

A REVIEW AND ANALYSIS OF PEER TUTORING:
IMPLICATIONS FOR EDUCATION

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ABSTRACT

Jody Lee-Lampe

The purpose of this study was to survey the practices and attitudes of area schools regarding cross-age and same-age peer tutoring. A review of literature included the determination of variables necessary for the establishment, content development, and structure of tutorial programs. The effectiveness of peer tutoring was determined by reviewing studies involving peer tutorial instruction. Responses to the survey were used to determine the status and extent of peer tutoring in area schools. An examination was made regarding the procedures employed in establishing, developing, and structuring programs, the attitudes of respondents to peer tutoring effectiveness, and the importance of certain variables in promoting successful programs. Results of both the review of literature and the survey appeared to support the efficacy of peer tutoring for improving education through: increased individualization of instruction; the promotion of academic achievement; and the enhancement of peer relationships and appropriate social behaviors.

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CHAPTER I
INTRODUCTION

Peer tutoring is defined as children teaching other children, usually on a one-to-one basis (Ehly & Larsen, 1980). The term "peer tutoring" has been used to describe situations in which a person, adult or child, provides instructional assistance and guidance to another person (Cohen, Kirk, & Dickson, 1972). For the purposes of this paper, peer tutoring will refer to those instances in which elementary through secondary students tutor other children.

The two types of peer tutoring arrangements available in the schools include cross-age and same-age tutoring. Cross-age tutoring refers to situations in which older students teach younger students, while same-age tutoring refers to those instances in which students teach other students of similar ages (Ehly & Larsen, 1980; Krouse, Gerber, & Kauffman, 1981). The term "peer tutoring" may be used to describe both cross-age and same-age tutoring arrangements. Within each peer tutoring arrangement there must be a tutor and a tutee. The tutor is the student who does the teaching, while the tutee is the student receiving the instruction (Ehly & Larsen, 1980; Feldman, Devin-Sheehan, & Allen, 1976; Hendrickson, 1981).

Although increasing attention has been given during the past few years to the effectiveness of peer tutoring, the use of children to teach other children is by no means a recent innovation (Allen, 1976). As early as the first century A.D., Quintilian, a Roman rhetorician, proposed the idea of using older children to instruct younger children (Krouse et al., 1981). Spanish Jesuits, by the beginning of the seventeenth century, developed a formal tutorial system in which one student monitor taught ten other students (Paollito, 1976). However, it was not until the late eighteenth and early nineteenth centuries that peer tutoring techniques attained widespread popularity and application (Krouse et al., 1981).

Early in the nineteenth century the Bell-Lancaster system of peer tutoring became the object of public attention, particularly in British schools. This system, based upon the use of children as teachers of other children, was first introduced by Andrew Bell while superintendent of an orphanage for boys in Madras, India. Bell, frustrated in his own efforts to teach the students, devised a system whereby the older children taught the younger children (Allen, 1976). Bell in 1797 noted:

By these means a few good boys, selected for the purpose, as teachers of the respective classes, form the whole school, teach their pupils to think rightly, and mixing in all the little amusements and diversions, secure them against the contagion of ill example, or the force of ill habits; and, by seeing that they treat one another kindly, render their condition contented and happy.

Not only did this system appear to be successful as a means of providing elementary instruction, but it also brought about a marked improvement in the behavior of the students (Allen, 1976).

During this same period, Joseph Lancaster (1806) adapted the ideas of Bell and proposed the "monitoring system". Under this system, which was based upon economic rather than educational considerations, children were highly successful in teaching other children (Ehly & Larsen, 1980).

Lancaster also asserted that by using this system up to 1000 students could be taught by only one teacher. This required a great deal of order and maintenance. Teaching, conducted with great precision, involved first drilling older children in the lesson. This was followed by the older children teaching groups of younger children, who in turn might drill still younger children. By this "ripple effect" the efforts of a single teacher could be greatly increased (Allen, 1976).

Fowle (1866), utilizing the monitorial approach, provided the educational theory to support peer tutorial practices. He proposed a teaching style labeled as "learner-focused". Fowle believed that children as tutors were not only better able to learn materials, but also capable of communicating more effectively to other students. He believed that children can be better teachers than adults because they are more likely to work democratically with their partners and to consider their partner's feelings and capacities (Allen, 1976).

The systems of Bell, Lancaster, and Fowle were adopted by American educators, especially during the days when one teacher was often hired to work with the children of an entire town or settlement. The benefits of the teacher's reliance on certain students to teach other students were maximized by the unlimited opportunities for interaction among children of diverse ages, both academically and socially, within the one-room school (Ehly & Larsen, 1980).

During the late 1800's educators gradually lost interest in the peer tutoring system (Krouse et al., 1981). Allen (1976) suggested that this was due to: (a) the generally low standard of teaching by peers; (b) the lack of appropriate training of teachers to use the system; (c) the rise of professionalism among teachers who considered extensive training necessary

for effective instruction; and (d) the increased funds provided to public education.

During the 1960's, however, interest in peer tutorial instruction was once again aroused in America. Conditions which appeared to have reinforced this interest were: (a) the belief that the predicted teacher shortage could be prevented by providing early teaching experiences to children who might later enter the teaching profession; (b) the demands placed on education to try more innovative approaches; and (c) the notion that using children as teachers represented a time and cost effective means of individualizing programs (Krouse et al., 1981).

In the past few years, investigators have begun to more closely examine the variables that affect the outcomes of peer tutoring for both the tutor and the tutee (Feldman et al., 1976; Krouse et al., 1981). The purpose of this study is to review the recent literature and to survey the current practices and attitudes regarding peer tutoring within area schools. The review of literature will involve examination of the critical variables necessary for the successful implementation of a peer tutoring program. The questions addressed by the survey will be used as a means for discovering whether or not area schools currently have peer tutoring programs, what their practices are in regard to setting up and maintaining programs, whether or not peer tutoring is viewed as an effective means for increasing the academic and social growth of both tutors and tutees, what the important variables are for an effective program, and whether or not teachers are interested in having peer tutoring programs if they currently do not have them in their schools.

CHAPTER II

REVIEW OF LITERATURE

Attention must be given to a multitude of factors when planning, implementing, and evaluating a peer tutoring program. Philosophies, goals, objectives, facilities, materials, characteristics of participants, and administrative considerations are among the factors that appear to influence program design (Krouse et al., 1981; Lippitt, 1976). The purpose of this review is to examine the recent literature to determine the variables which are necessary for establishing, developing content, and structuring a peer tutoring program. In addition, the effects of many of these variables on peer tutoring outcomes will be examined.

Rationale for Peer Tutoring

As a result of increasing demands on the professional teacher and because educators are becoming more responsive to student needs for individualized instruction, paraprofessional teacher aides, parents, and college students have been used increasingly to supplement the public school teaching staff (Davis, 1972). Another source of readily available help for teachers is other students who are willing, able, or trained to assist in the teaching of children with various needs (Endsley, 1980; Surratt, Ulrich, & Hawkins, 1969).

The rationale for peer tutoring is based on a number of studies which have demonstrated the effectiveness of using one student to teach another student (Boettcher, 1978; Graves, 1977; Harris, McDonald, & Siebenman, 1977; Heron, Heward, Cooke, & Hill, 1983; Schine, 1981; Sherbenou & McGuigan,

1979). Peer tutoring serves as a challenge to teachers to utilize time more effectively in meeting the individual needs of children (Jenkins & Jenkins, 1981). Both younger and older children can profit from increased special attention to their particular needs (Lippitt, 1976).

Programs involving peer tutoring have been conducted with almost every possible combination of cross-grade and age pairings and with a number of variations of other factors including sex, racial and ethnic background, socioeconomic level, and behavioral and intellectual characteristics (Ehly & Larsen, 1980; Krouse et al., 1981). Studies involving elementary through secondary students have indicated a range in age of participants from kindergarten (Sherbenou & McGuigan, 1979) through twelfth grade (Cloward, 1976; Graves, 1977). Although the predominant belief appears to be that same-sex pairs facilitate tutoring more than opposite-sex pairs, there has been little empirical data to support such an assertion (Feldman et al., 1976). Results of a study by Klentschy (1972) indicated that increases in reading skills were not affected by whether the tutee was tutored by a male or a female and that same-sex pairings did not necessarily enhance the benefits derived from tutoring.

Socioeconomic, racial, and cultural factors have been suggested as relevant variables to consider when implementing a peer tutoring program, however, little systematic research has been conducted in relation to these variables (Krouse et al., 1981). Although the literature on tutoring includes white, middle-class children as subjects predominantly, it is evident from a number of studies that other racial and social class groups have demonstrated significant academic improvement when serving as both tutors and tutees (Feldman et al., 1976). In several studies blacks tutored by blacks showed significant improvement (Brown, 1972; Coker, 1969; Holliday & Edwards, 1978). In a study by Lakin (1972), Mexican-American and

Anglo-American students served as tutors for Head Start children and both groups showed significant gains. Akigbe (1975) successfully used bilingual Spanish and Korean-speaking students to tutor their bilingual peers in regular academic assignments. Lower-class or disadvantaged children tutored by other lower-class persons also appear to have benefited as a result of tutoring (Hamblin & Hamblin, 1972).

Children with learning disabilities, mental retardation, behavior disorders, and sensory handicaps appear to share one common characteristic in that they often acquire basic academic and social skills at a slower rate than do their nonhandicapped peers (Jenkins & Jenkins, 1981). Several studies have demonstrated the effectiveness of including students with mild to severe handicaps as participants in peer tutoring programs. Successful tutoring programs have included tutors who were learning disabled (Epstein, 1978), mentally retarded (Almond, Rodgers, & Krug, 1979; Wagner & Sternlicht, 1975) and behavior disordered (Jorgensen, 1978; McCarty, Griffin, Apolloni, & Shores, 1977). Characteristics of tutees have been similarly diverse. Behaviorally disordered children (Jorgensen, 1978; Lazerson, 1980; Strain, Cooke, & Apolloni, 1976), mentally retarded children (McCarthy & Stodden, 1979; Wagner & Sternlicht, 1975), and learning disabled children (Blackburn, Candler, & Sowell, 1978; Epstein, 1978; Haisley, Tell, & Andrews, 1981) have benefited from being tutored by other children.

The rationale for peer tutoring extends beyond the belief that it is a viable means of accommodating a wide variety of individual differences. Peer tutoring is believed to promote individualized instruction (Jenkins & Jenkins, 1981), to promote friendships and positive social behaviors (Argyle, 1976; Sarbin, 1976; Schine, 1981), to increase academic performances (Ehly & Larsen, 1980), to increase opportunities for academic

response (Greenwood, Delquadri, & Hall, 1982), and to be cost efficient (Jenkins & Jenkins, 1981; Lippitt, 1976).

Establishing a Peer Tutoring Program

The first important element of an effective peer tutoring program includes staff members who have the skills to implement the program and who are willing and dedicated to making it successful. Members of the staff should include a supportive administrator, volunteer teachers who either desire student help or who have students who might be allowed to help, and someone to conduct training sessions for the student tutors. The program leader may be a counselor, principal, school social worker, special educator, classroom teacher, reading specialist, or any other interested person (Lippitt, 1976).

Good tutoring programs depend on careful and detailed planning before making any substantive changes in the school's operating procedures (Melaragno, 1976). Once the decision is made to initiate or establish a peer tutoring program either in the classroom or the entire school, there are several key considerations that need to be taken into account. These include the establishment of goals, the selection of tutees, the selection of tutors, the training of tutors, and the criteria to be used for matching or pairing tutors and tutees (Ehly & Larsen, 1980).

Establishing Goals

The goals that are established for a peer tutoring program may be the same regardless of whether only a few students are selected to participate or a schoolwide program is being considered. In general, the teacher or implementor will need to determine the broad categories of academic and

social-emotional development most appropriate to the tutors and the children being tutored (Endsley, 1980; Ehly & Larsen, 1980).

Goals for the tutee. The development of goals for children who will be tutored may occur both before and after the tutees have been selected. Pre-selection goals are based on the broader program goals and philosophy, while post-selection goals are more specific to the individual needs of each tutee. Goals for children being tutored may be academic or social in nature (Ehly & Larsen, 1980).

Academic or instructional goals may include increased achievement in a variety of subjects or content areas. Increased reading performance was often identified as a primary goal for many students being tutored (Boettcher, 1978; Graves, 1977; Heron et al., 1983; Isaacs & Stennett, 1979a; Isaacs & Stennett, 1979b; Jason & Frasure, 1979). Other studies identified the use of peer tutoring to increase academic achievement of tutees in the areas of spelling (Harris, Sherman, Henderson, & Harris, 1972), mathematics (Hendrickson, 1981; Jorgensen, 1978), social studies (Paul, Turnbull, & Cruickshank, 1977; Sapon-Shevin, 1978), and science (Schine, 1981).

In addition to goals in the regular content areas, some programs have been developed in relation to the unique needs of a particular school or population. Akigbe (1975) established a peer tutoring program based on the goal of helping non-English-speaking high school students in their regular academic assignments. Peer tutoring was also used as a means of effectively teaching younger students in the techniques of dental hygiene (Cone, Crawford, & Sayad, 1980). Asselin and Vasa (1981) and Wilcox and Bellamy (1982) advocated the use of peer tutoring for instructing handicapped students in community and vocational preparation programs.

Certain instructional benefits for tutees have also been identified as supplementary goals for peer tutoring programs. Peer tutoring situations may be used as a means of providing tutees with opportunities to receive increased individual attention (Asselin & Vasa, 1981; Greenwood et al., 1982; Hart, 1981; Jason, Ferone, & Soucy, 1978) and more immediate and frequent feedback (Ehly & Larsen, 1980; Jason et al., 1978; Lippitt, 1976).

