-tutored students as measured by DESB external blame ratings.

Alternative Hypothesis 44

The decrease of external blaming behavior for tutored students will be significantly greater than the decrease of external blaming behavior for non-tutored students.

Null Hypothesis 45

There will be no significant difference in the decrease in external reliance between tutored and non-tutored students as measured by DESB external reliance ratings.

Alternative Hypothesis 45

The decrease in external reliance will be significantly greater for tutored students than the decrease in external reliance for non-tutored students.

Null Hypothesis 46

There will be no significant difference in the decrease of inattentive-withdrawn behavior between tutored and non-tutored students as measured by DESB inattentive-withdrawn ratings.

Alternative Hypothesis 46

The decrease of inattentive-withdrawn behavior for tutored students will be significantly greater than the decrease of inattentive-withdrawn behavior for non-tutored students.

Null Hypothesis 47

There will be no significant difference in the decrease of irrelevant-responsiveness between tutored and non-tutored students as measured by DESB irrelevant-responsiveness ratings.

Alternative Hypothesis 47

The decrease in irrelevant-responsiveness for tutored students will be significantly greater than the decrease in irrelevant-responsiveness for non-tutored students.

A t-test for the difference between correlated means was conducted for each of these hypotheses. The results of the analysis of the classroom behavior data are presented in Tables 4.6 to 4.13.

The obtained t-value of -6.71 in Table 4.6 is statistically significant at the .05 level. Therefore, Null Hypothesis 4 was rejected in favor of Alternative Hypothesis 4.

As indicated in Table 4.7, the obtained t-value of -3.94 is statistically significant at the .05 level. Null Hypothesis 41 was rejected in favor of Alternative Hypothesis 41.

In Table 4.8 the comparison of experimental and control rating differences yielded a t-value of -3.60 with 19 degrees of

freedom. This was statistically significant at the .05 level. Null Hypothesis 42 therefore, was rejected in favor of Alternative Hypothesis 42.

The obtained t-value in Table 4.9 is -3.20 ( $df = 19$ ), which is statistically significant at the .05 level. Therefore, Null Hypothesis 43 was rejected in favor of Alternative Hypothesis 43.

As indicated in Table 4.10 the comparison of experimental and control group rating differences yielded a t-value of -1.82 with 19 degrees of freedom. This was statistically significant at the .05 level. Null Hypothesis 44 was, therefore rejected in favor of Alternative Hypothesis 44.

In Table 4.11 the obtained t-value is -6.74 ( $df = 19$ ), which is statistically significant at the .05 level. Therefore, Null Hypothesis 45 was rejected in favor of Alternative Hypothesis 45. Table 4.11 clearly indicates that the mean for the experimental group rating differences (pretest to posttest) was greater than the mean of the rating differences for the control group.

The obtained t-value in Table 4.12 is -4.17 with 19 degrees of freedom is statistically significant at the .05 level. Null Hypothesis 46 therefore, was rejected in favor of Alternative Hypothesis 46.

As indicated in Table 4.13, the obtained t-value of -2.59 ( $df = 19$ ) is statistically significant at the .05 level. Therefore, Null Hypothesis 47 was rejected in favor of Alternative Hypothesis 47.

Table 4.6  
t-Test for Difference Between Correlated Means:  
Composite Classroom Behavior

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group Composite Behavior Rating Differences (Post-Pre)	20	-12.1250	7.747	1.633	-6.71	19	.000
Control Group Composite Behavior Rating Differences (Post-Pre)		- 1.1750	4.499				

Table 4.7

t-Test for Difference Between Correlated Means:  
Classroom Disturbance

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group Classroom Disturbance Rating Differences (Post-Pre)	20	-1.6750	1.794	.476	-3.94	19	.0005
Control Group Classroom Disturbance Rating Differences (Post-Pre)		.2000	1.093				

Table 4.8

t-Test for Difference Between Correlated Means:  
Impatience

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group Impatience Rating Differences (Post-Pre)	20	-1.9750	1.674	.375	-3.60	19	.001
Control Group Impatience Rating Differences (Post-Pre)		- .6250	.944				

Table 4.9  
t-Test for Difference Between Correlated Means:  
Disrespect-Defiance

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group Disrespect-Defiance Rating Differences (Post-Pre)	20	-1.0500	1.605				
Control Group Disrespect-Defiance Rating Differences (Post-Pre)		.1000	.476	.359	-3.20	19	.0025

Table 4.10  
t-Test for Difference Between Correlated Means:  
External Blame

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group External Blame Rating Differences (Post-Pre)	20	-1.1500	.933	.370	-1.82	19	.042
Control Group External Blame Rating Differences (Post-Pre)		- .4750	1.272				

Table 4.11  
t-Test for Difference Between Correlated Means:  
External Reliance

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group External Reliance Rating Differences (Post-Pre)		-2.9500	1.776				
	20			.360	-6.74	19	.000
Control Group External Reliance Rating Differences (Post-Pre)		- .5250	1.342				

Table 4.12

t-Test for Difference Between Correlated Means:  
Inattentive-Withdrawn

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group Inattentive-Withdrawn Rating Differences (Post-Pre)	20	-2.0600	1.873	.446	-4.17	19	.0005
Control Group Inattentive-Withdrawn Rating Differences (Post-Pre)		- .2000	.909				

Table 4.13

t-Test for Difference Between Correlated Means:  
Irrelevant-Responsiveness

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	t Value	df	1-Tailed Probability
Experimental Group Irrelevant- Responsiveness Rating Differences (Post-Pre)	20	-1.0750	1.280	.366	-2.59	19	.009
Control Group Irrelevant- Responsiveness Rating Differences (Post-Pre)		- .1250	.841				

Teacher and Administrator  
Opinions Relating to  
Classroom Behavior

Teacher's responses to Item Four of the Teacher Survey were analyzed in an effort to further assess the effects of academic-social enrichment tutoring upon the classroom behavior of participating students.

Item Four asked teachers to indicate the number of students who showed improvement as a result of their participation in the program. Seven of the 14 teachers responded to this item, resulting in the following total relating to the aspect of the item that was directly concerned with classroom behavior:

As a result of the Homework Helper Program, please indicate the number of students who have shown improvement in the following areas:

Interpersonal Skills 19

Three principals in responding to Item One of the Principal Survey, "As an administrator, do you feel the Homework Helper Program was beneficial to your total school?" stated that the program was beneficial because "Students reflected more positive behavior." One principal continued that the program was beneficial because it "Enhanced students' satisfaction with school."

Summary

Eleven statistical hypotheses were derived from the three research hypotheses. Two statistical hypotheses which

related to academic achievement were tested for the experimental and control groups. One statistical hypothesis relating to total self-concept development was tested. One major statistical hypothesis and seven subhypotheses were tested for classroom behavior.

The methods used to test the null hypotheses of this study were the t-test for the difference between correlated means and the t-test for independent groups. The level of significance chosen was .05.

The data from the t-tests for differences in the means for this study can be summarized in the following manner:

1. There was no significant difference in reading achievement gain between tutored and non-tutored students as measured by SAT grade equivalents.
2. There was no significant difference in mathematics achievement gain between tutored and non-tutored students as measured by SAT grade equivalents.
3. There was no significant difference in self-concept score pretest to posttest differences between tutored and non-tutored students as measured by Piers-Harris Children's Self-Concept Scale scores.
4. The classroom behavior rating pretest to posttest differences of tutored students were significantly greater than those of non-tutored students as measured by composite DESB ratings.

