

**ACADEMIC TUTORING AND
MENTORING: A LITERATURE
REVIEW**

By

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DIGEST

Marian Bergeson, Governor Pete Wilson's Secretary of Child Development and Education, requested a review of research evaluating academic tutoring and mentoring programs. This report summarizes that research.

Over fifty publications — books, journal articles and special reports encompassing a large and varied body of prominent theoretical works, research reports and program evaluations of tutoring, mentoring, and combined tutoring and mentoring programs — were reviewed for this report. This report summarizes key elements from this literature.

- Chapter I briefly reviews developmental, learning and social intervention theories so that readers may have a better understanding of how and why tutoring and mentoring work.
- Chapter II describes a wide variety of tutoring program models.
- Chapter III discusses the findings of the *Peer Tutoring and Mentoring Services for Disadvantaged Secondary School Students* evaluation, a nation-wide federal demonstration, and describes the results of the 1989 survey of college-sponsored tutoring and mentoring programs for disadvantaged students.¹
- Chapter IV summarizes three important reports about mentoring, *Youth Mentoring: Programs and Practices* (Flaxman, et. al., 1988), a comprehensive analysis of at-risk youth mentoring efforts, *Making A Difference: An Impact Study of Big Brothers/Big Sisters*, and *Guiding Boys through the Transition to Adulthood: The Role and Potential of Mentoring*, a discussion of mentoring for African American male children and youth.

Additional documents that offer significant information relevant to understanding tutoring and mentoring, its characteristics, strengths and weaknesses, are listed at the end of the report.

¹ The first part of this chapter was previously published as CRB Note vol. 4 no. 2.

EXECUTIVE SUMMARY

Marian Bergeson, Governor Pete Wilson's Secretary of Child Development and Education, requested a review of research evaluating academic tutoring and mentoring programs. Although much is yet to be learned about when and how tutoring and mentoring are most effective, there is a significant body of research that supports the effectiveness of well-designed school-linked tutoring and mentoring programs.

Tutoring is assistance that is provided to students to help them attain grade-level proficiency in basic skills and, as appropriate, learn more advanced skills. Tutoring usually involves assisting with homework assignments, providing instruction and fostering good study habits. Tutoring is provided by class peers, older students, college students, professionals and older adults.

Mentoring involves a one-to-one relationship between an older person and a younger one (a protégé) to pass on knowledge, experience and judgment, or to provide guidance and friendship. Mentoring programs link an adult to a younger person, with the goals of reassuring innate worth, instilling values, guiding curiosity and encouraging a positive youthful life. Distinguished from child rearing and friendship, the mentoring relationship is intended to be temporary, with the objective of helping the protégé reach independence and autonomy.

Tutoring²

There is an extensive range of tutoring program models, involving individuals of different ages and experiences (Goodlad and Hirst, 1989). For example, undergraduate science and technology students have coached secondary school students who in turn tutored younger elementary and middle school students. Tutoring is promoted within higher education in order to encourage learning and to prevent dropout among at-risk students.

Most of the research on tutoring generally finds it to be moderately effective at improving academic achievement. In 1982, a meta-analysis of 65 tutoring studies (Cohen) found that tutored students outperformed their peers on examinations, and expressed more positive attitudes toward the subjects in which they were tutored.

- Tutoring was particularly beneficial among children from disadvantaged socioeconomic backgrounds, with learners showing greater than average gains in reading and mathematics achievement and less absenteeism than nonparticipating counterparts. Both structured and unstructured programs produced measurable academic effects; however, the effects of more structured tutoring programs were greater.

² For purposes of this report, tutoring is defined as assistance that is provided to students by non-professionals to help them attain grade-level proficiency in basic skills and, as appropriate, learn more advanced skills. Tutoring usually involves assisting with homework assignments, providing instruction and fostering good study habits. Classmates, older students, college students, academicians, professionals from other fields, parents and senior citizens can be tutors. In the education research literature this is referred to as "peer tutoring."

- Tutoring benefited both tutors and tutees on cognitive and affective levels. Tutors developed more positive attitudes toward the subjects that they were teaching, and gained a better understanding of these subjects. However, tutoring was not found to improve the self-concept of either the tutor or the tutee.

Academic Tutoring and Mentoring³

A nation-wide academic tutoring and mentoring program (Pringle, et. al., 1990) was found to be moderately successful and at a per-learner cost comparable to that of federal Title I⁴ services. Modest positive effects on the academic performance and/or social integration of participating students in the first year suggests that, given the chance to mature, these and similar programs could yield positive results for more students on a sustained basis.

Peer assistance appears to be instrumental in helping disadvantaged youth improve academically and develop feelings of belonging in school. Properly matched tutors and tutees can develop positive personal bonds. Cross-age tutoring in particular seems to foster bonds so that participants come to regard one another as surrogate siblings or extended family members.

Expanded use of tutoring and mentoring services in several other specific contexts appears to be promising, particularly in schools with large student populations.

- New or limited English proficient (LEP) students, when paired with older students who serve as tutor-mentors, may socialize more successfully into the mainstream school culture. Tutors help them negotiate the rules, schedules and activities, and foster academic growth.
- Using Title I eligible adolescents as tutors could produce a range of positive effects similar to those reported in this demonstration program.
- A strong training and ongoing monitoring program would be essential to this model.