Behavioral or social and emotional goals for tutees have included general objectives such as helping tutees with social difficulties (Jason et al., 1978) or providing meaningful experiences to those being tutored (Mason, 1979). More specific goals have included remaining on task (Haisley et al., 1981) and sitting quietly, completing work, or improving behaviors through the emulation of peer role models (Ehly & Larsen, 1980). Increasing self-concepts and developing self-confidence have also been identified as goals for tutees in some programs (Ehly & Larsen, 1980; Hendrickson, 1981; Lippitt, 1976). Other social goals have included altering negative attitudes of tutees towards school and learning (Hendrickson, 1981) and improving the way students in the classroom or school relate to each other (Jorgensen, 1978; Schine, 1981).

Goals for the tutor. Selecting goals for tutors in a tutorial program may also occur before tutors are selected, according to the philosophy of the program, and after tutors are selected, based on the specific needs of each student. The goals generally provide a broad focus that relates to both academic instruction and social-emotional behavior (Ehly & Larsen, 1980).

Academic or instructional goals for the tutor have included motivating the unmotivated learner or providing a boost for instructional performance in the content areas. Goals have also included developing more positive attitudes towards learning and developing better learning habits through

teaching (Allen & Feldman, 1976; Hendrickson, 1981; Jenkins & Jenkins, 1981).

Social and emotional goals for tutors have involved developing better listening skills (Ehly & Larsen, 1980), serving as positive role models (Mason, 1979), promoting self-confidence (Asselin & Vasa, 1981; Hendrickson, 1981), and creating a positive awareness and acceptance of others (Ehly & Larsen, 1980; Jorgensen, 1978). Peer tutoring has also been used as a means of increasing nonhandicapped tutors' social acceptances of their mainstreamed educable mentally retarded peers (Gajar, Sindelar, Mascitelli, & Collins, 1980).

While the social and academic goals may vary according to the individual child and specific program, there is one goal which appears to be common to almost all tutorial programs. This goal is to prepare tutors so that they will become competent teachers of their peers (Ehly & Larsen, 1980; Graves, 1977; Jason et al., 1978; Jorgensen, 1978).

Selecting Tutees

Often the goals established for peer tutoring programs determine the criteria by which tutees are selected. If the overall goals include academic or social and emotional development, then selection should include students with these needs (Ehly & Larsen, 1980).

Students in need of remediation have often been selected on the basis of teacher recommendations (Earl, Stennett, & Tomlinson, 1980; Isaacs & Stennett, 1979b). However, Harris, McDonald, & Siebenman (1977) and Schine (1981) stated that in some situations students may volunteer to be tutored by their peers. Referrals have also been based on a variety of sources including standardized test results, homework assignments, teacher-made test

results, and classroom performance (Endsley, 1980). At times program directors have limited their selection of tutees to only those who qualified according to their performances on tests such as the Spache Diagnostic Reading Scale (Graves, 1977) or the Woodcock Reading Mastery Test (Earl et al., 1980). According to Blackburn et al., (1978) some students have been selected to receive extra assistance because of extended periods of absence from school.

Students have also been selected to receive tutorial instruction on the basis of identified exceptional educational needs in the areas of academic or social and emotional development. Tutee selection has included students who were underachievers in certain content areas (Boettcher, 1978; Graves, 1977; Harris, McDonald, & Siebenman, 1977), learning disabled (Blackburn et al., 1978; Epstein, 1978; Haisley et al., 1981), behaviorally disordered (Jorgensen, 1978; Lazerson, 1980; Strain et al., 1976), and mildly to severely mentally retarded (Gajar et al., 1980; McCarthy & Stodden, 1979; Sherbenou & McGuigan, 1979; Wagner & Sternlicht, 1975). According to Almond, Rodgers, and Krug (1979), autistic children have also been selected to receive peer tutorial instruction.

While students selected to be tutored may be from any sex, grade level, socioeconomic level, racial, or ethnic background (Ehly & Larsen, 1980, Feldman et al., 1976), Ehly & Larsen (1980) recommended two factors for consideration before selecting students to receive tutoring. The first is concerned with the potential of the student to exhibit a change in his or her academic performance. The best tutees are students who are aware of their need for help (Blackburn et al., 1978). However, while there is no guarantee that a student will be receptive to tutoring or evidence gains academically, the program director should not limit the selection based only on learning capacities. Even students with severe learning handicaps

have demonstrated some success through peer tutoring (Almond et al., 1979; McCarthy & Stodden, 1979).

The second factor stated by Ehly and Larsen (1980) is concerned with students' behaviors and attitudes and beliefs about themselves. While there is no guarantee that the tutoring relationship will improve the tutee's behaviors or increase his or her self-confidence, the potential benefits may far outweigh the risks. According to Asselin and Vasa (1981), success through peer tutoring may be responsible for reinforcing the positive self-concepts of tutees.

When selecting tutees, the final decision depends on the program director's belief that the student can benefit from the peer tutoring and that the tutor will be able to handle him or her without constant teacher supervision (Ehly & Larsen, 1980). The tutee's willingness to accept help or desire to participate may be more important than the level at which the tutee is working or the severity of his or her learning problem (Blackburn et al., 1978; Laycock, 1980).

Selecting Tutors

Guidelines for the selection of tutors may vary considerably from program to program. While some program directors have provided limited specifications (Isaacs & Stennett, 1979b), others have established strict criteria for the selection of peer tutors (Akigbe, 1975).

Almost every student can potentially serve as a tutor. Tutors have included all students who volunteered or signed up (Laycock, 1980; Medway & Lowe, 1980), students who excelled in their schoolwork, students who were well-behaved, but had some academic weaknesses, or students who met the criteria for the tutor role in a particular program (Ehly & Larsen, 1980).

In several cases peer tutors were selected on the basis of teacher or administrator recommendation (Asselin & Vasa, 1981; Gajar et al., 1980) or intellectual ability and achievement test results (Gardner, 1978).

Blackburn, Candler, and Sowell (1978) reported, however, that it is not necessary to limit tutors to only those who are excellent students. The diligent student who is well-liked may qualify as a potential tutor even though he may have learning problems. An enthusiastic "C" student may have a better attitude toward tutoring than a "hot shot" student with all "A's", according to Jason and Frasure (1979).

Akigbe (1975) proposed strict criteria for the selection of students to serve as tutors for English as a Second Language (ESL) students at the junior high school level. Only students of high academic standing and who possessed a high level of maturity were selected. Student tutors were also to be bilingual, in the eighth or ninth grade, and well adjusted socially. Tutor selection was based on observations kept on the progress of former ESL students, honor roll and cumulative records, and teacher, counselor, or former tutor recommendations. Recruitment was further enhanced through discussions in regular English classes by the ESL coordinator, support of English teachers through informative discussions on the importance of being bilingual, and notices in the daily student bulletin.

While some programs are restrictive in the selection of peer tutors, it appears that variables such as age (Linton, 1973), sex (Klentschy, 1971), achievement level (Hendrickson, 1981), and racial and socioeconomic backgrounds (Brown, 1972; Lakin, 1972) need not be overemphasized. According to Jenkins and Jenkins (1981), the crucial factors in tutor selection relate to the tutors' personal characteristics.

According to Endsley (1980), the selection of tutors often depends on the possession of certain personality characteristics such as dependability,

understanding, and patience. In addition, program organizers normally seek children who are responsible, sensitive, and caring, or children who appear likely to develop these characteristics (Jenkins & Jenkins, 1981).

Blackburn, Candler, & Sowell (1978) stated that behavior is a prime factor for consideration in selecting students to serve as tutors. The teacher or director should select students who are able to follow directions in unsupervised settings and who relate well to other students. Asselin and Vasa (1981) recommended that tutors should be interested, enthusiastic, poised, courteous, adaptable, thorough and accurate, in addition to having clear, distinct speech, positive attitudes, and respect for others.

It is important to keep in mind that almost every student can potentially serve as a tutor if given training and supervision that focuses on the specific needs of the learner in the tutoring arrangement. However, caution should be exercised in regard to selecting the child who cannot carry out demands, is immature, acts out in a destructive manner, or who disregards the needs of others (Ehly & Larsen, 1980). Teacher judgments, based on students' past interactions with peers and demonstrated abilities to assume responsibility, appear to be the best forms of selection of appropriate tutors (Asselin & Vasa, 1981).

Training Tutors

The amount and nature of tutor training may vary with the teacher or program director, the tutor, and the requirements of the tutorial program. The program goals and considerations for time, space, and materials available may essentially determine the extent of the training. While some have felt that only minimal training is necessary because students are natural teachers, other program directors have utilized extensive training

procedures in both learning content and social skill development (Ehly & Larsen, 1980).

According to Krouse, Gerber, and Kauffman (1981), the nature and extent of tutor training should be directly related to both the goals of the program and the complexity of the task the tutor is to perform. Training procedures may vary along a continuum from completely unstructured to highly structured.

Unstructured training. At times teachers have simply instructed children to arrange themselves in small groups and help each other on a prescribed task. In a study by Harris, Sherman, Henderson, and Harris (1972), students were given a list of spelling words ten minutes prior to a test. The teacher simply told the students to arrange themselves in groups of from two to four and to tutor each other on the words.

On-the-job training has also been used as a means of preparing tutors. In these types of situations the teacher simply demonstrated the lesson while the tutors watched, explained how the drill should be performed, and then observed the groups as they taught (Akigbe, 1975; Jorgensen, 1978).

According to Von Harrison (1976), many educators continue to believe that tutoring is an informal interaction between tutor and tutee in which skills or information are transferred. It is expected that a tutor will automatically use effective instructional procedures without training. However, an increasing amount of evidence has indicated that untrained nonprofessional tutors do not use sound instructional techniques (Lippitt, 1976; Niedermeyer, 1970, 1976). In a study by Niedermeyer (1970), it was found that only trained tutors exhibited characteristics considered to be desirable for good instruction, such as maintaining rapport and providing unambiguous directions. Untrained tutors never offered verbal praise to their tutees and seldom engaged in noninstructional, friendly conversation.

In addition, untrained tutors confirmed correct responses only half the time. According to Niedermeyer (1976), if it is desirable for tutors to handle correct and incorrect responses appropriately and to maintain positive, friendly rapport with their learners, they need to receive training.

Structured training. According to Von Harrison and Guymon (1980), tutoring alone does not benefit students in most instances. However, it has been demonstrated that if training is approached in a highly structured way, students can profit a great deal from tutoring. Structured training procedures involve teaching tutors to use general tutoring techniques, material specific techniques, task specific techniques, and record keeping.

Training in the use of general tutoring techniques may involve teaching students to establish and maintain rapport with the tutees, to employ positive contingencies, to provide feedback and strategies for correcting responses, to give special recognition for achievement, and to be goal and success oriented (Von Harrison & Guymon, 1980). Cone, Crawford, and Sayad (1980) stated that training should concentrate on the relationship between the tutor and tutee, rather than the method of tutoring, since the rapport between students is critical if the tutee is to model the tutor.

Several studies have indicated the need for training tutors in developing rapport, using positive reinforcement, and providing feedback for correct and incorrect responses (Almond et al., 1979; Asselin & Vasa, 1981; Cone et al., 1980; Davis, 1972; Jason & Frasure, 1979). The teaching of these strategies has included instructions and prompting (Jason et al., 1978; Jason & Frasure, 1979), modeling of correct procedures (Davis, 1972), and role playing by the tutors (Almond et al., 1979; Heron & Harris, 1982). In a study by Jason and Frasure (1979), the use of prompting to increase tutors' skills in praising, providing corrective feedback, and re-presenting

questions was investigated. Results indicated that all three behaviors increased after prompting.

In addition to the general procedures and tutoring techniques, the tutor must also be trained in procedures which are determined by the nature of the instructional materials (Von Harrison & Guymon, 1980). In some cases training in the use of materials has simply consisted of instructing the tutors to become familiar with the materials that are available (Haisley et al., 1981). In other situations, tutors were trained to use specific types of programmed materials (Boettcher, 1978; Gajar et al., 1980; Graves, 1977) or materials made by teachers or students (Heron & Harris, 1982; Heron et al., 1983). Training in the use of materials has also included an orientation to audio-visual equipment (Asselin & Vasa, 1981). In general, the more structured the instructional materials, including the specificity of the dialogue which is actually used by the tutor, the less training in the use of materials is required of the tutor (Von Harrison & Guymon, 1980).

Task specific techniques, according to Endsley (1980) and Von Harrison and Guymon (1980), relate to the actual presentation of instruction by tutors. Techniques for training tutors in the presentation of tasks may include the use of task analysis. According to Haisley et al. (1981), this method involved training tutors to break assignments down into logical sequences of steps and to teach the tasks to the tutees one step at a time. Training in the use of other task specific techniques has involved teaching students how to prepare lessons and how to present specific skills such as word blending and sight word reading (Heron et al., 1983; Sherbenou & McGuigan, 1979).

Training in the preparation of lesson plans was supported in the tutor training handbooks published by the United States Department of Health, Education, and Welfare (1974). According to the Tutor-Trainers' Resource

Handbook, tutors should be provided with simulation exercises when learning how to prepare lessons. As a result of the training, the tutor should understand why a particular objective was selected, what the lesson attempts to teach, what prerequisite skills the tutee must have in order to complete the exercise, how to prepare the material, what instructions to provide before presenting the activity, where to find other activities to reinforce the skill, and how to reinforce performance and evaluate the lesson (U.S. Department of Health, Education, and Welfare, 1974). According to Von Harrison and Guymon (1980), the use of highly structured materials such as pre-planned lessons may reduce the amount of training necessary, while nonspecific or unstructured materials with little direction may increase the amount of training needed by tutors for task presentation.