5. The decrease in classroom disturbance for tutored students was significantly greater than the decrease for non-tutored students.

6. The decrease of impatient behavior for tutored students was significantly greater than the decrease in such behavior for non-tutored students.

7. The decrease of disrespectful-defiant behavior for tutored students was significantly greater than the decrease of such behavior for non-tutored students.

8. The decrease of external blaming behavior for tutored students was significantly greater than the decrease of external blaming behavior for non-tutored students.

9. The decrease in external reliance for tutored students was significantly greater than the decrease for non-tutored students.

10. The decrease of inattentive-withdrawn behavior for tutored students was significantly greater than the decrease of such behavior for non-tutored students.

11. The decrease in irrelevant-responsiveness for tutored students was significantly greater than the decrease for non-tutored students.

A review of teacher and administrator responses on both the Teacher Survey and the Principal Survey seemed to indicate positive changes in academic achievement, self-concept development and classroom behavior had resulted from the academic-social enrichment experience.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

The final chapter of this study is presented as follows:

- (1) Summary, (2) Conclusions, (3) Discussion of results, and
- (4) Implications and recommendations.

#### Summary

The purpose of this study was to determine if underachieving students can be more effectively reached through a supplementary academic-social enrichment experience than by traditional in-school classroom procedures alone. The primary objective was to evaluate the effects of an after-school academic-social enrichment program upon the (1) academic achievement, (2) self-concept development, and (3) classroom social behavior of elementary school underachievers in grades three through six. A secondary objective was to assess the effectiveness of the program as viewed by classroom teachers and school administrators.

The academic-social enrichment program was conducted in the public school system in the capital city of the state of Michigan. Twenty undergraduate student volunteers from Michigan State University were selected from various campus organizations and trained to serve as academic-social enrichment tutors.

The population of interest for the study consisted of those public elementary school children who were found to be achieving below grade level in reading and mathematics proficiency under the federal Emergency School Aid Act (ESAA) guidelines, as measured by the Stanford Achievement Test. From this population, a sample of 48 third-, fourth-, fifth- and sixth-grade students was selected for participation in the academic-social enrichment program. Those selected for participation were students who had been identified as underachievers by ESAA guidelines and teacher evaluations, were members of a minority group or low income members of the majority group and who lived in specified target neighborhoods. After identification, the students were enrolled in the program and became the initial experimental group. These students were then matched with 48 other students not enrolled in the program on the following variables: age, sex, grade level and composite teacher academic and social evaluations. These students comprised the initial control group. Over the period of the program, attrition resulted in thirteen members of the initial experimental group and their matched partners in the control group, being eliminated from the sample. At the end of the treatment period, the total experimental and control groups each contained 35 subjects.

Four elementary schools were selected for the study. The treatment involved the assignment of the volunteer academic-social enrichment tutors to work with the students in small group sessions on reading and mathematics remediation, the development of study

skills and the exploration of personal and social concerns as they relate to developing skills to better understand self and others. The tutors attempted to provide a warm, empathic, genuine and concrete atmosphere in their interactions with the children in an effort to facilitate positive cognitive and affective helping relationships. Academic-enrichment sessions were conducted two days a week for one and a half to two hours for a six-month period.

Changes in academic achievement, self-concept development and classroom behavior were expected as a result of the treatment. The instruments used to measure changes were, respectively: the Stanford Achievement Test, the Piers-Harris Children's Self-Concept Scale and the Devereaux Elementary School Behavior Rating Scale. The instruments were administered to the experimental and control groups before and after treatment. The following research hypotheses were investigated:

- H<sub>1</sub>      The reading and mathematics achievement of elementary school underachievers who participate in an after school academic-social enrichment program will be higher than the reading and mathematics achievement of those elementary school underachievers who do not participate in an after school academic-social enrichment program.
- H<sub>2</sub>      The reported self-concept scores of elementary school underachievers who participate in an after school academic-social enrichment program will be higher than the reported self-concept scores of those elementary school underachievers who do not participate in an after school academic-social enrichment program.

- H<sub>3</sub> The teacher-reported classroom behavior ratings of elementary school underachievers who participate in an after school academic-social enrichment program will be higher than the teacher-reported classroom behavior ratings of those elementary school underachievers who do not participate in an after school academic-social enrichment program.

Major statistical hypotheses were cast for each of the research hypotheses. A total of four major statistical hypotheses were investigated. Two of these were generated for academic achievement. One of them related to reading achievement and another to mathematics achievement. Another major statistical hypothesis was generated for self-concept development. The Devereaux Elementary School Behavior Rating Scale included, in addition to a composite score for personal-social behavior, seven subscores purported to measure various dimensions of classroom social behavior. The classroom behavior data therefore, involved the investigation of one major statistical hypothesis and seven subhypotheses.

Statistical comparisons of the groups were accomplished by the t-test for the difference between correlated means for achievement and behavior data and the t-test for independent groups for self-concept data. The level of significance was set at the .05 level for the purposes of this study. Only the subjects who were involved in the total treatment period were included in the final analysis.

In addition to the statistical analysis, the reported opinions of teachers and administrators on the Teacher Survey and the Principal Survey were assessed to determine the effectiveness of the academic-social enrichment experience. These findings were incorporated with the statistical analysis where appropriate.

The findings for the study are divided into two areas - (1) The analysis of the statistical data and (2) the analysis of teacher and administrator opinions.

The t-tests used to test the null hypotheses indicated the following:

- (1) There were no significant differences between tutored and non-tutored students for total reading and mathematics achievement as measured by the Stanford Achievement Test (SAT).
- (2) There were no significant differences between tutored and non-tutored students for total self-concept development as measured by the Piers-Harris Children's Self-Concept Scale.
- (3) The composite classroom behavior ratings of tutored students were significantly higher than those of non-tutored students as measured by the Devereaux Elementary School Behavior Rating Scale (DESB).
- (4) The decrease in classroom disturbance of tutored students was significantly greater than the decrease

in classroom disturbance of non-tutored students as measured by the DESB.

- (5) The decrease in the impatient behavior of tutored students was significantly greater than the decrease in impatient behavior of non-tutored students as measured by the DESB.
- (6) The decrease in the disrespectful-defiant behavior of tutored students was significantly greater than the decrease in the disrespectful-defiant behavior of non-tutored students as measured by the DESB.
- (7) The decrease in the external blaming behavior of tutored students was significantly greater than the decrease in the external blaming behavior of non-tutored students as measured by the DESB.
- (8) The decrease in external reliance for tutored students was significantly greater than the decrease in external reliance for non-tutored students as measured by the DESB.
- (9) The decrease in inattentive-withdrawn behavior for tutored students was significantly greater than the decrease in inattentive-withdrawn behavior for non-tutored students as measured by the DESB.
- (10) The decrease in irrelevant-responsiveness for tutored students was significantly greater than the decrease

in irrelevant-responsiveness for non-tutored students as measured by the DESB.