Tutor training must also include teaching students to keep accurate records of the progress made during tutoring sessions (Earl et al., 1980). Through the maintenance of accurate records, the nature and rate of the student's progress can be analyzed over time, the assurance of mastery and directed review can be facilitated, and an alternate tutor can efficiently substitute if the regular tutor is absent (Von Harrison & Guymon, 1980). Training tutors to keep records has involved explanation and practice in determining and evaluating student progress and in filling out the specific forms required by the program director (Asselin & Vasa, 1981; Heron et al., 1983).

Tutor training may involve relatively few sessions (McCarthy & Stodden, 1979) or several sessions over a prolonged period of time (Graves, 1977). Training may take place during free periods or the noon hour (Akigbe, 1975), after school (Mason, 1979), or on weekends (Schine, 1981). While often times the training procedures are devised by the director of a particular program, programmed materials and training guidelines have been used to

facilitate the training process (Davis, 1972; Graves, 1977; Harris, McDonald, & Siebenman, 1977). Several publishers have provided materials and handbooks for establishing peer tutoring programs and training tutors (see Appendix A).

While training procedures may vary from completely unstructured to highly structured, there appears to be a cost-benefit trade-off in that the more extensive the training procedures, the more likely that training will result in the development of generalizable skills (Krouse et al., 1981). The organization of training procedures will ultimately be determined by the individual school and program director, however, it is important that the procedures reflect the program objectives (Asselin & Vasa, 1981).

Pairing Tutors and Tutees

A number of variables have been examined in an attempt to facilitate the optimum tutor-tutee match. Among these variables are: tutor and tutee age differences; same versus opposite sex pairings; socioeconomic, racial, and cultural factors; and personal characteristics of the tutor and tutee (Krouse et al., 1981).

There are instructional merits for both cross-age and same-age tutoring arrangements (Hendrickson, 1981). It appears, however, that the majority of studies involving peer tutoring have used older children to tutor younger children (Cone et al., 1980; Davis, 1972; Graves, 1977; Isaacs & Stennett, 1979b; Jorgensen, 1978). These cross-age programs have been based on the assumptions that older children can provide younger children with appropriate role models, older children often benefit from the tutoring experience, and older children can effectively teach skills that require more time than the teacher has available (Lippitt, 1976).

While these assumptions may be valid, they may also be applicable to the tutor-tutee relationship in same-age tutoring. Several studies have demonstrated the effectiveness of pairing students of approximately the same age (Hendrickson, 1981; Jason & Ferone, 1978; Jason & Frasure, 1979). Hendrickson (1981) stated that often students perceived as capable for tutoring are not available. Children of approximately the same age with similar skill levels are most obtainable for special educators and remedial teachers who have high concentrations of low-achievers in need of individualized instruction.

Research in the area of same or opposite sex pairings between tutors and tutees is inconclusive (Krouse et al., 1981). Often investigators do not even mention the sex of the participants (Epstein, 1978). As Devin-Sheehan et al. (1976) concluded, there is little support in the literature for the superiority of either same sex or opposite sex pairings of tutors and tutees.

There appears to have been little systematic research conducted on racial and socioeconomic factors associated with tutoring (Devin-Sheehan et al., 1976). Racial and social class groups, other than the predominantly used white, middle-class children, have produced significant improvement when tutoring children of the same race and status (Brown, 1972; Hamblin & Hamblin, 1972). Studies on the effects of same socioeconomic or racial and ethnic grouping versus different socioeconomic or racial and ethnic grouping have not evidenced the significance of one grouping over the other (Ehly & Larsen, 1980).

There has been a great deal of evidence to suggest that children with a variety of personal characteristics may be paired together in the tutorial process (Feldman et al., 1976). Several studies have not indicated any guidelines to be used in matching tutors and tutees (Earl et al., 1980;

Isaacs & Stennett, 1979a, 1979b; Schine, 1981). Other studies have shown success by randomly pairing all students within particular classrooms to serve as tutors and tutees (Greenwood et al., 1982; Jason et al., 1978; Jason & Frasure, 1979).

Often tutors of average or above average academic ability have been paired with low-achieving students (Graves, 1977; Harris et al., 1977; Medway & Lowe, 1980) or mildly to severely handicapped children (Almond et al., 1979; Gajar et al., 1980; McCarthy & Stodden, 1979; Scherbenou & McGuigan, 1979). Hendrickson (1981) demonstrated success through the matching of underachieving tutors with underachieving tutees of the same age, while Almond et al. (1979) effectively paired educable mentally retarded tutors with autistic children. In a study by Jorgensen (1978), older students with behavior problems served as tutors for their younger peers in a multicategorical resource room. This was based on the notion that energy expressed as hostility and aggression can be diverted into constructive channels through the use of contingency contracting.

In addition to pairing students based on their capabilities, Harris et al. (1977) pointed out that sometimes students should be paired according to subject areas and the amount of time available in their schedules for working together. Schine (1981) stated that matching tutors with tutees who have the same classroom teacher may enhance tutoring.

Tutors have also been matched according to their abilities to meet needs of other students (Harris, McDonald, & Siebenman, 1977) and their abilities to work with tutees without constant supervision (Ehly & Larsen, 1980). If the pairing of a tutor and tutee warrants change due to misbehavior or a personality conflict, the situation should be handled quickly and with tact (Schine, 1981). Ehly and Larsen (1980) suggest that the teacher who has experience with the children selected to participate in

the tutorial program should match children for tutoring through a recognition of the cognitive and affective strengths and needs of both the tutor and the tutee.

Developing the Content of a Peer Tutoring Program

Several elements and procedures need to be considered when determining the content of a peer tutoring program. The first element to be considered involves the specification of academic or social and emotional objectives for each student. Before actual tutorial instruction, materials and activities must be determined so that stated program goals may best be achieved. During and following instruction, records must be kept so that student progress may be analyzed (Ehly & Larsen, 1980).

Setting Objectives

Without written goals and instructional objectives, peer tutorial programs may have difficulties in reaching their potentials for success (Endsley, 1980). One of the first steps in establishing objectives is to consult with the teachers of the participating students to determine needs and objectives in regard to classroom performance (Ehly & Larsen, 1980). Objectives have also been established through diagnostic examination of the learner's strengths and weaknesses (Earl et al., 1980; Isaacs & Stennett, 1979a; Ehly & Larsen, 1980).

When stating the instructional objectives it is important to be sensitive to the entering behaviors of the student to be tutored. If the student does not have the prerequisite skills necessary for the successful completion of tasks, then objectives may have to be revised. It is also important that objectives be carefully defined and stated in terms of observable and measurable student performance (Ehly & Larsen, 1980; Endsley,

1980). In determining objectives, the needs of both the tutor and the tutee should be considered (Ehly & Larsen, 1980). While the program director and classroom teachers have the most responsibility for providing objectives, in some cases the tutor and the tutee have been involved in the task (Harris, McDonald, & Siebenman, 1977).

According to the United States Department of Health, Education, and Welfare (1974), the selection of an objective is the first step in planning instruction. After the objective has been selected, activities that will enable the tutee to perform the skill must be described. Following instruction, student performance should be evaluated and recorded. Appropriate planning and organization can be facilitated through the use of daily lesson plans. The lesson plans to be used by tutors should include an explanation of the objective, materials, procedure, reinforcement, and evaluation determined for each skill presented to the tutee (see Appendix B).

Specifying Materials

The materials selected for use in the tutorial sessions should reflect the content as determined by the objectives. The quantity of materials available to form the content of a program determines, to a large extent, the amount of work that will be necessary in creating additional materials or in modifying existing materials to meet the needs of the program.

The materials used in tutorial sessions have included examples such as flashcards (Heron et al., 1983), materials devised by tutors (Harris, McDonald, & Siebenman, 1977), worksheets (Jorgensen, 1978), and games (Harris, McDonald, & Siebenman, 1977). In some tutorial situations the material and content was based on the assignments and textbooks used in the regular classroom (Akigbe, 1975; Harris, McDonald, & Siebenman, 1977; Jason

et al., 1978; Jason & Frasure, 1979). The use of programmed curriculums has also been advocated by some program coordinators (Gajar et al., 1980; Graves, 1977).

According to Ehly and Larsen (1980), the program coordinator is generally responsible for determining the content of the materials to be used in the tutoring sessions. However, in certain school programs the tutors have been responsible for making the final decisions on materials and plans for implementation (Schine, 1981).

Although several types of material have been used effectively, Niedermeyer (1976) stated that the instructional materials and procedures to be used by the tutors should be clearly specified and keyed directly to the program outcomes. The material should be sufficiently structured so that a tutor can sequentially administer it with a minimum amount of confusion and error. When selecting materials, it is important to recognize that if material has little structure, instruction may be inefficient and ineffective. On the other hand, if the material is overly structured, training tutors to use the complicated materials may prove to be too time consuming and costly to justify the effort (Graves, 1977; Niedermeyer, 1976).

Presenting Instruction

The manner in which materials are presented to the tutee may vary according to the type of materials used and the philosophy of the program. The amount of structure attached to the presentation of materials may at times be minimal. The other extreme involves situations in which the tutor is required to present all materials in a predetermined manner (Ehly & Larsen, 1980).

When the role of the tutor was to provide assistance to the tutee in his regular class assignments, the structuring of materials appeared limited (Harris et al., 1977). However, by consulting with the classroom teacher, choosing additional materials for practice, and preplanning the tutor could provide more structure to the lessons (Harris et al., 1977; Schine, 1981).

Blackburn et al. (1978) stated that a tutor's preparation for instruction should include finding out the assignment for the session, making sure he or she understands the material, and locating the necessary supplies or equipment to be used in the session. Procedures for conducting instruction should include the reinforcement of correct responses. In several studies tutors were trained to use special techniques such as presenting stimuli or questions, identifying and correcting errors, and providing contingent praise (Greenwood et al., 1982; Heron et al., 1983; Jason et al., 1978; Jason & Frasure, 1979).

The presentation of instruction in a study by Greenwood et al. (1982) consisted of the tutor listening as the tutee read, identifying and correcting errors, and providing points to the tutee for correct reading. After a certain amount of time, the tutor and tutee switched roles and went through the same procedure.

According to Von Harrison and Guymon (1980), the presentation of instruction in the form of flashcards required that tutors rehearse the correct responses with the student, check for learning, and teach the remaining new answers. In a study by Heron et al. (1983), the daily peer tutoring sequence of instruction using flashcards consisted of tutor huddle, tutee practice, and testing. During the tutor huddle, each tutor practiced the words he or she would be teaching his student that session. If there were difficulties with any of the words, the teacher provided assistance. Following the tutor huddle, the tutors joined their tutees and presented the

word cards for practice. During the practice session the tutors employed a standard prompting procedure to elicit correct responses. At the end of the practice period, the tutors tested the students on their words.

In situations in which published curriculums were used as the basis for instruction, tutors were generally required to present materials in a predetermined manner. For example, in a study by Graves (1977) tutees were placed in one of three programs including the Graves Sequence (Graves & Graves, 1972), Action Program (Cebulash, 1970), or Double Action Program (Cebulash, 1973). One-to-one instruction consisted of following the set curriculums at individualized rates.

While the presentation of instruction may vary from person to person and program to program, one method of individually specifying the manner of material presentation is through the use of lesson plans (Ehly & Larsen, 1980). While lesson plans are generally supplied for younger children by program coordinators or classroom teachers, older children have at times been responsible for developing their own (Harris, McDonald, & Siebenman, 1977; Schine, 1981). Robbins (1976) in connection with the National Reading Center provided several sample lessons which could be used either as guidelines for training tutors in the development of plans or for actual tutorial instruction if the skills appear applicable to the tutee's needs (see Appendix C).

According to Von Harrison and Guymon (1980), it is absolutely essential, before presenting instruction, that tutors and teachers plan very specifically what is anticipated to be covered in a particular tutoring session. In addition to the actual presentation of instruction, the United States Department of Health, Education, and Welfare (1974) recommended that tutors be prepared to assume responsibility for other teaching behaviors. To enhance the quality of instruction, it was stated that the tutor should:

meet the student in a relaxed, friendly manner; learn the student's name and pronounce it correctly; show interest by asking about interests, friends, and problems; maintain the schedule for tutoring; provide full attention to the student; meet with the student's teacher for instructions on lessons to be taught; follow the school's rules; set an example by being courteous and respectful; be prepared for the lesson and keep it moving with materials and activities; build the student's self-confidence through success; ask for help when needed; and be patient.

Keeping Records

Turning over instructional duties to peer tutors may put teachers at a disadvantage in that a certain amount of their knowledge about how students are progressing may be lost. One means of compensating for this information loss has been to teach tutors to collect daily performance data on each teaching objective (Jenkins & Jenkins, 1981).

Lesson plans, themselves, may serve to maintain records of what has been covered in the sessions, methods of presentation, and performances of the tutee (Ehly & Larsen, 1980). In addition to lesson plans, tutors may be trained to keep other accurate records of student progress (Von Harrison & Guymon, 1980).

Record keeping has included checking and marking the number of correct responses made by the tutee and charting or graphing the accumulated data (Endsley, 1980). Von Harrison and Guymon (1980) advocated the use of summary sheets for learning gains and records of the tutee's mastery of skills. Tutor logs and daily record sheets have also been used as forms of recording general information about the tutee and the daily tutoring sessions (Asselin & Vasa, 1981; Endsley, 1980). According to Von Harrison and Guymon (1980), initial information in the log should include the

student's name, age, grade, school, and teacher. Record sheets may be useful forms for presenting daily information about activities, procedures, evaluations, comments, and reactions (see Appendix D). While the actual forms may vary, the information should provide an adequate representation of tutorial sessions to be used in further program evaluation.

Structuring a Peer Tutoring Program

Attention to the components of structure in peer tutoring can determine, to a large extent, whether or not a particular program will be successful. When determining the structure of a peer tutoring program, considerations may be made in relation to arranging the environment, scheduling the sessions, monitoring individual progress, and evaluating the overall program. Each element must be developed and structured for the total program to achieve optimal results (Ehly & Larsen, 1980).

Arranging the Environment

Peer tutoring may take place in a variety of settings. Tutors have conducted tutorial sessions in hallways, cafeterias, auditoriums (Ehly & Larsen, 1980), gymnasiums (Folio & Norman, 1981), regular classrooms (Greenwood et al., 1982; Heron et al., 1983), multicategorical resource rooms (Jorgensen, 1978), severely handicapped classrooms (Almond et al., 1979), and vocational settings (Wilcox & Bellamy, 1982).

In some peer tutorial situations, instruction has been designated to a special room (Schine, 1981). A space or room that the program can call its own is one of the most important ingredients for success, according to Harris, McDonald, and Siebenman (1977).

Ehly and Larsen (1980) concluded that whatever type of setting is chosen, the criteria for selection should be based on a limited number of auditory and visual distractions.

Scheduling Sessions

Scheduling is an important matter for consideration in determining the structure of a tutorial program. Considerations must be made for the lengths of sessions and the number of days per week that the pairs of students will meet. In addition, if possible, the number of sessions that will be necessary for completion of the program should be estimated (Ehly & Larsen, 1980).

Peer tutoring may take place at almost any time throughout the day. Sessions may be held once a week (Schine, 1981), periodically throughout the week (Cone et al., 1980; Harris, McDonald, & Siebenman, 1977), or daily (Greenwood et al., 1982; Heron et al., 1983). Determining the length and days of tutorial sessions may ultimately depend on the daily and weekly schedules of the participants (Ehly & Larsen, 1980). In most instances, brief tutoring sessions several times per week are preferable to longer or less frequent lessons (Laycock, 1980).

The total number of sessions to be held between the tutor and the tutee may be dependent upon school schedules, in addition to an estimation of the amount of time necessary to achieve the goals and objectives established for the individuals and the program (Ehly & Larsen, 1980). According to the Feldman et al. (1976), most investigators appeared to believe that the longer the tutoring program, the more positive were the effects. However, Melaragno (1976) suggested that it is quite conceivable that after a certain amount of time with the same partner, both the tutor and the tutee may become bored.

While only limited guidelines can be given for the establishment of lengths, times, and numbers of sessions, Ehly and Larsen (1980) offered a few final suggestions. Not only should sessions be scheduled at times when both the tutor and the tutee are free, but also at times, if possible, when energy levels are at their optimum. Also, it is very important that sessions are not scheduled during other highly preferred activities. Finally, whatever arrangement is made, the need for consistency in the maintenance of the schedule is important.

Monitoring Progress

Monitoring, which involves supervision of the tutor and the tutee, is important in the maintenance of continuity and the documentation of student progress in a tutoring program (Asselin & Vasa, 1981). Niedermeyer (1976) stated that program ineffectiveness may at times be due to lack of monitoring by program coordinators or teachers. Endsley (1980) agreed that lack of monitoring could lead to program failure if tutors began to deviate from the prescribed instructional procedures, which could best be detected through close monitoring.

Ehly and Larsen (1980) reported that the regularity and consistency of meetings by the tutorial pair over the term of the program is more important than the length or number of tutoring sessions. Therefore, once a schedule is established, the tutor's responsibility for meeting on time and in specific locations must be stressed and monitored. Monitoring should include checking to see that the tutors and tutees are punctual in attending the tutorial sessions and in returning to their classes (Endsley, 1980).

Monitoring has also served as a means of observing the relationship between the tutor and tutee (Asselin & Vasa, 1981). If personality problems appear to exist, decisions may have to be made concerning the

appropriateness of the tutor and tutee match and the possibility of exchanging partners (Endsley, 1980).

Probably the most important aspect of monitoring is checking to see if stated objectives are being successfully met (Ehly & Larsen, 1980; Endsley, 1980). Supervision of tutors assists the evaluation of the program by examining the effectiveness of instructional materials and tutoring techniques on the tutee's progress (Asselin & Vasa, 1981). Through the observation of sessions and tutor records, decisions may be made in regard to whether or not instructional procedures are being followed and objectives are being met. If there are problems in either of these areas, changes may have to be made in the objectives, the tutor and tutee match, or the program procedures (Endsley, 1980).

Evaluating the Program

The evaluation of a peer tutoring program should assist the program coordinator or teacher in assessing whether or not progress is being made towards the predetermined goals and objectives of the program (Ehly & Larsen, 1980). According to Asselin and Vasa (1981), evaluation was essential to the improvement and overall success of their peer tutoring program.

Achievement of program goals has been evaluated by measuring changes in academic performance, attitudes, participation, and utilizations of time (Asselin & Vasa, 1981). Changes in academic skill performance of the tutee and tutor has been evidenced by pretest to posttest results (Cone et al., 1980; Earl et al., 1980; Gajar et al., 1980; Graves, 1977) and judgements of the tutor, teacher, or program coordinator (Mason, 1979; Schine, 1981). Evaluations of changes in the attitudes of tutors and tutees towards themselves, their peers, their teachers, and their school has been based on

attitude or adjustment scales (Earl et al., 1980; Jason & Frasure, 1979), student comments and questionnaires (Mason, 1980; Schine 1981), or program coordinator, staff, and parent judgement and observation (Akigbe, 1975; Harris, McDonald & Siebenman, 1977; Jorgensen, 1978). Utilization of time has been evaluated through documentations in tutor records and observations during program monitoring (Asselin & Vasa, 1981; Endsley, 1980; Von Harrison & Guymon, 1980). The United States Department of Health, Education, and Welfare (1974) provided sample forms to be used in program evaluation (see Appendix E).

As Akigbe (1975) stated, "Peer tutoring may be the means by which the credibility of the schools can be reestablished, since student tutoring is low on rhetoric but high on results." This evaluation of results is important is establishing the viability of peer tutoring as a means of increasing or promoting the academic or social and behavioral growth of both tutors and tutees (Ehly & Larsen, 1980).

Peer Tutoring Effectiveness

The effectiveness of peer tutoring as a supplement to students' regular education programs may be evaluated by several standards including results in both academic or social and behavioral growth. The determinants of effective peer tutoring programs may include variables from all areas of implementation including the establishment, development, and structure (Ehly & Larsen, 1980).

Determining the Effectiveness of Peer Tutoring

Peer tutoring, students teaching other students, has been viewed as a useful strategy for individualizing instruction and increasing time engaged in academics (Boettcher, 1978; Fitz-Gibbon & Reay, 1982; Good & Brophy,

1973; Greenwood et al., 1982; Stowitschek, 1982). The question of whether or not peer tutoring is an effective means for increasing academic achievement and promoting positive social and emotional behaviors can only be answered by those who have actually experienced or witnessed the results.

Several studies have demonstrated the effectiveness of peer tutoring for increasing both tutor and tutee academic achievement (Earl et al., 1980; Jorgensen, 1978; Schine, 1981). Hendrickson (1981), in a study which involved a same-age, similar skill format with underachieving tutors and tutees, demonstrated an average academic achievement of one and one-half times the nationally expected gain score in the areas of reading and math.

Academic success in reading was also demonstrated by Graves in 1977. In this study, 17 out of 25 secondary students, who were seriously deficient in reading skills, made gains of at least twice the average rate following peer tutorial instruction. Gardner (1978) similarly found that the results of peer tutoring indicated positive changes in the area of reading for experimental groups of tutors.

Cloward (1967) further demonstrated the effectiveness of peer tutoring in promoting the reading achievement of both tutors and tutees. In this study, tenth and eleventh grade students, who were at least two years below their age norm in reading, were paid \$1.35 per hour to tutor fourth and fifth graders with difficulties in reading. After 26 weeks and 104 hours of tutoring, test results indicated that the tutees made average gains of six months in reading, while the control group made gains of three and one-half months, and that the tutors made average gains in reading of 3.4 grade levels, while the control group showed gains of 1.7 grade levels.

Fox (1973) also reported that peer tutoring effectively increased oral reading accuracy and correct rate, while it decreased the rate of errors of underachieving fourth grade students. In the assessment of arithmetic

achievement, Johnson and Bailey (1974) demonstrated that the gains of five kindergarten students in basic arithmetic skills indicated superior performance as compared to five kindergarten students in a control group.

Peer tutoring effectiveness has also been demonstrated in academic areas other than reading and math. Maher (1982), in a study which evaluated the effectiveness of using conduct problem adolescents as cross-age tutors for elementary school-aged mentally retarded students, found that tutors improved significantly on social science and language arts grades and had reduced rates of absenteeism and disciplinary referrals.

Stowitschek (1982) investigated the effects of peer tutoring on the instructional performance of 12 behaviorally disordered adolescents trained as tutors and the subsequent effects on the performance of their learners. Results indicated that the performance of both tutors and tutees on daily spelling tests increased considerably following intervention in the form of peer tutoring. In another study which investigated the effects of a tutoring procedure on the spelling behavior of fifth grade students, Harris, Sherman, Henderson, and Harris (1972), reported that test gains from pretest to posttest were consistently higher for tutored word lists than for comparison word lists.

Two research studies were conducted by Sherbenou and McGuigan (1979) to examine the effects of peer teachers on the implementation of individual education programs and to determine whether the skills learned in one educational setting would generalize to a second educational setting. In the first study five mildly mentally handicapped kindergartners, including one hydrocephalic child, two Down's Syndrome children, and two children with unknown etiologies, were mainstreamed into a regular classroom and taught letter recognition by kindergarten children from their peer group. Results indicated that the handicapped children made significant progress when given

additional help from peer tutors utilizing the instructional implementation plans. Further, it was concluded that the skills learned in the regular class setting generalized to the special class setting.

The second investigation, which involved twelve case studies of mild to moderately handicapped first, second, and fifth graders, examined teacher-to-student instruction versus student-to-student instruction in the regular classroom. The results indicated that there were no consistent or significant differences between teacher and student instruction on either correct or error responses.

While there appears to be considerable evidence for the effectiveness of peer tutoring for increasing academic achievement, several studies have also indicated the efficacy of using peer tutoring to promote positive social and behavioral adjustment. According to Gajar et al. (1980), peer tutoring meets the criteria for a cooperatively structured instructional arrangement. In 1974, Johnson and Johnson reviewed studies which assessed the effect of goal structure on achievement and adjustment. They found that cooperation resulted in a variety of positive outcomes, including mutual friendliness, respect, concern, and trust. The hypothesis was that the cooperative involvement of tutor and student pairs would promote the social acceptance of the students by their tutors and by other nonhandicapped peers.

Jorgensen (1978) demonstrated the effectiveness of a peer tutoring program designed to change student interaction in a multicategorical resource room from verbal aggression and hostility to overt helpfulness and support for one another. Results of the program indicated that peer tutoring was not only successful in changing students' attitudes, but also in creating a positive awareness and acceptance of differences. Several other studies indicated that peer tutoring was successful in promoting

friendships and positive peer relationships (Akigbe, 1975; Fogarty & Wang, 1982; Hart, 1981; Schine, 1981).

Folio and Norman (1981) used peer teachers to assist the physical education teacher with mainstreamed exceptional education students. Results of the program demonstrated several benefits of peer tutoring. According to the researchers, the peer tutors served as excellent role models for both handicapped and nonhandicapped students. Their assistance allowed the teacher to keep contact with the entire class and many disruptive behaviors were eliminated due to the extra help and maintenance of on-task behaviors. Benefits to the handicapped child included a positive atmosphere and the development of a cooperative effort among students in providing assistance, as well as a sensitivity toward appropriate degrees of assistance. The most obvious change, however, according to Folio and Norman, was the increase of peer expectations as regular students broadened their perceptions of the abilities of handicapped students.

Results presented by Haisley et al. (1981) also provided strong support for the conclusion that on-task behaviors of tutees improved significantly as a result of peer tutoring. In addition, 83% of the junior high school tutees felt that their grades or work had improved in classes where they received tutorial help, while teachers noted not only improvement in academic performance, but also in areas of self-confidence and attitude toward school. The two major benefits reported by teachers were that slow learners were given the continuous one-to-one help they needed and that slow learners were on-task a greater percentage of the time, which decreased student frustration and disruptive behavior.

In a program designed to assist sixth grade adolescent development by using high school student leaders to interact with them, Mason (1979) found that more than 80% of the sixth graders felt that the experience was a

success and that their tutors were competent. In assessing the overall attitude of both tutors and tutees, results showed that 42% strongly agreed and 50% agreed that they had experienced positive personal growth and that the program was successful.

The effectiveness of peer tutoring extends beyond the success in tutor and tutee academic achievement (Ehly & Larsen, 1980). The benefits of peer tutoring for the tutee have included increased opportunities to improve self-confidence (Asselin & Vasa, 1981; Jorgensen, 1978), improved attitudes towards school, teachers, and peers (Fogarty & Wang, 1982), individualized instruction at appropriate levels of understanding (Asselin & Vasa, 1981; Schine, 1981), and more encouragement, support, and opportunities for success (Jason et al., 1978; Schine, 1981).