Teachers and administrators subjectively responded to both the Teacher Survey and Principal Survey in the following manner:

- (1) Students who participated in the academic-social enrichment experience showed improvement in basic skill areas and general quality of schoolwork.
- (2) Students who participated in the academic-social enrichment experience, exhibited positive changes in self-concept.
- (3) Students who participated in the academic-social enrichment experience, showed improvement in interpersonal skills, reflected more positive behaviors, and experienced increased satisfaction with school.

### Conclusions

The literature related to the present study suggested that an academic-social enrichment experience might improve the academic achievement, self-concept development and classroom behavior of underachieving elementary school students. The results of this study lend empirical support, in part, to the theory underlying academic-social enrichment tutoring.

Of the eleven null hypotheses developed for the purpose of this study, eight were rejected and three were not rejected.

However, only one of the four major statistical hypotheses was among those rejected.

In the area of academic achievement, two major statistical hypotheses were developed, neither of which was rejected. Also, the major statistical hypothesis relating to self-concept development was not rejected.

The major statistical hypothesis which was developed and tested for classroom behavior, however was rejected. There was a difference favoring the tutored group, significant at the .05 level. In addition, the seven subhypotheses relating to classroom personal-social behavior were tested and rejected.

The subjective opinions of teachers and principals in response to the surveys evaluating the program tend to emphasize growth in achievement, self-concept and classroom behavior as a result of academic-social enrichment tutoring.

Two of the three research hypotheses, ( $H_1$  and  $H_2$ ) must be rejected. Overall, academic-social enrichment tutoring did not appear to significantly influence reading and mathematics achievement or the self-concept development of the participating students. However, research hypothesis  $H_3$  is not rejected. Apparently this type of tutoring did have a significant effect on the social classroom behavior of the students who received it. A closer examination of the data leads to the following conclusions within the limitations noted in Chapter I:

- (1) No differences were found among tutored students and non-tutored students for total reading achievement or for total mathematics achievement.
- (2) No differences were found among tutored students and non-tutored students for total self-concept.
- (3) The tutored students positively and significantly exceeded the non-tutored students in classroom behavior pretest to posttest rating differences.
- (4) The tutored students significantly exceeded the non-tutored students in the decrease of classroom disturbance, impatient behavior, disrespectful-defiant behavior, external blaming behavior, external reliance, inattentive-withdrawn behavior and irrelevant-responsiveness.

The feedback received from teachers and administrators led to the following additional conclusions:

- (5) Subjectively, teachers and principals indicated improvement in the basic skill areas and the enhancement of student satisfaction with school on the part of participating students.
- (6) Subjectively, teachers and principals indicated positive changes in self-attitudes and self-worth on the part of participating students.

- (7) Subjectively, teachers and principals indicated improvement in interpersonal skills and the reflection of more positive behavior on the part of participating students.

### Discussion of Results

This investigation does not support the hypothesis that underachieving elementary students who participate in an after school academic-social enrichment program will have higher reading and mathematics achievement than those underachieving youngsters who do not participate. Neither does this study support the hypothesis that the reported self-concept scores of elementary school underachievers who participate in such an enrichment program will be higher than the reported self-concept scores of those students who do not participate in such a program.

With regard to academic achievement the objective data indicated little change as a result of academic-social enrichment tutoring. There were no significant differences found for the two statistical analyses relating to reading and mathematics achievement.

Studies related to enrichment programs have reported mixed results for improvement in academic achievement. Cloward (1971) found that fourth- and fifth-grade children who were exposed to a tutoring program made greater gains in reading skills than those students not exposed to the program. In contrast, Olsen (1969)

learned that a college student volunteer enrichment tutoring program did not significantly influence the total educational achievement of participating students.

The achievement batteries used in this particular study to measure academic achievement, emphasized proficiency in specific reading and mathematics skills. In addition, a certain sophistication in taking standardized tests on the part of students is important for success. Given the time framework and the importance given to the affective goals of this enrichment experience, intensive drill and practice in reading and mathematics skills necessary for successful test performance were not always possible on a consistent basis. More importantly, the purpose of the tutoring experience in the area of academic achievement was to focus on the improvement of reading and mathematics skills in terms of the overall quality of schoolwork rather than concentrate on the narrow emphasis of preparation for the standardized tests. With regard to this, little time was assigned to facilitating actual test taking skills or the development of "test-wiseness" important for standardized test-taking. It is possible that if drill and practice in specific reading and mathematics skills, with an emphasis on developing test-taking skills had been the exclusive focus of the academic aspect of the program, then significant changes in achievement favoring the experimental group might have followed.

Although comparisons were made at the group level as opposed to the grade level, there are indications that experimental group differences are greater, though not significantly so, for fifth- and sixth-grade students for reading achievement. Figure 5.1 illustrates the growth in reading achievement for the experimental and control groups by grade level as measured by pretest to posttest differences in the mean grade equivalent for each grade. These differences at the fifth- and sixth-grade perhaps imply that the academic-social enrichment tutors at these grade levels placed greater emphasis upon reading and mathematics skill development or possessed greater overall tutoring technique than did the ones at third and fourth grade.

Questions which relate to pedagogy, underscore the fact that actual tutorial processes were not empirically investigated in this study. Outcome measures have evaluated the effectiveness of the program in meeting the objectives set forth, however there is no data with which to assess the actual tutoring process. In terms of academic achievement, there is no accurate way to compare tutoring with traditional classroom instruction in terms of facilitating reading and mathematics skill development.

Teacher and principal opinions indicated that some students improved in reading and mathematics as a result of academic-social enrichment tutoring. Some teachers reported improvements in the general quality of schoolwork.

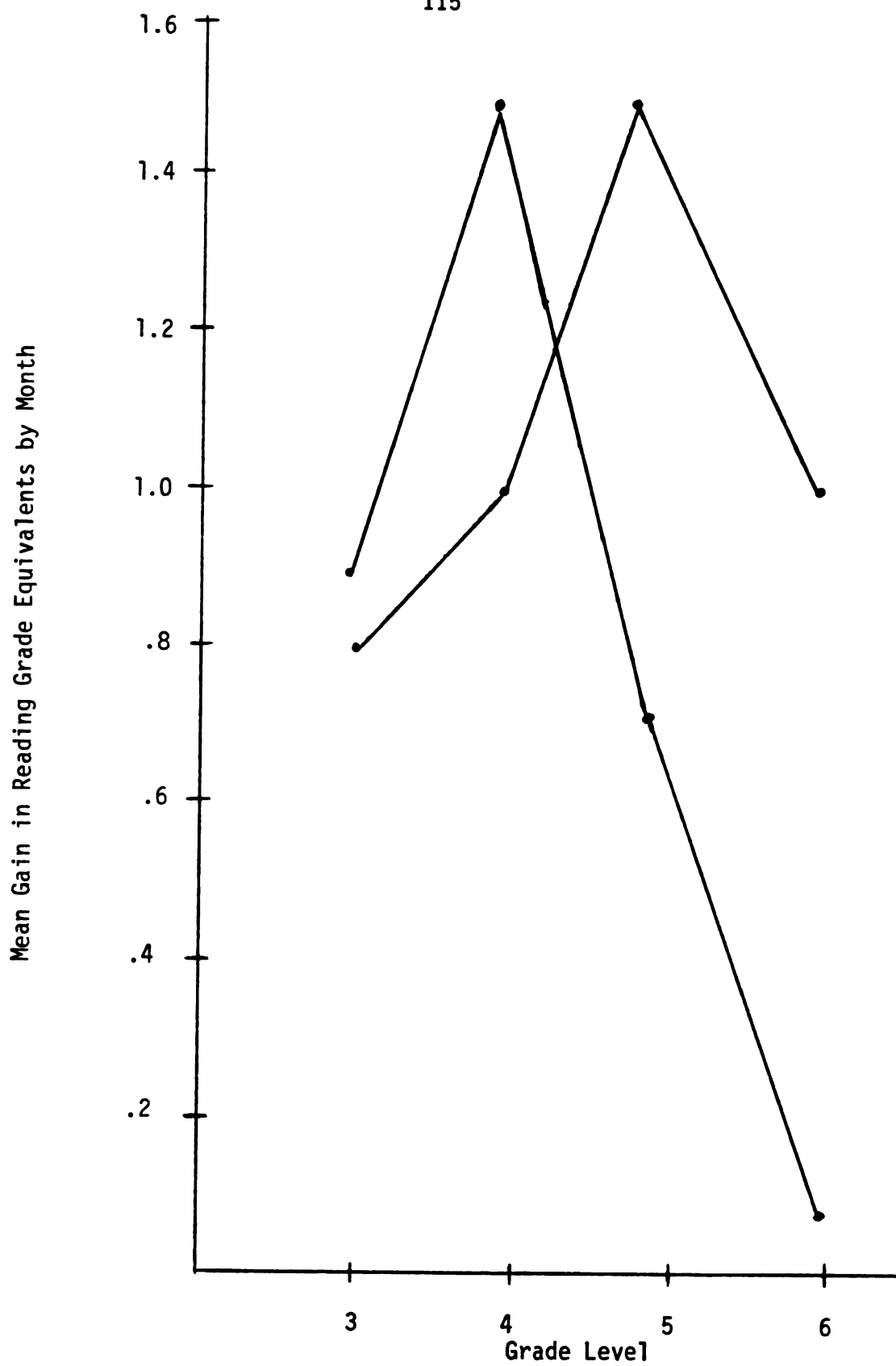


Figure 5.1.--Growth in Reading Achievement - Experimental vs. Control.

In the area of self-concept development, the objective data from this study indicated little change as a result of the academic-social enrichment experience. These findings are consistent with those of Gordon, Curran and Avila (1966) and Brookover, Erickson and Joiner (1967). Gordon et. al. reported no difference between experimental and control groups for measured self-concept as a result of a tutorial project for elementary and junior high school students. Brookover and associates attempted to create significant others for under-achieving students in grades nine through twelve. By assigning counselors who held high expectations and evaluations of students to members of an experimental group, the researchers hoped to improve the self-concept of academic ability of the students. However, no significant differences were found between the experimental and control groups.

Changes in self-concept are probably difficult to effect. The literature suggested that bringing about changes in self-concept in underachieving students who have met with little academic success has been and is a formidable undertaking (Wylie, 1961; Combs, 1962).

The assessment of self-concept at the elementary levels is a questionable matter. In the present study, self-concept development was measured with a self-report inventory. This instrument, as with most self-report measures, is sensitive to the subjective mood swings of children. Indeed, many self-concept

authorities and psychometricians have cautioned about the use of self-report instruments to measure self-concept.

The aggregate self-concept scores found in the present study indicated that for fifteen of the twenty groups used as units of analysis in the experimental group, positive, but not necessarily significant gains were made during the treatment period. Since self-concept development is a gradual process that proceeds over time, it is possible that a longer enrichment period may have resulted in these positive gains becoming significant.

It must be assumed that any changes in a child's self-concept as the result of an enrichment experience must be related to the skill and effectiveness of his or her tutor. In this study it was anticipated that enrichment tutors would become significant others for the students assigned to them. In this role, they were to develop positive evaluations of their students and hold high expectations for them. It was expected that through social interaction, the positive manner in which tutors perceived students would impact positively on their self-evaluations. Since there were no process measures taken in this study, there is no way to effectively examine the enrichment process in terms of tutor technique or skill in facilitating self-concept development. There is no accurate way to explain the success of specific self-concept development techniques for each tutor. It is possible that some type of process measure would have added further

information on the social interactions between tutor and student and how they related to self-concept development.

The opinions of participating teachers and administrators seem to indicate that academic-social enrichment tutoring did have a positive effect on the self-concept of some of the students in the program. Individual case studies of these students might have added further information in this area.

Although the findings and conclusions drawn from the statistical data of the study did not seem to support the general hypotheses relating to academic achievement and self-concept, further inspection reveals there are no apparent negative effects. In fact, the statistical tests indicated there were no significant differences for the null hypotheses which related to reading achievement, mathematics achievement, and self-concept.

A great deal of the subjective data reported by the participating classroom teachers and principals seemed to be supportive of the research hypotheses for reading and mathematics achievement and self-concept. Their feedback implied that academic-social enrichment tutoring did have positive effects on the academic achievement and self-concept development of some of the participating students. It is possible however, that teachers' assessments of these students reflected individual performances and excluded cases in which success failed to occur.

In view of both the statistical data and the subjective opinions of the participating teachers and administrators, there

does seem to be some evidence that would indicate that some of the students who participated in the academic-social enrichment experience made positive gains. Had the experimental and control groups been larger, it is possible that significant differences might have been determined.

In contrast, this investigation supports the hypothesis that underachievers who participate in an after school academic-social enrichment program will have higher classroom behavior ratings than those students who do not participate in such a program. The statistical data indicated positive differences in several aspects of classroom personal-social behavior as a result of the academic-social enrichment experience. There were significant differences found for the major statistical hypothesis relating to composite classroom behavior as well as the seven subhypotheses relating to various classroom behavioral factors.

Empirical findings related to the effects of enrichment tutoring on behavior have reported positive results. Engle (1964), designed a study in which two experimental treatments focused on the role of the significant other with underachieving secondary school students. One group, the "warm teacher" experiment resulted in fewer teacher referrals for disciplinary action among the experimental group. The other group, the "peer leader" experiment resulted in fewer referrals and less tardiness for the experimental group. Gordon et. al. in the study mentioned previously found that teachers indicated positive behavioral changes for

Black students involved in a tutorial program. According to measured behavior changes, student behavior became more positive.

In terms of this particular investigation it was anticipated that through the cognitive and affective remediation process, the enrichment tutors would become significant role models for the students assigned to them. In many instances, the tutors came from similar social backgrounds as their students and were familiar with the challenges which confronted these children in the educational system. The literature relating to imitation and identification has stated that significant others are important in the formation of patterns of behavior. An individual may respond to the behavior of other people by imitating the same behavior himself or herself and strive to behave in a manner that parallels that of a model. Research has shown that interaction between a social exemplar and an observer is effective in influencing behavior, skills and attitudes.