Benefits to the tutor have included or are believed to have enhanced the development of concern and cooperation among fellow students, responsibility for other persons, insight into the teacher's role, and self-confidence (Asselin & Vasa, 1981; Schine, 1981). In addition, peer tutoring has appeared to benefit tutors through opportunities to learn and practice human relation skills, to learn the importance of setting realistic goals, to become advocates for persons with handicaps, and to engage in meaningful interactions with adults (Almond et al., 1979; Asselin & Vasa, 1981; Jorgensen, 1978; Schine, 1981).

Determinants of Peer Tutoring Effectiveness

Several variables have been identified as necessities for the successful implementation and outcome of peer tutoring. Ehly and Larsen (1980) indicated that considerations must be made in the areas concerning the establishment, the development of content, and the structure of a peer tutoring program in order that successful outcomes might be ensured.

In a review of fourteen tutorial programs, Boettcher (1978) found that the critical variable for success was the actual program content and structure. Hendrickson (1981) similarly established that successful peer tutoring was dependent on a well-sequenced, structured curriculum in addition to comprehensive training for teacher and student participants. Success was also traced to several other factors, including individual attention, personal content, and immediate and frequent feedback.

Ingredients for success, according to Harris et al. (1977), must include a person whose primary duties are to work with and supervise the program, a space or room that the program can call its own, selection of tutors and tutees, and appropriate materials with which to work. Schine (1981) stated that having tutors and tutees enter the program voluntarily was crucial to program success. Also, continued evaluation was viewed as an important variable for making sure the program was meeting each student's needs.

In regard to tutor selection, Schine (1981) stated that success was dependent on the careful selection and recruitment of tutors with strong academic and social skills, while Mason (1979) stated that in order to ensure success a tutor should have personal integrity and a commitment toward school. Several studies also supported tutor training as an important factor for the successful implementation of a peer tutoring program (Asselin & Vasa, 1981; Endsley, 1980; Ehly & Larsen, 1980; Schine, 1981). Jason and Frasure (1979) demonstrated that the effectiveness of peer tutoring was dependent on tutor use of praise, corrective feedback, and questions during the presentation of instruction. However, Cone et al. (1980) stated that the rapport between the tutor and the tutee was more important than the method of tutoring for the promotion of successful modeling of the tutors by the tutees.

In a study of the causes of successful or unsuccessful learning in tutorial instruction, Medway and Lowe (1980) found that tutors generally viewed the ability of the tutee to be a more important cause of success and their own efforts as less important causes of success. Tutees, however, felt that tutor ability and effort were the most important variables for success. The study went on to show that tutors viewed unsuccessful outcomes as due less to deficiencies in tutee effort and more to their own lack of effort and ability. Tutees, however, unfortunately attributed unsuccessful outcomes to their own lack of ability.

All children in the study judged ability to be the most important determinant of tutorial outcomes. The implications of this are dangerous, according to Medway and Lowe, because if tutees do not show some progress as a result of tutoring, the tutors and tutees may come to believe that the tutees are incapable of being taught. In a similar study conducted by Dweck (1975), students were trained to interpret failure as being attributed to insufficient effort rather than lack of ability. By providing a program in which gradual and consistent progress could be made and by changing students' attributions of success and failure, children were taught to deal more effectively with failure and to attribute less to ability in unsuccessful outcomes.

Medway and Baron (1977) found "locus of control" and tutor instructional style to be determinants of cross-age tutoring effectiveness. The study, which involved junior high tutors instructing elementary schoolmates in reading, was conducted to determine what types of children learn best under tutorial instruction and what types of children are the most effective tutors. It was hypothesized that children who appear to be influenced by external control would benefit most from tutoring and that children with apparent internal control would make the most successful

tutors as shown by both the quality of their teaching and gains in tutee performance. Before the tutoring program began, all participating students completed an appropriate measure of internal and external locus of control through classroom group administrations.

Results of the study indicated that external tutees did not exhibit higher performance levels than internal tutees, although a trend in the expected direction was evidenced. Results, however, did indicate that tutors with high specific expectancies for tutee success and with internal control beliefs were more effective teachers of their peers. In terms of the selection of students desiring to tutor, it was shown that tutors with internal control beliefs exhibit an energetic and animated instructional style and are highly effective student teachers. The researchers concluded that the implications of these results should be considered in the selection of tutors for successful peer tutoring programs.

Chandler (1975) proposed a theory with a different perspective based on the concept of locus of control. According to this theory, internal individuals, who feel they are in control of their lives and environment, tend to be more academically successful than external students, who believe more in luck or chance or who tend to be dependent on others. The need, according to Chandler, is for a program that moves the externals toward internal locus of personal control, and he sees tutoring by low-achieving externals as a way to effect this change. The act of tutoring should help an external student become more active in the learning process and may result in increased motivation and learning for the tutor.

Some researchers have been dissatisfied with the results of peer tutoring due to the inadequacy of certain variables. Graves (1977) advocated the use of tutor training packets designed specifically for peer tutoring. Six sessions, each lasting two hours, were required to cover the

packets. Although the variables were important, the success of the program was limited due to the fact that the training program was too complicated to be logistically feasible.

In a study by Isaacs and Stennett (1979a), peer tutoring was determined not to be an effective method of increasing time on task for elementary children. The authors concluded that the ineffectiveness was due to a lack of assistance from additional staff members in program implementation. That is, successful peer tutoring requires a significant commitment of time and someone to constantly monitor the program. Isaacs and Stennett (1979b) in a follow-up study concluded that peer tutoring success was limited due to the need for a person to review records, monitor tutor performance, and take action to correct problems.

According to Good and Brophy (1973), although some reports have suggested that peer tutoring has not increased academic achievement, there are no reports that have indicated students were harmed by the process. Success, according to the researchers, depends on creating a positive attitude toward tutoring for both tutors and tutees. Effectiveness also depends on proper implementation through the following guidelines: the creation of the mental set that everyone learns from one another; the working out of procedural details such as specific times for tutoring, specific assignments and materials, and cooperation among participants; appropriate training of tutors and matching of tutors and tutees; and complete program organization through consistent planning and clear directions.

CHAPTER III

PROCEDURES

The purpose of this study was to determine whether or not area schools currently have peer tutoring programs, what their practices are in regard to setting up and maintaining existing programs, whether or not educators feel their programs are successful, and whether or not respondents would be interested in having peer tutoring programs if they currently do not have them in their schools. The study was also designed to determine and compare the attitudes of those respondents who had programs and those who did not have programs. Comparisons were made as to whether or not peer tutoring was viewed as an effective method for increasing and promoting the academic and social-behavioral growth of both tutors and tutees. Comparisons were also made between both groups to determine attitudes as to whether certain identified variables were necessary for effective programs.

Selection of Subjects

The subjects for the study consisted of regular and special educators in both elementary and secondary schools within 27 school districts served by the Cooperative Educational Service Agency #11 (CESA #11) in Wisconsin. The identified population for distribution included, but was not limited to, reading specialists, teachers of learning disabilities, teachers of emotional disturbance, and regular classroom teachers.

Instrumentation

The research instrument consisted of a 19 question survey on peer tutoring attitudes and practices. Questions one through three provided general information to be responded to by all participants, while items four through eleven determined current peer tutoring practices and were to be completed only by those respondents with peer tutoring programs in their schools. A Likert scale was designed for items twelve through sixteen and was used to compare the attitudes of those respondents who had peer tutoring programs and those who did not have peer tutoring programs. Item number seventeen included ten variables to be ranked in regard to each one's importance in promoting effective peer tutoring programs. The final two questions were concerned with the opinions of those respondents who had peer tutoring programs as to the success of their programs and the interests of those respondents who did not have programs in possible program implementation. In addition to the questionnaire, a cover letter was provided to further explain the purpose of the study, to define certain terms used in the survey, and to request participation and proper return of the completed form (see Appendix F).

The procedure for obtaining results included identifying the population to be surveyed, obtaining permission from various agencies to conduct the research, and determining methods for the distribution and return of the questionnaires. The first step, following identification of the population, was to obtain permission from CESA #11 to send and receive surveys through their agency. In addition to permission from CESA #11, the survey was presented to the La Crosse Research and Development Committee for approval of distribution in the La Crosse School District (see Appendix G).

The survey was distributed both through CESA #11 mail and in person to the identified reading specialists, teachers of learning disabilities and teachers of emotional disturbance. In addition, each school was requested to randomly select other regular or special educators to participate in completing the surveys. A total of 239 surveys were distributed.

CHAPTER IV

RESULTS

The purpose of this study was to determine the current attitudes and practices of both regular and special educators in elementary through secondary schools within 27 Wisconsin area school districts. One hundred and fifty-nine persons responded to the survey. Results of the accumulated data were analyzed through calculations of the percentages of participants who responded to each item on each question of the survey. The data were further analyzed following the division of the total sample into two groups; those respondents who had peer tutoring programs either schoolwide or in classrooms and those who either did not have peer tutoring programs in their schools or were not aware of their existence. Chi-square tests were used to determine the significance of differences in attitudes toward peer tutoring effectiveness between the two groups.

The results of the data analysis have been organized according to the sequence of questions and the information presented. The first section relates to general information provided by the entire sample, while the second section consists only of results obtained from those who responded that they had peer tutoring in their schools. The items in this section relate to the developmental and structural practices employed in area peer tutoring programs.

Section three of the results is concerned with the attitudes of respondents in regard to the effectiveness of peer tutoring and the importance of certain variables in promoting an effective program. The last section relates to respondents' overall evaluations of peer tutoring. The

items in this section were used to determine whether or not respondents with peer tutoring in their schools felt their programs were successful and whether or not those respondents without programs would like to have peer tutoring implemented in their schools.

General Information

Of the total 159 participants in the survey, 158 respondents indicated their current positions and levels of instruction. Table 1 presents the percentages of those who responded, consistent with their positions and levels of teaching instruction.

Table 1
Position and Level of Instruction
Per Cent of Responses

Teaching Position	Elementary	Middle	Secondary	Other	Total
Learning Disabilities	8%	2%	6%	6%	22%
Emotional Disturbance	2%	4%	4%	1%	11%
Reading Specialist	2%	2%	1%	4%	9%
Regular Classroom	25%	11%	4%	2%	42%
Other	4%	4%	5%	3%	16%
Total	42%	22%	20%	16%	100%

Those classified as having the position of "other" included a variety of special educators (E.M.R., T.M.R., E.D./L.D., E.D./E.M.R., L.D./E.M.R., E.C./E.E.N., Speech and Language), Chapter I reading teachers, school psychologists, counselors, an art teacher, a Director of Special Education, a unit leader, a basic skills instructor, and a volunteer tutor. Levels of instruction in the "other" category included kindergarten through eighth, kindergarten through twelfth, and sixth through twelfth grades. Results indicate that 42% of the respondents were regular classroom teachers. Special educators, including teachers of learning disabilities, teachers of emotional disturbance, and those in the category of "other", comprised an additional 42% of the respondents.

The entire sample of 159 participants responded to the question of whether or not they had peer tutoring programs in their schools. Twenty-eight per cent indicated that they had schoolwide programs, while 16% responded that they had tutorial programs by individual classroom only. Forty-four per cent of the respondents indicated that they did not have peer tutoring programs in their schools, while 12% were not aware of the existence of any such programs. For the purposes of data analysis, 44% of the respondents were considered as having had some type of peer tutoring in their schools, while 56% were considered as not having had peer tutoring in their schools. This 56% includes those who answered that they were not sure of any such programs.

Development and Structure of Peer Tutoring

Fifty-two of the 70 participants with either schoolwide or classroom peer tutoring programs responded to the items which related to the development and structure of peer tutoring programs. In regard to the question of who was responsible for the organization and operation of the

program, 25% of the respondents indicated that a counselor was responsible, while 21% stated a special education teacher, six per cent stated that an administrator, and six per cent indicated that a reading specialist had responsibility. Twenty-three per cent of the participants indicated that regular classroom teachers were responsible for the operation of their own classroom programs.

Twenty per cent of the participants reported that combinations of educators were responsible for the operations of their programs. These combinations included a special education teacher with a social worker, a special education teacher with a counselor, a special education teacher with regular classroom teachers, and a counselor with regular classroom teachers. Results also show that 45% of the respondents indicated that special education teachers or reading specialists were involved in the operations of peer tutoring programs.

Fifty-two participants with peer tutoring programs again responded to the question as to how peer tutors are identified and selected. The results of the accumulated data are presented in Table 2 according to the percentages of those who responded to each factor used in the identification and selection process. It should be noted that respondents were allowed to check all variables that applied to their programs' procedures for the development and structure of peer tutoring programs.

Table 2
Tutor Identification and Selection

Variables	Per Cent	Total Responses
Voluntary Basis	77%	40
Teacher Recommendation	62%	32
Ability to Work with Others	60%	31
Academic Standards	48%	25
Tutor Needs	40%	21
Other	8%	4

The importance of the identification and selection of tutors on a voluntary basis, by teacher recommendation, and according to their abilities to work well with others was supported by the responses of over 50% of the participants to these items. Academic standards and tutor needs appear also to be quite important in that more than 40% of the participants responded as to the inclusion of these variables in tutor selection. Those who indicated that "other" means were used for tutor identification stated that the ability to teach and the availability of time for students were important variables to be considered in tutor selection.