In the present study, tutors attempted to become role models by forming helping relationships with students that were based on warmth, empathy, genuineness and concreteness. In "big brother/big sister" roles, the tutors explored with youngsters personal-social concerns as they related to classroom behavior with an emphasis toward developing plans for positive change. The tutors explicitly, or in many instances implicitly, behaved as social exemplars, stressing the point that positive attitudes toward school had led to academic success for them. It was

impressed upon students that similar attitudes could lead to the same type of success in their own academic experiences as well.

Tutor-student interaction led to differences in many aspects of classroom behavior. There was a significant decrease in the instances of classroom behavior that was disruptive, disrespectful or resistant to the teacher. The enrichment experience also led to an increase in the extent to which students assumed responsibility for themselves and their actions. Students became more aware that success or failure in school is self-determined and not a consequence of external circumstances. This appears to be related to an increase in the degree of ability to make independent decisions and take independent action. In addition, there was a significant increase in attentiveness in the classroom, coupled with a rise in verbal behavior that was relevant and contributed positively to classroom discussion.

The dimensions that were measured consisted of overt problem behaviors that teachers would consider as being relevant to classroom achievement. Although the ratings reported by participating classroom teachers in this study are subjective and possibly confounded with a reactive arrangements effect, it can also be assumed that teachers perceived significant behavioral changes in tutored students as a result of their enrichment experience. This would be consistent with the goals of academic-social enrichment tutoring.

The findings for classroom behavior from this particular study seem to have practical significance considering the importance of personal and interpersonal classroom behavior to a child's overall educational experience. Children with positive personal-social classroom behavior generally tend to have higher achievement levels and greater satisfaction with school. Those students who display socially purposive behavior can better accept self and others. Finding the correlates between classroom behavior ratings at the end of the enrichment experience and posttest self-concept scores in the areas of personal behavior and school performance might have yielded interesting data.

Additional subjective data in the form of teacher and principal opinions regarding the enrichment program indicated that tutoring had a positive effect on the classroom behavior of the student participants.

Since this exploratory study was conducted at the third-, fourth-, fifth- and sixth-grade levels in four elementary schools located in one urban area, findings must be restricted to these schools. Due to the policy and structure of the school system, randomization was not possible. Through matching of subjects between the experimental and control groups, an effort was made to equate the groups. The methods of analysis accounted for the inherent dependency between the matched subjects in experimental and control groups.

A closer look at the non-equivalent control group design used in this study reveals that a possible threat to internal validity is regression. However, since the students in the experimental and control groups were matched on the basis of low achievement and social development, the assumption can be made that both groups will regress at equal rates.

Grade level comparisons were not made in this study. Group comparisons using the members of the third- through sixth-grade experimental and control groups as a whole were conducted. It is possible that these comparisons between groups containing students from different grade levels might have confounded the data. The total number of students in the study at each grade level, though, was too small to have gained interpretable results from the data. The small numbers would have increased the margin for error in any analysis at the grade level.

In order to avert problems with making interpretations of achievement data, which was collected with a measurement device constructed with different levels, growth in reading and mathematics achievement from the beginning to the end of the treatment period was examined by measuring differences in grade equivalents across the various levels of the instrument.

It is also recognized that subject attrition influenced the results of this study. The initial population consisted of 96 subjects, 48 of whom were in the experimental group and 48 in the control group. However, only 70 subjects, 35 in both the

experimental and control groups went through the entire treatment period. Had the experimental and control groups been larger, it is possible that other significant differences might have been determined.

To conclude this discussion of the results of this investigation, the statistical findings suggest that academic-social enrichment tutoring can have a positive effect on the classroom personal and inter-personal behavior of underachieving elementary school students. Although the statistical results for achievement and self-concept were not significant, the subjective data collected from teachers and administrators suggests that an experience of this nature can also influence achievement and self-concept development. These findings, examined as a whole, have practical significance for administrators, counselors, and teachers. It is important for educators to plan for positive cognitive and affective change in students, through the implementation and evaluation of innovative social programs such as the one in question in this present study.

#### Implications and Recommendations

The results of this study and the evidence from the literature appear to imply that further study of enrichment tutoring of this type is merited. Although the statistical trends only supported the research hypothesis relating to classroom behavior, the positive teacher and administrator evaluations in

the area of achievement and self-concept give ample implications for future study.

Next to the family unit, the school probably has the greatest impact on the development of children. Administrators, counselors, and teachers must appreciate the fact that in addition to cognitive development, school experiences should have considerable effect on the personal, inter-personal and social development of students as well. Therefore, in addition to providing the basic academic skill areas, it is the responsibility of schools to focus attention and resources on helping students to acquire skills that will enable them to better understand themselves and others in our increasingly complex society. Specifically, elementary schools should provide children with opportunities to develop the ability to: demonstrate positive feelings about themselves as unique individuals, function successfully as individuals and as a part of a group and demonstrate personal and socially responsible behavior.

As the urban educational system continues to be confronted with challenges, its ability to focus attention and resources on helping students acquire these affective skills becomes severely limited. With respect to this, it is imperative that new strategies and techniques are developed to insure the delivery of important affective services to students. Counselors along with other educators must exploit all possible resources in attempting to promote personal-social, as well as academic growth and development.

The academic-social enrichment program developed for this present study represented such an attempt. The program was a cooperative effort between a major university and an urban school system to enhance the academic and affective performance of elementary school children. It made use of volunteer nonprofessionals as an educational resource that was developed to achieve important academic and social goals with underachieving students.

With respect to the present realities and the future direction of urban education and in light of this present study, the following areas of possible research in the area of development, implementation and evaluation of supplemental academic-social enrichment programs are recommended.

- (1) Replication of this study is desirable to discover if other academic-social enrichment tutors working with similar pupils obtain the same results.
- (2) Replication of the study with larger samples at the four grade levels, or any number of grade levels, is indicated since the possibility of significant results is much more likely with larger groups.
- (3) Replication of the study with a considerably longer period of treatment is desirable to determine if the longer time periods results in improved achievement, self-concept and behavior.
- (4) Replication of the study with larger samples, applied at the junior high and high school levels, is

suggested to determine if enrichment tutoring has similar effects on older children.

- (5) A follow-up study should be undertaken one year after treatment to determine the permanence of achievement, self-concept and behavior gains noted and to determine if other changes have occurred as a result of the treatment.
- (6) Replication of this study with a more extreme sample of underachievers is desirable to determine if the degree of underachievement is a factor which influences the findings.
- (7) Replication of this study with random assignment to experimental and control groups to control for any systematic differences between experimental and control groups.
- (8) A study which involves a measure of change in tutor attitudes toward the helping relationship and their attitudes toward the students they help is desirable.
- (9) Replication of this study with a measure of the overall quality of schoolwork as the instrument to assess academic achievement is desirable.
- (10) A study should be undertaken which employs process, as well as outcome measures to determine if tutoring processes parallel those of classroom teaching.

- (11) Replication of this study with enrichment tutoring taking place during the school day where the process would entail time out from classroom instruction for small group interaction with enrichment tutors to compare these outcomes with those of after-school treatment is desirable.
- (12) A study should be undertaken with populations of underachieving students from varying socio-economic levels and ethnic backgrounds from school systems varying in size and structure to determine the broader generalizability of the results of this investigation.

These suggested areas for future research are attempts to expand the present knowledge base in the area of supplemental academic-social enrichment programs and their academic and affective effects on underachieving students. The availability of such information may help counselors and other educators restructure their programs to more effectively meet the developmental needs of children. Ultimately this line of research could insure better teaching and guidance services in the schools which will help make the educational experience truly meaningful for all students.

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## APPENDICES

## APPENDIX A

### TUTOR TRAINING OUTLINE

## HOMework HELPER PROGRAM - 1978-79

### ACADEMIC-SOCIAL ENRICHMENT TUTOR

#### TRAINING OUTLINE

##### I. TRAINING DESCRIPTION

A review of educational theory and techniques as they relate to the academic and social concerns of underachieving elementary school students in an urban setting. Emphasis will be placed on the development of helping models relevant to the cognitive and affective growth of these students.

##### II. TRAINING OBJECTIVES

1. To gain an understanding of selected aspects of elementary school curriculum as a basis for developing innovative reading and mathematics enhancement approaches, formal and non-formal.
2. To examine aspects of early childhood development theory as they relate to the urban child.
3. To evaluate humanistic education techniques and their importance in self-concept development and positive behavior change.
4. To develop models and strategies for facilitating positive cognitive and affective helping relationships.

##### III. TRAINING OUTLINE

Modules to be covered:

Week 1	Module 1
Week 2	Module 2
Week 3	Module 3
Week 4	Module 4
Week 5	Module 4
Week 6	Module 5
Week 7	Module 6
Week 8	Module 7

##### MODULES

Module 1: Introduction and orientation to the Homework Helper Program:

- 1) overview of program goals, objectives and philosophy
- 2) discussion of tutor requirements

Module 2: Orientation to the elementary school curriculum: This module will be conducted by the Instructional Development Team of the Lansing School District. It will include:

- 1) introduction to the Instructional Management System
- 2) profile of target students

- Module 3: Review of the developmental concerns of the urban elementary school child:
- 1) selected review of child development theories
  - 2) exploration of the urban environment
  - 3) systemic analysis of the contemporary urban elementary school.
- Module 4: Introduction to humanistic education skills development:
- 1) review of the literature on self-concept development
  - 2) exploration of the relationship between self-concept and achievement
  - 3) exploration of self-concept enhancing materials-humanistic education exercises, DUSO materials
- Module 5: Applying humanistic education techniques to the learning process:
- 1) introduction to techniques that incorporate cognitive and affective educational experiences in innovative and non-traditional ways
- Module 6: Development of helping models and techniques:
- 1) introduction to the Systemic Family Model and its relation to the helping process
  - 2) discussion of modeling and the helping process
  - 3) discussion of advocacy in the helping process
  - 4) review of selected problems and challenges related to the academic-social enrichment process
- Module 7: Preparation of academic and affective materials and initial home visits.

The modules will be supplemented by periodic training workshops throughout the school year.

#### IV. REQUIREMENTS

1. Two term commitment to the Homework Helper Program.
2. Attendance at training sessions - sessions will meet Tuesday and Thursday evenings from 7 to 9 p.m.
3. Consistent attendance at academic-social enrichment sessions with assigned students.
4. Parent/Guardian contact - home visits or letters of progress at least once per term.
5. Frequent contact with classroom teachers of assigned students.

## V. ACADEMIC CREDIT

All volunteer academic-social enrichment tutors may register for an Independent Study (ED 483)-Participation in a Community Tutorial Program under Dr. Gloria Smith, 441 Erickson Hall, 355-1751 each term. Credits will be variable.

## APPENDIX B

### SELF-CONCEPT INSTRUMENT

THE WAY I FEEL ABOUT MYSELF

NAME \_\_\_\_\_

AGE \_\_\_\_\_ GRADE \_\_\_\_\_ SCHOOL \_\_\_\_\_

CODE NUMBER \_\_\_\_\_

## THE WAY I FEEL ABOUT MYSELF

- |   |     |    |
|---|-----|----|
| 1. People in my class make fun of me . . . . .        | yes | no |
| 2. I am a happy person . . . . .                      | yes | no |
| 3. It is hard for me to make friends . . . . .        | yes | no |
| 4. I am often sad . . . . .                           | yes | no |
| 5. I am smart . . . . .                               | yes | no |
| 6. I am shy . . . . .                                 | yes | no |
| 7. I get nervous when the teacher calls on me . . .   | yes | no |
| 8. I don't like the way I look . . . . .              | yes | no |
| 9. When I grow up, I will be an important person . .  | yes | no |
| 10. I get worried when I have tests in school . . . . | yes | no |
| 11. I am not popular . . . . .                        | yes | no |
| 12. I am well behaved in school . . . . .             | yes | no |
| 13. It is my fault when something goes wrong . . . .  | yes | no |
| 14. I cause trouble to my family . . . . .            | yes | no |
| 15. I am strong . . . . .                             | yes | no |
| 16. I have good ideas . . . . .                       | yes | no |
| 17. I am an important member of my family . . . . .   | yes | no |
| 18. I usually want my own way . . . . .               | yes | no |
| 19. I am good at making things with my hands . . . .  | yes | no |
| 20. I give up easily . . . . .                        | yes | no |

- |     |  |     |    |
|-----|--|-----|----|
| 21. | I am good in my school work . . . . .                    | yes | no |
| 22. | I do many bad things . . . . .                           | yes | no |
| 23. | I can draw well . . . . .                                | yes | no |
| 24. | I am good in music . . . . .                             | yes | no |
| 25. | I behave badly at home . . . . .                         | yes | no |
| 26. | I am slow in finishing my school work . . . . .          | yes | no |
| 27. | I am an important member of my class . . . . .           | yes | no |
| 28. | I am nervous . . . . .                                   | yes | no |
| 29. | I have pretty eyes . . . . .                             | yes | no |
| 30. | I can give a good report in front of the class . . . . . | yes | no |
| 31. | In school I am a dreamer . . . . .                       | yes | no |
| 32. | I pick on my brother(s) and sister(s) . . . . .          | yes | no |
| 33. | My friends like my ideas . . . . .                       | yes | no |
| 34. | I often get into trouble . . . . .                       | yes | no |
| 35. | I am obedient at home . . . . .                          | yes | no |
| 36. | I am lucky . . . . .                                     | yes | no |
| 37. | I worry a lot . . . . .                                  | yes | no |
| 38. | My parents expect too much of me . . . . .               | yes | no |
| 39. | I like being the way I am . . . . .                      | yes | no |
| 40. | I feel left out of things . . . . .                      | yes | no |

- |   |     |    |
|---|-----|----|
| 41. I have nice hair . . . . .                                | yes | no |
| 42. I often volunteer in school . . . . .                     | yes | no |
| 43. I wish I were different . . . . .                         | yes | no |
| 44. I sleep well at night . . . . .                           | yes | no |
| 45. I hate school . . . . .                                   | yes | no |
| 46. I am among the last to be chosen for games . . . . .      | yes | no |
| 47. I am sick a lot . . . . .                                 | yes | no |
| 48. I am often mean to other people . . . . .                 | yes | no |
| 49. My classmates in school think I have good ideas . . . . . | yes | no |
| 50. I am unhappy . . . . .                                    | yes | no |
| 51. I have many friends . . . . .                             | yes | no |
| 52. I am cheerful . . . . .                                   | yes | no |
| 53. I am dumb about most things . . . . .                     | yes | no |
| 54. I am good looking . . . . .                               | yes | no |
| 55. I have lots of pep . . . . .                              | yes | no |
| 56. I get into a lot of fights . . . . .                      | yes | no |
| 57. I am popular with boys . . . . .                          | yes | no |
| 58. People pick on me . . . . .                               | yes | no |
| 59. My family is disappointed in me . . . . .                 | yes | no |
| 60. I have a pleasant face . . . . .                          | yes | no |