Fourty-four of the fifty-two participants with peer tutoring programs in their schools responded to the survey item on the benefits of peer tutoring for tutors. The other ten respondents were either not sure or felt that there were no specific benefits for tutors. Table 3 presents the results according to the percentage of those who responded to each perceived benefit of peer tutoring.

Table 3
Benefits for Tutors

Tutor Benefits	Per Cent	Total Responses
Class Credit	38%	20
Special Privileges	15%	8
Monetary Payment	4%	2
Other	37%	19
None or Not Sure	19%	10

Results appear to indicate that most of the participants viewed class credit as a benefit of peer tutoring in their school programs. Thirty-seven per cent of the participants also responded to the category of "other" benefits. Respondents stated that these benefits included satisfaction or enjoyment in helping others, recognition for services, honorary credit on transcripts, getting out of study halls to tutor, written recommendations for performance, and gifts or tangible reinforcers.

The item concerned with variables used in the selection of tutees was responded to by the 52 participants with peer tutoring in their schools. Table 4 presents the results of the percentages of those who responded to each factor used in tutee selection.

Table 4
Tutee Selection

Variables	Per Cent	Total Responses
Academic Needs	92%	48
Social-Behavioral Needs	37%	19
Other	23%	12

Results of the data indicate that the majority of the participants responded that academic needs were used in the selection of tutees. The "other" means of selecting tutees included speech and language needs, teacher or parent referrals, needs in art class, mainstreaming needs for educable mentally retarded students, and tutee requests for help.

The next area in the development and structure of peer tutoring programs was related to how tutors and tutees are matched for tutorial instruction. Results of the percentages of those 52 participants who responded to each variable used in matching are displayed in Table 5.

Table 5
Tutor and Tutee Match

Tutoring Formats	Per Cent	Total Responses
Cross-Age Tutoring	73%	38
Reg. Tutoring E.E.N.	48%	25
Reg. Tutoring Reg.	35%	18
Same-Age Tutoring	29%	15
E.E.N. Tutoring E.E.N.	19%	10
E.E.N. Tutoring Reg.	12%	6
Other	17%	9

Results of the data appear to indicate that the most popular practices in matching included cross-age tutoring or older students teaching younger students and regular education students teaching students with exceptional educational needs. Those who responded to the category of "other" indicated that personalities, subject areas, tutor and tutee needs and abilities, similar classrooms, scheduling, and tutor choices should be considered in the matching process.

Results of the percentages of those participants with peer tutoring programs who responded to the survey item concerned with tutor training are presented in Table 6. Of a total of 52 participants, only one respondent was not sure of the type of training employed.

Table 6
Tutor Training

Type of Training	Per Cent	Total Responses
Informal Daily Instructions	44%	23
Special Inservice Training	38%	20
No Special Training	27%	14
Training by Published Program	0%	0

Informal daily instructions followed by special inservices appear to be the types of training most commonly used as indicated by the respondents to the survey. There were no participants who responded to the use of training through published training programs.

Fifty-two participants again responded to the question pertaining to program monitoring and performance evaluations. Table 7 presents the results of the percentages of those who responded to each form of monitoring and evaluation. Two of the respondents indicated that they were not sure how this procedure was conducted in their schools.

Table 7
Program Monitoring and Evaluation

Components	Per Cent	Total Resones
Teacher Supervision	56%	29
Informal Evaluations	54%	28
Daily Achievement	29%	15
Tutor Records	27%	14
Test Achievement	19%	10
Other	13%	7

The results appear to indicate that teacher supervision of tutoring sessions and informal evaluations are the more commonly used methods of monitoring and evaluating programs. Those who responded to the category of "other" methods indicated that report card grades, pretest and posttest self-concept scores, attendance, extra credit in regular classes, and tutor journals of feelings and reactions were also used as methods of monitoring and evaluating performance.

The final item in the section on the development and structure of peer tutoring was concerned with the average number of hours tutors and tutees met each week for tutorial instruction. Fifty per cent of the respondents indicated that students met for less than two hours each week, while 26% stated that the pairs met for two to four hours and 20% that they met from four to six hours each week. There were no instances indicated of tutors and tutees meeting for more than six hours each week.

Effectiveness of Peer Tutoring

The results of this section pertain to the attitudes of respondents as to whether peer tutoring increases the academic growth and promotes the social-behavioral growth of both tutors and tutees and whether peer tutoring requires too much time from students' regular classroom programs. Results were also used to determine the attitudes of participants in regard to the importance of ten identified factors in the promotion of effective peer tutoring programs.

For purposes of data analysis and comparisons, participants were divided into groups of those who had peer tutoring programs either schoolwide or in classrooms and those who did not have programs or were not sure of their existence. Of the total of 70 respondents who indicated that they had peer tutoring programs, 68 responded to the statements concerning whether peer tutoring increases academic growth and promotes social-behavioral growth of both tutors and tutees, while 67 responded to the statement of whether peer tutoring takes too much time from students' regular programs. Of the 89 respondents who indicated that they did not have or were not sure of the existence of peer tutoring, 88 responded to the same attitude statements.

A rating scale was used to determine the attitudes of participants in regard to whether peer tutoring increases tutee academic growth, increases tutor academic growth, promotes tutee social-behavioral growth, promotes tutor social-behavioral growth, and whether peer tutoring takes too much time from students' regular programs. The scale consisted of the following: one equals never; two equals almost never; three equals sometimes; four equals almost always; and five equals always. Results of the data are presented according to the mean differences between the attitudes of those

with programs and those without programs (see Table 8). It should be noted that according to the rating scale, the greater the number from one to five on statements one through four, the more positive the response, while for statement five, the smaller the number, the more positive the attitude.

Table 8
Table of Means

Statement Peer tutoring . . .	With Programs	Without Programs	Mean Differences
1. Increases tutee academic growth	3.58	3.40	+ .18
2. Increases tutor academic growth	3.63	3.56	+ .07
3. Promotes tutee social growth	3.59	3.42	+ .17
4. Promotes tutor social growth	3.75	3.59	+ .16
5. Interferes with regular program	2.24	2.72	- .48

According to the results presented in Table 8, those respondents with peer tutoring in their schools were slightly, but consistently, more positive in their attitudes towards the effectiveness of peer tutoring. The difference in attitudes, however, appears to be more evident in regard to whether peer tutoring takes too much from students' regular programs. Those respondents with programs were more positive in their attitudes that peer tutoring does not take too much time away from students' regular programs.

Results as to whether there were significant differences between the attitudes of those with programs and those without programs were determined

by the chi-square test for two independent samples. Table 9 presents the results of this test on the five hypotheses.

Table 9
Statistical Analyses of Five Null Hypotheses

Hypothesis	df	χ^2
1. There is no significant difference at the .05 level on attitudes as to whether peer tutoring increases the academic growth of tutees.	2	3.29*
2. There is no significant difference at the .05 level on attitudes as to whether peer tutoring increases the academic growth of tutors.	2	.74*
3. There is no significant difference at the .05 level on attitudes as to whether peer tutoring promotes the social-behavioral growth of tutees.	2	1.47*
4. There is no significant difference at the .05 level on attitudes as to whether peer tutoring promotes the social-behavioral growth of tutors.	2	2.13*
5. There is no significant difference at the .05 level on attitudes as to whether peer tutoring requires too much time from regular programs.	2	18.82**

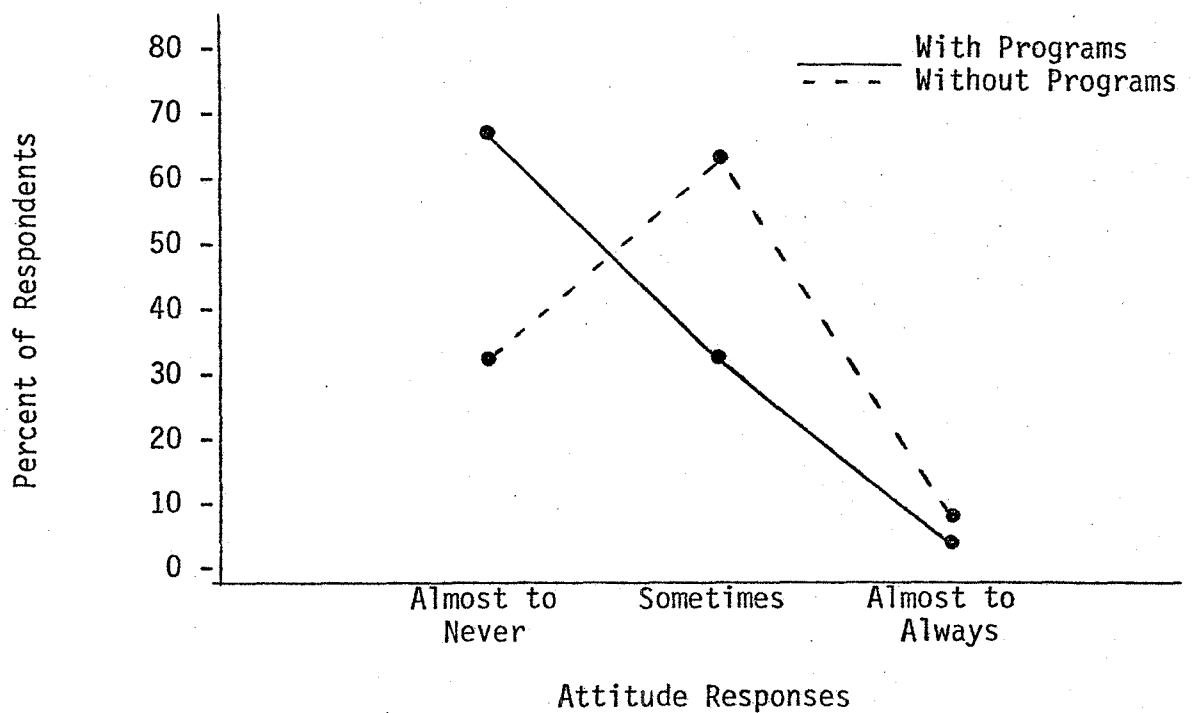
* Researcher accepts this hypothesis (<5.99).

** Researcher rejects this hypotheses (>5.99).

Results of the chi-square tests illustrate that there were no significant differences between the attitudes of those with programs and those without programs on the first four items which concerned whether peer tutoring increases the academic growth and promotes the social-behavioral growth of both tutors and tutees. There was, however, a significant

difference between the two group's attitudes on the last item which was concerned with whether peer tutoring requires too much time away from students' regular programs. These differences, according to the percentages of those who responded, are illustrated in Figure 1.

Figure 1
Tutoring Takes Time From Regular Programs



Results of the data indicate that while 66% of the respondents who had peer tutoring programs felt that peer tutoring did not require too much time from students' regular programs, only 31% of those who did not have programs responded with similar attitudes. Those without peer tutoring programs appear less positive in their attitudes as indicated by a 62% response to the statement that peer tutoring sometimes takes too much time from regular programs.

The final item in the section on peer tutoring effectiveness was concerned with the importance of each of ten identified variables in promoting effective peer tutoring programs. The ten factors included tutor selection, program goals, administrative support, tutor training, tutor and tutee match, program supervision, tutee selection, specific materials and equipment, parent support, and monitoring of tutorial sessions. Each item was ranked on a scale from one to three in which one was very important, two was somewhat important, and three was not important. Results of the data are presented according to the mean differences between the attitudes of those who had peer tutoring programs and those who did not have programs (see Table 10). It should be noted that according to the rating scale, those items marked with smaller values from one to three were viewed as more important in promoting effective peer tutoring programs.