- |     |  |     |    |
|-----|--|-----|----|
| 61. | When I try to make something, everything seems to go wrong . . . . . | yes | no |
| 62. | I am picked on at home . . . . .                                     | yes | no |
| 63. | I am a leader in games and sports . . . . .                          | yes | no |
| 64. | I am clumsy . . . . .  | yes | no |
| 65. | In games and sports, I watch instead of play . . . . .               | yes | no |
| 66. | I forget what I learn . . . . .                                      | yes | no |
| 67. | I am easy to get along with . . . . .                                | yes | no |
| 68. | I lose my temper easily . . . . .                                    | yes | no |
| 69. | I am popular with girls . . . . .                                    | yes | no |
| 70. | I am a good reader . . . . .   | yes | no |
| 71. | I would rather work alone than with a group . . . . .                | yes | no |
| 72. | I like my brother (sister) . . . . .                                 | yes | no |
| 73. | I have a good figure . . . . .                                       | yes | no |
| 74. | I am often afraid . . . . .  | yes | no |
| 75. | I am always dropping or breaking things . . . . .                    | yes | no |
| 76. | I can be trusted . . . . .   | yes | no |
| 77. | I am different from other people . . . . .                           | yes | no |
| 78. | I think bad thoughts . . . . .                                       | yes | no |
| 79. | I cry easily . . . . .   | yes | no |
| 80. | I am a good person . . . . .   | yes | no |

Score: \_\_\_\_\_

## APPENDIX C

### CLASSROOM BEHAVIOR RATING SCALE

Please rate the classroom behavior of \_\_\_\_\_. For each item use the rating scale below. Write your rating (number) for each item in the space to the left of the item number.

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

---

Compared to the average child in your classroom, how often does \_\_\_\_\_

Rating

- \_\_\_\_\_ 1. Start working on something before getting the directions straight?
- \_\_\_\_\_ 2. Say that the teacher doesn't help him/her enough (i.e., won't show him/her how to do things, or answer questions)?
- \_\_\_\_\_ 3. Bring things to class that relate to a current topic (e.g., exhibits, collections, etc.)?
- \_\_\_\_\_ 4. Tell stories or describe things in an interesting and colorful fashion?
- \_\_\_\_\_ 5. Speak disrespectfully to the teacher?
- \_\_\_\_\_ 6. Initiate classroom discussion?
- \_\_\_\_\_ 7. Defy the teacher?
- \_\_\_\_\_ 8. Seek out the teacher before or after class to talk about school or personal matters?
- \_\_\_\_\_ 9. Belittle or make derogatory remarks about the subject being taught (e.g., "spelling is stupid")?
- \_\_\_\_\_ 10. Get the point of what he reads or hears in class?
- \_\_\_\_\_ 11. Have to be reprimanded or controlled by the teacher because of his/her behavior in class?
- \_\_\_\_\_ 12. Poke, torment or tease classmates?
- \_\_\_\_\_ 13. Annoy or interfere with the work of his peers in class?
- \_\_\_\_\_ 14. Tell stories which are exaggerated and untruthful?
- \_\_\_\_\_ 15. Give an answer that has nothing to do with the question being asked?
- \_\_\_\_\_ 16. Break classroom rules?
- \_\_\_\_\_ 17. Interrupt when the teacher is talking?
- \_\_\_\_\_ 18. Quickly lose attention when the teacher explains something to him/her?

- \_\_\_\_ 19. Offer to do things for the teacher?
- \_\_\_\_ 20. Make you doubt whether he/she is paying attention to what you are doing or saying?
- \_\_\_\_ 21. Introduce into class discussion personal experiences or things he/she has heard which relate to what is going on in class?
- \_\_\_\_ 22. Get openly disturbed about scores on a test?
- \_\_\_\_ 23. Show worry or get anxious about knowing the "right" answers?
- \_\_\_\_ 24. Look to see how others are doing something before he/she does it?
- \_\_\_\_ 25. Complain the teacher never calls on him/her?
- \_\_\_\_ 26. Make irrelevant remarks during a classroom discussion?

---

Very Frequently	Often	Occasionally	Rarely	Never
5	4	3	2	1

FOR ITEMS 27 to 47 PLEASE USE THE SCALE BELOW:

Extremely	Distinctly	Quite a bit	Moderately	A little	Very slightly	Not at all
7	6	5	4	3	2	1

---

COMPARED TO THE AVERAGE CHILD IN YOUR CLASSROOM, TO WHAT DEGREE IS \_\_\_\_\_

- \_\_\_\_ 27. Unable to change from one task to another when asked to do so?
- \_\_\_\_ 28. Oblivious to what is going on in class?
- \_\_\_\_ 29. Reliant upon the teacher for directions and to be told how to do things or proceed in class?
- \_\_\_\_ 30. Quickly drawn into the talking or noisemaking of other children?
- \_\_\_\_ 31. Outwardly nervous when a test is given?
- \_\_\_\_ 32. Unable to follow directions given in class?
- \_\_\_\_ 33. Sensitive to criticism about his school work?
- \_\_\_\_ 34. Prone to blame the teacher, the test or external circumstances when things don't go well?
- \_\_\_\_ 35. Able to apply what he/she has learned to a new situation?
- \_\_\_\_ 36. Sloppy in his work?
- \_\_\_\_ 37. Likely to know the material when called upon to recite in class?
- \_\_\_\_ 38. Quick to say work assigned is too hard?

- \_\_\_\_\_39. Responsive or friendly in his relationship with the teacher in class?
- \_\_\_\_\_40. Likely to quit or give up when something is difficult or demands more than usual effort?
- \_\_\_\_\_41. Slow to complete his/her work?
- \_\_\_\_\_42. Swayed by the opinion of his peers?
- \_\_\_\_\_43. Difficult to reach?
- \_\_\_\_\_44. Unwilling to go back over his/her work?
- \_\_\_\_\_45. Like to be close to the teacher?
- \_\_\_\_\_46. Have difficulty deciding what to do when given a choice between two or more things?
- \_\_\_\_\_47. Rush through work and therefore make unnecessary mistakes?

APPENDIX D

TEACHER AND PRINCIPAL EVALUATION FORMS

SCHOOL \_\_\_\_\_

HOMEWORK HELPER PROGRAM  
TEACHER SURVEY

As part of the Emergency School Aid Act Project in the District, your school is participating in the Homework Helper Program. The Homework Helper Program is designed to help students in grades three through six develop study skills by providing assistance with homework assignments and tutorial help in reading, writing and mathematics. We would like to know what you think of the program.