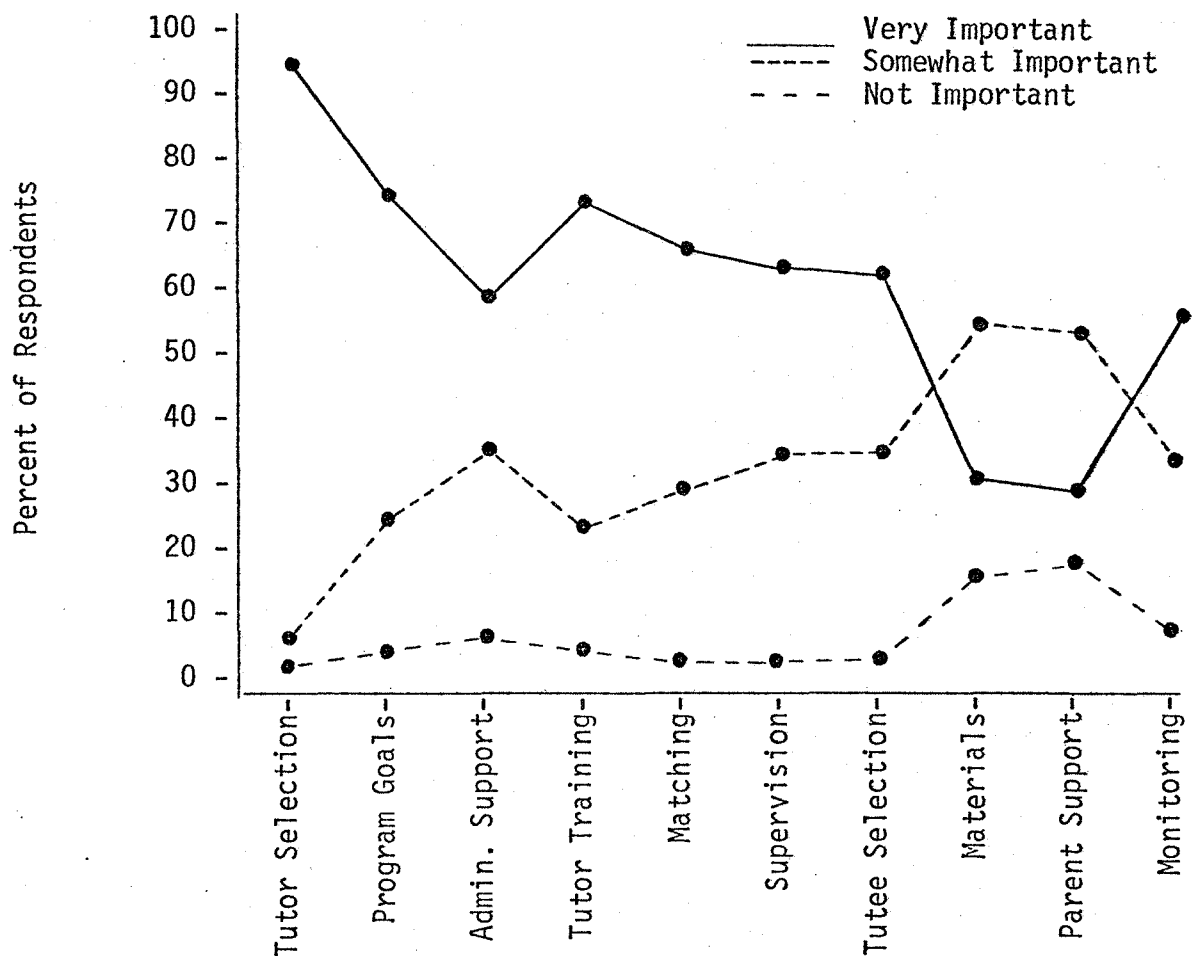
Table 10
Table of Means

Variables of Importance	With Programs	Without Programs	Mean Differences
1. Tutor Selection	1.10	1.06	+.04
2. Program Goals	1.37	1.22	+.15
3. Administrative Support	1.50	1.45	+.05
4. Tutor Training	1.40	1.24	+.16
5. Tutor and Tutee Match	1.41	1.28	+.13
6. Program Supervision	1.43	1.32	+.11
7. Tutee Selection	1.41	1.38	+.03
8. Materials and Equipment	1.94	1.74	+.20
9. Parent Support	2.03	1.73	+.30
10. Monitoring of Sessions	1.54	1.43	+.11

Results of Table 10 indicate that those respondents without peer tutoring programs viewed each factor as being slightly more important than those with peer tutoring programs. However, it appears that both groups tended to feel that most of the variables were important in promoting effective programs. Tutor selection, program goals, and tutor training were viewed as most important by both groups, while materials and equipment and parent support were viewed as being least important. Figure 2 presents the results regarding the importance of each identified variable in promoting peer tutoring effectiveness.

Figure 2

Importance of Factors in Peer Tutoring Effectiveness



Evaluations of Peer Tutoring

This section relates to the evaluations of peer tutoring by respondents. The responses to items in this section were used to determine whether or not participants with peer tutoring in their schools felt their programs were successful and whether or not those without programs would like to see peer tutoring implemented in their schools.

Sixty-four of the 70 participants who had peer tutoring programs either in their classrooms or on a schoolwide basis responded as to whether or not they felt their programs were successful. Results indicate that 89% of the participants responded positively as to the success of their programs, while an additional six per cent felt their programs were somewhat successful. Five per cent of the sample indicated that their programs were not successful. Reasons for the negative attitudes toward program success included statements such as, "the student has not responded", "the tutee becomes less attentive in class because the tutor will explain all again", and "the program has just started and needs more time to develop". Additional written responses were provided by respondents who felt their programs were successful (see Appendix H).

Of the 89 respondents who indicated that they did not have peer tutoring programs in their schools and of the 26 who had only classroom programs, 91 responded to the item which was concerned with whether or not they would like to see peer tutoring programs started in their schools. Results indicated that while 81% wanted to have peer tutoring, three per cent were not sure and 15% did not want to have programs. Appendix H provides a summary of the written responses.

CHAPTER V

DISCUSSION

The purpose of this study was to determine the current attitudes and practices of both regular and special educators in elementary through secondary schools within 27 Wisconsin area school districts. Sixty-nine per cent of those surveyed responded to the study. Of the 159 respondents, 42% were classified as regular classroom teachers and 42% of the respondents were classified as special educators. The results of the questionnaire indicated that only 28% of the respondents had schoolwide peer tutoring programs, while 56% of the respondents did not have programs or were unaware of the existence of peer tutoring in their schools.

The results regarding the developmental and structural practices of those with peer tutoring programs are also emphasized and supported in the literature. The importance of the identification and selection of tutors on a voluntary basis, by teacher recommendation, and according to their abilities to work well with others was supported by the responses of more than 50% of the participants to these items. Selection on a voluntary basis was also supported by Schine (1981) who stated that tutor voluntarism was critical to the success of the peer tutoring program. Teacher recommendations and students' abilities to work well with others were also emphasized in the tutor selection processes of several programs (Asselin & Vasa, 1981; Blackburn et al., 1978; Gajar et al., 1980; Jenkins & Jenkins, 1981).

According to the results obtained for the benefits of tutoring for peer tutors, class credit and "other" received the greatest numbers of responses.

While Akigbe (1975) included class credit as a benefit of tutoring in high school programs, it is the researcher's opinion that this factor may have been misrepresented due to differing views of participants as to whether class credit was considered as actual credit for tutoring as a class or whether class credit consisted of extra points given in regular classes for work accomplished in the tutorial sessions. Therefore, although 38% of the respondents included class credit as a benefit for tutors, both interpretations should be considered. The responses of participants as to "other" benefits such as satisfaction and enjoyment from helping others and the receipt of tangible reinforcers and recognition were supported by Asselin & Vasa (1981) and Schine (1981).

Tutee selection according to academic needs was emphasized by 92% of the respondents and by several researchers of the area (Blackburn et al., 1978; Boettcher, 1978; Endsley, 1980; Graves, 1977). Jorgensen (1978) and Strain et al. (1976) also provided support for the selection of tutees with social and behavioral needs, while only 32% of the respondents indicated the inclusion of this factor in their selection processes.

As indicated in the results of tutor and tutee match, cross-age tutoring and regular students teaching students with exceptional educational needs received the highest percentages of responses. However, while only 31% of the respondents indicated the use of tutors with exceptional educational needs, the review of literature included several instances of effective results using tutors with identified academic or social needs (Cloward, 1967; Maher, 1982; Stowitschek, 1982).

While the greatest percentage of participants responded to the use of tutor training through informal daily instructions, Von Harrison and Guymon (1980) implied that effective programs should include structured training. In regard to structured training, 38% of the respondents indicated that

special inservices were included in tutor training, while no participants included training through published programs.

Several studies supported the effectiveness of peer tutoring for increasing and promoting the academic and social-behavioral growth of both tutors and tutees (Akigbe, 1975; Earl et al., 1980; Gajar et al., 1980; Jorgensen, 1978). Results of the chi-square tests on the items which compared the attitudes of those respondents with peer tutoring programs and those without programs indicated that there were no significant differences between the two groups in their attitudes as to whether peer tutoring increases the academic growth of tutors, increases the academic growth of tutees, promotes the social-behavioral growth of tutors, or promotes the social-behavioral growth of tutees. However, while the mean attitude scores for both groups were positive for all items, the means for those with programs were slightly greater.

Results also indicated, as demonstrated in Table 9, that there was a significant difference between the two groups in regard to their attitudes as to whether peer tutoring takes too much time from students' regular programs. As Figure 1 illustrates, a significantly greater percentage of those with programs responded that peer tutoring does not take too much time from regular programs.

Although Isaacs and Stennett (1979a) noted that peer tutoring demands a significant commitment of time, there were no instances cited in the literature in which time taken away from regular programs was a major concern. As reported by Boettcher (1978), Good and Brophy (1973), and Greenwood et al. (1982), peer tutoring appears to be an effective means of individualizing instruction and increasing the amount of time directly engaged in academics. Therefore, the literature appears to support the

finding that peer tutoring does not take too much time from regular programs.

Results regarding the importance of each of ten identified variables in promoting effective peer tutoring programs indicated that those respondents without programs tended to view each factor as being slightly more important than those with peer tutoring in their schools (see Table 10). The factors which received the highest percentages of responses as to their importance included tutor selection, program goals, and tutor training. Ninety-three per cent of the respondents indicated that tutor selection was very important in promoting an effective peer tutoring program, while 74% responded to program goals and 73% to tutor training as being very important.

The review of literature also provided support for the importance of these variables in promoting program effectiveness. According to Schine (1981), successful peer tutoring was dependent on the careful selection and recruitment of tutors with strong academic and social skills, while Mason (1979) stated that a tutor should possess personal integrity and a commitment toward school. Ehly and Larsen (1980) emphasized that almost every student can potentially serve as a tutor if given training and supervision that focuses on the needs of the learner. Von Harrison and Guymon (1980) provided further support for the importance of tutor training through their belief that if training is approached in a highly structured way, students can benefit a great deal from the program. In regard to the importance of program goals, Melaragno (1976) and Ehly and Larsen (1980) emphasized that successful peer tutoring programs are dependent on careful and detailed planning which begins with the establishment of program goals.

While only 31% of the participants responded to materials and equipment as being very important in promoting effective programs, Harris et al.

(1977) stated that ingredients for success must include appropriate materials with which to work. The literature, however, appeared to support 70% of the respondents who indicated that parent support was not very important for successful peer tutoring. Only one study noted the inclusion of parents in a program through an attitude measure of behavior changes at home following peer tutoring (Gardner, 1978).

The final section of results was related to the reactions of those participants with peer tutoring as to the success of their programs and to the desires of those without programs to have peer tutoring implemented in their schools. Results indicated that while 89% of those with programs felt their programs were successful, only five per cent felt their programs were not successful. This appears to indicate that peer tutoring is viewed as an effective means of instruction by those who have witnessed or experienced the results.

Results regarding whether those without programs would like to have peer tutoring in their schools indicated that only 15% did not want to have programs. As stated in Appendix H, reasons for not wanting peer tutoring programs included the potentials for problems in scheduling, rivalry among students, and the time commitment. Some respondents indicated that individual teachers should be responsible for determining their own needs for such programs, while other reasons for not wanting programs included the need for further investigation in the area, the belief that bridging student deficits could best be handled by the teacher and other adult volunteers, and the impression that such a program might not be successful.

Eighty-one per cent of the respondents, however, indicated that they would like to have peer tutoring implemented in their schools. Several of these respondents also provided additional comments and concerns about peer tutoring. As stated in Appendix H, concerns regarding the implementation of

peer tutoring included needs in the areas of organization, selectivity, monitoring, and supervision, adequate time and personnel to provide such programs, and more information on the implementation of peer tutoring programs.

The responses of the participants appear reasonable in that peer tutoring may take a significant amount of time and organization, but as evidenced in the review of literature, the benefits and potential outcomes are highly supportive of peer tutorial instruction. The researcher suggests that future investigations include educators' concerns about peer tutoring. It appears that schools might benefit from additional information and guidelines on the procedures involved in establishing, developing, and structuring peer tutorial programs.

In conclusion, the research clearly provides reasons for schools to support and encourage peer tutoring at all levels of instruction. Peer tutoring, students teaching other students, has the potential to improve education through the individualization of instruction, the promotion of academic achievement for both tutors and tutees, and the enhancement of peer relationships and appropriate social behaviors for all involved students.

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APPENDICES

Appendix A

Peer Tutoring Materials and Handbooks

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- Wisconsin Right to Read Effort. Wisconsin handbook for reading improvement: Volunteer programs. Wisconsin Department of Public Instruction, 1979.

Appendix B
Daily Lesson Plan

Student's name _____

Tutor's name _____ Date _____

Objective:

Materials:

Procedure:
Introduction:

Practice Activity:

Reinforcement:

Evaluation:

Appendix C
Sample Lesson Plans

CONSONANT AND VOWEL DISCRIMINATION

Preassessment

- Objective:** Given a random line of letters of mixed case, the student will identify by naming the letters and will classify as either consonants or vowels.
- Instructions:** The tester will say: I am going to show you some letters. I want you to tell me the names of the letters, and whether they are vowels or consonants.

g	M	w	Q	F	c	A	X	t
D	o	h	j	B	I	l	d	N
u	r	k	S	b	E	G	m	q

Postassessment

- Instructions:** Tester will say: "I am going to show you some letters. Then I am going to make some letter sounds. I want you to point to the letter whose sound I make, and tell me if it is a vowel or a consonant."

Sound B, await response. Sound K, await response.
 Sound e, await response. Sound Z, await response.
 Sound i, await response. Sound a, await response.

a	z	f	k	e	b
u	l	i	j	m	o

LOCATING SPECIFIC PLACES ON A NEIGHBORHOOD MAP

Preassessment

- Objective:** Given a map of the neighborhood, the student will locate his home, school, and shopping area.
- Instructions:** The tester will say: "On this neighborhood map, mark the location of your house with an H. Mark your school's location with an S. Mark the store you shop in most often with a G."

Postassessment

- Instructions:** The tester will say: "On this neighborhood map draw the route you follow from your house to school."

Appendix D
Tutor Record Sheets

DAILY TUTORING RECORD

Child's name _____

Tutor's name _____ Date _____

Materials Used:

Notes made during tutoring session:

Child's reactions:

Tutor's reactions and comments:

Appendix D (continued)

DAILY RECORD SHEET

Student _____

Tutor _____ Date _____

Review:

Readiness:

Specific purpose:

General purpose:

Materials:

Reading selection: Title _____

Author _____

Source _____

Procedures:

Evaluation:

Appendix E
Program Evaluation Forms

TUTOR EVALUATION

Name of tutor _____

Name of teacher _____ Date _____

Please rate the performance of the tutor in the following areas as Excellent, Good, Needs Improvement, or Poor.

The tutor has been able to work with the teacher.

The tutor has been regular in attendance.

The tutor has been able to establish rapport with the student(s) assigned.

The tutor provided an appropriate model for the student in his speech and behavior.

The tutor was able to carry out instructions well.

The tutor was able to keep good daily records.

The tutor was able to work without much direction from the teacher.

The tutor at all times maintained a professional relationship with the student, with the teacher, and with the school's staff.

The tutor was able to bring about a change in the child's attitude and/or reading ability.

The tutor was able to apply his own initiative in making plans for the student.

The tutor was able to change or adapt the lesson plans to the needs of the student when adaptations seemed necessary.

The tutor seemed to enjoy working in the tutoring situation.

Appendix E (continued)

TUTOR'S FINAL EVALUATION REPORT

Student's name _____ Grade _____

Tutor's name _____ Date _____

How many sessions did you actually meet with the student?

How has the student responded to the tutoring sessions and to you as a personal friend?

Have you noticed a change of attitude on the part of the student toward the tutoring sessions or toward reading?

What skills have you been working on with this student?

What materials have you used with this student?

What are your impressions of the problems facing your student?

What do you see as the strengths of this student?

Have you had any special problems with this student?

What change, if any, have you noticed in the student's reading ability or in the student's ability to use specific skills?

What recommendations would you make concerning future work with this student?

Appendix E (continued)

STRUCTURED OBSERVATION

Tutor's name _____ Date _____

Time of observation _____ Room no. _____

Name of child or children observed _____

What activities were occurring when you observed?

How did the student participate in these activities?

What kind of reading habits did this child exhibit?

What seemed to be the child's relationships with other children in the classroom?

What kinds of work habits did this child exhibit?

How did he make use of his free time?

What did you notice about this child's oral language ability?

Did the child volunteer any information during class discussion? If so, how did his information relate to the discussion?

Appendix F

Peer Tutoring Questionnaire

Dear Participant:

I am a graduate student in the Special Education Program at the University of Wisconsin - La Crosse. As part of the requirements for the completion of the program I have chosen to review the current literature and survey the current attitudes and practices regarding peer tutoring within area schools. The survey will be used as a means for discovering whether or not area schools currently have peer tutoring programs, what their practices are in regard to setting up and maintaining programs, whether peer tutoring is viewed as an effective means for increasing academic and/or social growth of both tutors and tutees, what the important variables are for an effective program, and whether teachers are interested in having tutoring programs if they currently do not have them.

Peer tutoring is defined basically as students teaching students. For the purposes of this study, both similar-age and cross-age tutoring will be considered. Similar-age refers to students teaching students of the same age. Cross-age refers to older students tutoring younger students. Students may include both those in regular education and those with exceptional education needs. The term tutor refers to the student doing the teaching while tutee refers to the student being tutored.

I would sincerely appreciate your responses to the following items on the questionnaire. Please complete the survey even if there is not currently a peer tutoring program in your school. I would appreciate the return of all questionnaires by _____ . Please return the completed form through CESA #11 in the enclosed envelope. Thank you very much for your time and consideration.

Sincerely,

Jody Lee-Lampe

Appendix F (continued)

1. What is your current position?

- | | |
|--------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> L.D. Teacher | <input type="checkbox"/> Reading Specialist |
| <input type="checkbox"/> E.D./B.D. Teacher | <input type="checkbox"/> Classroom Teacher |
| <input type="checkbox"/> Other _____ | |

2. At what level are you currently employed? (Check all that apply)

- | | |
|-------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Elementary (K-5) | <input type="checkbox"/> Secondary (9-12) |
| <input type="checkbox"/> Middle (6-8) | <input type="checkbox"/> Other _____ |

3. Is there a peer tutoring program in your school?

- | | |
|-----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Yes, school wide (Go to ques. 4) | <input type="checkbox"/> Yes, classroom only
(Go to 12) |
| <input type="checkbox"/> No (Go the ques. 12) | <input type="checkbox"/> Not Sure |

4. Who is responsible for the organization and operation of the program?

- | | |
|------------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> L.D. Teacher | <input type="checkbox"/> Reading Specialist |
| <input type="checkbox"/> E.D./B.D. Teacher | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> Other (explain) _____ | |

5. How are tutors identified and selected for tutoring? (Check all that apply)

- | | |
|--------------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> Academic Standards | <input type="checkbox"/> Tutor Needs (academic or social) |
| <input type="checkbox"/> Teacher Recommendations | <input type="checkbox"/> Ability to work well with others |
| <input type="checkbox"/> Volunteer Basis | <input type="checkbox"/> Other _____ |

6. What are the benefits for peer tutors? (Check all that apply)

- | | |
|---------------------------------------|---------------------------------------------|
| <input type="checkbox"/> Class Credit | <input type="checkbox"/> Special Privileges |
| <input type="checkbox"/> Monetary Pay | <input type="checkbox"/> Other _____ |

7. How are candidates to be tutored selected? (Check all that apply)

- | | |
|------------------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> Academic Needs | <input type="checkbox"/> Social-Behavioral Needs |
| <input type="checkbox"/> Other (explain) _____ | |

8. How are tutors and candidates for tutoring matched? (Check all that apply)

- | | |
|-----------------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> Similar Ages | <input type="checkbox"/> Reg. Ed. tutoring EEN |
| <input type="checkbox"/> Older tutoring younger | <input type="checkbox"/> EEN tutoring Reg. Ed. |
| <input type="checkbox"/> Reg. Ed. tutoring Reg. Ed. | <input type="checkbox"/> EEN tutoring EEN |
| <input type="checkbox"/> Other (explain) _____ | |

Appendix F (continued)

9. How are tutors trained for tutoring? (Check all that apply)

- No special training
 Informal daily instructions (oral or written directions)
 Special inservice training (teaching demonstrations, use of materials & equipment, data recording techniques)
 Training through a published program

10. How is the program monitored or evaluated in regard to performance?

- Informal Evaluations
 Tutor Records
 Teacher Supervision of sessions
 Achievement on daily work
 Achievement on tests
 Other _____

11. How often do tutors and those being tutored meet each week? (average)

- 0 - 2 hours
 2 - 4 hours
 4 - 6 hours
 6 or more hours

Please respond to the following items as opinions of your own peer tutoring program if you have one in your school. If you do not have a tutoring program in your school, please respond to them according to your general understanding of peer tutoring. (Circle one response for each.)

12. Peer tutoring increases academic growth of those being tutored.

- 1 2 3 4 5
 Never Almost Never Sometimes Almost Always Always

13. Peer tutoring increases academic growth of tutors.

- 1 2 3 4 5
 Never Almost Never Sometimes Almost Always Always

14. Peer tutoring promotes social-behavioral growth of those being tutored.

- 1 2 3 4 5
 Never Almost Never Sometimes Almost Always Always

15. Peer tutoring promotes social-behavioral growth of tutors.

- 1 2 3 4 5
 Never Almost Never Sometimes Almost Always Always

16. Peer tutoring requires too much time away from students' regular programs.

- 1 2 3 4 5
 Never Almost Never Sometimes Almost Always Always

Appendix F (continued)

17. Please rank each of the following items on a scale of 1 to 3 in regard to the importance of each one in promoting an effective peer tutoring program. (1 - Very Important, 2 - Somewhat Important, 3 - Not Important)

<input type="checkbox"/> Tutor Selection	<input type="checkbox"/> Overall Program Supervision
<input type="checkbox"/> Program Goals	<input type="checkbox"/> Tutee Selection
<input type="checkbox"/> Administrative Support	<input type="checkbox"/> Specific Materials & Equipment
<input type="checkbox"/> Tutor Training	<input type="checkbox"/> Parent Support
<input type="checkbox"/> Tutor & Tutee Match	<input type="checkbox"/> Monitoring of Tutoring Sessions

18. Do you feel your program has been successful?

Yes Not Applicable
 No (explain) _____

19. If you do not have a peer tutoring program in your school at this time, would you like to see one started?

Yes Not Applicable
 No (explain) _____

APPENDIX G

SCHOOL DISTRICT OF LA CROSSE



HOGAN ADMINISTRATIVE CENTER
807 East Avenue South
La Crosse, WI 54601
608 785-0275 784-8960

SUPERVISOR OF
CURRICULUM
KATHRYN S. CAPPELEN

April 15, 1983

Ms. Jody Lee-Lampe
University of Wisconsin-La Crosse
17th and State Streets
La Crosse, WI 54601

Dear Ms. Lee-Lampe:

On April 13, 1983 the Research and Development Committee along with Steve Lang, Supervisor of Special Education, met to review your project, Implementation and Effectiveness of Peer Tutoring. You are to be commended for the very professional manner in which you completed the Research/Survey Overview form. I am pleased to inform you that the committee approved your project.

Please contact me in the near future so we can make the necessary arrangements for initiating your research.

Sincerely,

Kathryn Cappelen
Supervisor of Curriculum

KC/lg

Appendix H

Summary of Written Responses

Question #18: Do you feel your program has been successful?

- "Yes, except when irresponsible tutors are sent to us."
- "Somewhat successful, but it did take time away from some scheduled classes so as to accomodate the tutor."
- "Success varies depending on the tutor. Some are very dependable and able to carry out instructions. Others only show up when they want to. There isn't enough supervision and enforcement of attendance rules by the high school, although regular education teachers have had a little more luck with their tutors. The tutors I have had have not been strong enough to control behavior and enforce classroom rules."
- "Successful in many ways, but these are problems I have seen: there is not enough contact with tutors and it is hard to get students released from classes; teachers get too busy to give time to the program or forget to assign peers with tutors; the program started too late in the year and needs more follow-through; the person in charge needs time away from classes to monitor the program; and an orientation program is needed so teachers can be made aware of the program and it's needs."
- "Somewhat successful, but need better matching of tutor and tutee."
- "Yes, but I would like to see more tutoring going on schoolwide."
- "Yes, my children look forward to having the tutors help them. I feel it is an excellent service for me and for the children being helped."
- "Yes, but a tutoring program should be a long-term commitment. It takes at least two to three years of program development."

Question #19: If you do not have a peer tutoring program in your school at this time, would you like to see one started?

- "Yes, I would like to see one started with some definite organization and supervision, but we are such a small busy building that I don't know which one of us would have the time to study and organize it."
- "Yes, but you can't do it without personnel which I'm sure we don't have. Someone has to be there to supervise the sessions."
- "Yes, students can learn from more than one person."
- "Yes, I think the social-behavioral growth is a positive result."
- "Yes, however, I think an older high school student helping a younger child after school is a good idea."
- "Yes, but limited and selective."
- "Yes, I feel it could be very useful to both the tutor and tutee if someone could organize and implement the program."
- "Yes, I can see it being a positive addition to my classroom."
- "Yes, but scheduling can be difficult."
- "Yes, if adequate information is available for such a program."
- "Yes, but it needs to be well monitored."
- "Yes, but I feel there would be a definite scheduling problem at the middle school level."
- "Yes, if we have the time to do it."
- "Yes, it's effective but takes teacher time."
- "Yes, but there are many variables to be considered before implementation. I am interested in the social and emotional growth of tutors."
- "Yes, I'd like to see it expanded."
- "We had a schoolwide program handled through the guidance department in the past. The program was phased out supposedly due to lack of successful outcomes. I feel that if the concerns in item number 17 were

- dealt with in a more organized manner, the program would be successful."
- "I would like to know more about what is considered the program. I have done some peer tutoring in reading and math, but feel I could use more information."
 - "Yes, but it does take extra time to plan and monitor effectively."
 - "Yes, but I would need to know more about the program first."
 - "I teach kindergarten and am not aware of any organized tutor program in our school at this time, although I'm sure some of this takes place with older students. I would be interested in seeing one started. It could be a real neat thing for both my kindergarteners and older students."
 - "It would depend on how it was set up and handled, whether I would vote yes or no."
 - "No, we use that option on an individual basis."
 - "No, too often the students who are capable of being tutors are already spread too thin by extra curricular activities and thus would not have the time to give the full measure that would be required to make the program successful. Financially, our school districts have to make cut-backs and to have a well-planned program, a faculty member would have to oversee the project, plan goals, evaluate effectiveness, etc. Therefore, a qualified teacher could be hired with that money and actually work with the students tutoring in areas needed."
 - "I'm sure it has its value, but I don't think I would be the one to start it."
 - "I've used it in the past in different school systems and feel it can work wonderfully. However, with the small number of kids I have now, I don't want to use their valuable time to study with peer tutoring. Maybe if there were older kids in my school, but I'm trying to bridge

deficits which I feel I can do best through my own teaching and some adult student volunteers. Research does seem to suggest that it is very valuable. For older students, I can see this!"

- "No, because of our grade level."
- "No, because there is a scheduling problem at this level. If this were changed it could be very helpful."
- "I don't see the need for a district program. Each teacher should determine their needs."
- "I would need to investigate it more thoroughly."
- "I've confronted various teachers throughout the system and they all felt that peer tutoring wouldn't work because of rivalry and students feeling and acting superior so the idea of peer tutoring has been dropped."
- "No, our resource time allows the student a chance for extra time with academic teachers."
- "I didn't feel it was very successful several years ago when my students were involved, but maybe another try would work out."
- "We used it some years ago. It was difficult to have students leave the room and miss other instruction in the classroom. The time set aside for it would be extremely important."