1. How did you find out about the Homework Helper Program?

\_\_\_\_\_ staff meeting \_\_\_\_\_ orientation meeting \_\_\_\_\_ written handout, poster  
\_\_\_\_\_ other, please specify \_\_\_\_\_

2. Did you make any referrals to the program?

\_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, how many of your students actually used the services? \_\_\_\_\_

3. Did the Homework Helper Program assist you in meeting the individual needs of students in your classroom?

\_\_\_\_\_ Yes \_\_\_\_\_ No

Explain: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. As a result of the Homework Helper Program, please indicate the number of students who have shown improvement in the following areas:

Reading skills \_\_\_\_\_

Interpersonal skills \_\_\_\_\_

Math skills \_\_\_\_\_

General quality of schoolwork \_\_\_\_\_

5. Instructional materials used in the Homework Helper Program were

(check all that apply)

\_\_\_\_\_ developed by myself      \_\_\_\_\_ developed by tutors

\_\_\_\_\_ other, please specify \_\_\_\_\_

6. Describe your working relationship with the tutors?

---

---

---

7. How do you rate your relationship with the tutors?

\_\_\_\_\_ Excellent      \_\_\_\_\_ Satisfactory

\_\_\_\_\_ Good      \_\_\_\_\_ Needs improvement

8. Overall, how do you rate the program?

\_\_\_\_\_ Excellent      \_\_\_\_\_ Satisfactory

\_\_\_\_\_ Good      \_\_\_\_\_ Needs improvement

9. If the Homework Helper Program continues next year, what changes or recommendations would you like to make? \_\_\_\_\_

---

---

SCHOOL \_\_\_\_\_

# HOMEWORK HELPER PROGRAM PRINCIPAL SURVEY

As part of the Emergency School Aid Act Project in the District, your school is participating in the Homework Helper Program. The Homework Helper Program is designed to help students in grades three through six develop study skills by providing assistance with homework assignments and tutorial help in reading, writing and mathematics. We would like to know what you think of the program.

1. As an administrator do you feel the Homework Helper Program was beneficial to your total school program?

\_\_\_\_\_ Yes      \_\_\_\_\_ No

If yes, in what way(s) was it beneficial:

\_\_\_\_\_ Assisted teachers in identifying student needs

\_\_\_\_\_ Students reflected more positive behavior

\_\_\_\_\_ Enhanced students' satisfaction with school

Other \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. If you answered no to the above question, what would you suggest be done to improve the situation?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Your working relationship with the M.S.U. supervisors were: (check the most descriptive phrases)

Feedback: \_\_\_\_\_ Timely/Informative      \_\_\_\_\_ Non-Informative

Contacts: \_\_\_\_\_ Frequent      \_\_\_\_\_ Infrequent

\_\_\_\_\_ Cooperative      \_\_\_\_\_ Uncooperative

\_\_\_\_\_ Dependable      \_\_\_\_\_ Undependable

Comment: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

4. If this/these relationship(s) were not good, how could it be improved?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. The most noteworthy aspects of the Homework Helper Program were: (Explain)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Since you have participated in the Homework Helper Program (basic, interpersonal skills) during the past year, what would you suggest for future program improvement?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. As an administrator, would you like to have the program continued in your building next year?

\_\_\_\_\_ Yes          \_\_\_\_\_ No

If no, why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX E

HOMEWORK HELPER PROGRAM  
ADMINISTRATIVE CORRESPONDENCE  
AND FORMS

HOMEWORK HELPER PROGRAM  
STUDENT REGISTRATION FORM

CODE NUMBER:

STUDENT NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_

HOME PHONE # \_\_\_\_\_ SCHOOL & TELEPHONE # \_\_\_\_\_

TEACHER \_\_\_\_\_ GRADE \_\_\_\_\_ TUTOR \_\_\_\_\_

PARENT/GUARDIAN \_\_\_\_\_

-----

REMARKS:

HOMEWORK HELPER PROGRAM  
TUTOR-TEACHER INFORMATION SHEET

Student Name \_\_\_\_\_

School \_\_\_\_\_

Grade \_\_\_\_\_

Teacher \_\_\_\_\_

Tutor \_\_\_\_\_

Reading:  
Areas Covered -

Math:  
Areas Covered -

Affective Domain:  
Areas Covered -

Parental Contact:

Attendance: \_\_\_\_\_ Days Absent

Please indicate any areas that you would like me to concentrate on  
with \_\_\_\_\_.

Reading:

Math:

Affective Domain:

Additional Teacher Comments:

Dear Parents,

You have expressed an interest in having your child participate in the Homework Helper Program. The Homework Helper Program is an after school academic-social enrichment program that is being conducted by the ESAA Programs of the Lansing School District in conjunction with the Urban Counseling Program of the College of Education at Michigan State University.

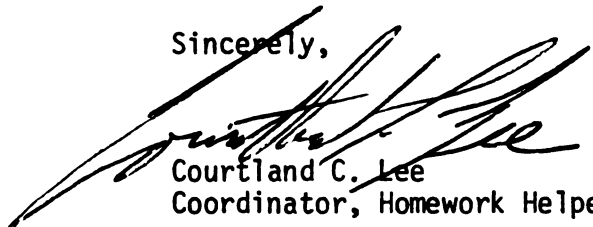
The Homework Helper Program is designed to offer students help in improving reading and math skills. In addition, the children will be given assistance in developing good study skills and participating in recreational activities.

This program will operate on \_\_\_\_\_ afternoons from \_\_\_\_\_ at \_\_\_\_\_. Bus transportation will be provided at the end of the program for those children who need it.

Please sign the permission slip below and return it to school with your child.

If you have any questions, please contact me at 355-1751.

Sincerely,



Courtland C. Lee  
Coordinator, Homework Helper Program

---

I give my permission for my child to participate in the Homework Helper Program.

---

Parent or Guardian

May 29, 1979

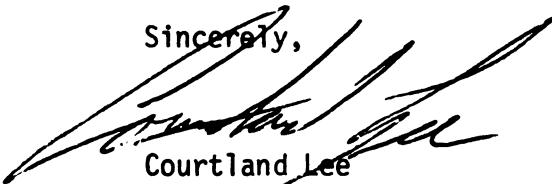
Dear Parents,

The Homework Helper Program will end for the school year on  
\_\_\_\_\_.

I would like to express our pleasure at having had the opportunity to work with your child this year. We look forward to working with your child again next year.

Have a nice summer.

Sincerely,

A handwritten signature in black ink, appearing to read "Courtland Lee", written over a horizontal line.

Courtland Lee  
Coordinator, Homework Helper Program

On behalf of the Urban Counseling Mental Health Program and the College of Education, I would like to commend you for your volunteer service to the Homework Helper Program.

Through your efforts as an academic-social enrichment tutor, the children involved in the program have received a much needed educational experience from which they have gained both academically and socially.

Your commitment and dedication to children has had a positive impact on the university, the Lansing School District and the Lansing community as a whole.

As we survey the problems and challenges of urban life, it is encouraging to know that there are young people such as yourself ready to offer assistance to address these concerns.

Again, let me extend my sincere thanks for a job well done and wish you continued success in the future.

Sincerely,



Dr. Gloria S. Smith  
Director, Urban Counseling  
Mental Health Program

GSS/jl  
Enclosures

cc: Ms. Joanne Conner  
Mr. Courtland Lee