The Pringle, et. al., study (1990) identified five major characteristics in successful tutoring programs:

1. Recruiting at-risk students to serve as tutors and training them to act as mentors reduced stigma associated with receiving help.
2. Incentives (such as school credit) encourage tutors to view their tutoring responsibilities as important and productive work.

³ Mentoring is traditionally defined as a one-to-one relationship between an older person (a mentor) and a younger one (mentee or protégé). The purpose of mentoring is to improve a child or youth's chances for achieving his or her goals by linking them to resources and support not otherwise available. The role of the mentor is to pass on knowledge, experience and judgment, and/or to provide guidance and support. Also, mentoring can offer psychosocial support for changes in behavior, attitudes and ambitions. Mentoring programs link an adult to a younger person, with the goals of reassuring innate worth, instilling values, guiding curiosity, and encouraging a positive youthful life. Distinguished from child rearing and friendship, the mentoring relationship is intended to be temporary, with the objective of helping the protégé reach independence and autonomy.

⁴ Title I, formerly entitled Chapter I, provides federal financial assistance to school districts to meet the special education needs of educationally deprived children.

3. Both tutors and supervising classroom teachers should be trained. Tutors needed substantial support in order to be successful, so effective projects included preservice training, ongoing debriefing and problem-solving sessions and reflective journaling.
4. The most effective projects employed one-to-one tutor-student matching based on interpersonal bonds.
5. Collaborating with local colleges, universities and professional organizations to infuse new ideas and research into schools and strengthen school-community relationships generated broad-based project support.

Colleges and universities are involved in numerous tutoring and mentoring programs. A study of these efforts reported several important findings (Calahan and Farris, 1990):

1. Nearly one-third of all two- and four-year colleges in the United States sponsored programs involving college students as tutors or mentors for elementary and secondary school students. Nationally, there were an estimated 1,700 programs.
2. These programs involved about 71,000 college students serving 240,000 elementary and secondary school students.
3. One-third of the tutoring and mentoring programs reported insufficient tutors or mentors to serve all the recommended students. The larger programs experienced the greatest gaps in service ability.
4. The vast majority of the programs partnered with local school systems, and the remainder worked with social service and church sponsored groups.

Mentoring

This report goes beyond the scope of the original request by including extensive information about community-based mentoring efforts. This information is provided for several reasons. First, it is important to recognize that many effective community-based mentoring programs have been found, among other things, to improve academic performance. Second, information about how mentoring works and the conditions under which mentoring is found to be most effective will be useful to schools in planning and implementing academic mentoring programs. Third, mentoring might better serve students with greater needs than can be addressed solely by academic tutoring and mentoring strategies. Finally, the information could be useful in developing and implementing partnerships between schools and community mentoring programs.

Researchers generally conclude that mentoring can be moderately effective at improving the overall well being of children and youth (Flaxman, et. al, 1988 and Freeman, 1992). Effective mentoring, particularly for highly at-risk youth, was found to require significant levels of intense and long-lasting one-to-one relationships. The ability of the mentor to provide the substitute positive adult missing in the lives of at-risk children and youth is often a significant challenge. This is in large part because of the frequency and duration of the relationship that is required to override the often significant negative circumstances and influences present in these youth's lives. The evaluation of the Big Brother/Big Sister program model found mentoring to be

successful because the program infrastructure ensures adequate frequency and duration in the mentoring relationship.

When designing mentoring programs it is critical to consider precisely what outcomes are desired. This is essential so that meaningful assessments and monitoring mechanisms can be developed to identify appropriate candidates, and so that prospective mentors have the necessary capacity and time to meet these needs. Achieving these limited goals depends on accurately diagnosing client needs and determining that mentoring is the most appropriate intervention for attending to them.

Mentoring should be part of an overall intervention that offers multiple opportunities. Effective mentoring efforts are built around and coordinated with other program components; successful outcomes are dependent on all components. The most effective mentoring programs have specific goals, criteria for participation and established methods for mentor-protégé interaction, including frequency and duration. Monitoring and evaluation are essential to assess the degree to which programs succeed.

The literature review finds ten features critical to program success.

1. Top management supports programs.
2. Mentoring is one component of, and integrated into, a broader youth development effort.
3. Participation is voluntary.
4. Program duration may be relatively short (up to a year).
5. There are specific goals toward which the mentoring relationship is focused.
6. Mentors and protégés are selected carefully.
7. Mentor and protégé roles are delineated.
8. Orientation and training is provided for both mentors and protégés.
9. Programs have “structured flexibility” to allow mentors to use their own style.
10. Programs are carefully monitored.

These features suggest that the sponsoring organization, mentors and protégés must each be committed to and have ownership in the program and mentoring process.

CHAPTER I: SOCIAL INTERVENTION, LEARNING AND DEVELOPMENTAL THEORIES AND MODELS

This chapter provides a theoretical context for why and how tutoring and mentoring work. Some of the theories and models relate specifically to mentoring; others relate to tutoring; and some apply to both mentoring and tutoring. The information is drawn from *Youth Mentoring: Programs and Practices* by Erwin Flaxman, Carol Ascher and Charles Harrington, and *Peer Tutoring: A Guide to Learning by Teaching* by Sinclair Goodlad and Beverley Hirst.

THEORIES UNDERLYING TUTORING

This section reviews various underlying theories applied in the design and evaluation of tutoring programs. These include the role model, behaviorist, socio-linguistic, and Gestalt theories. They are not mutually exclusive. They do suggest, however, different priorities and types of activities that differentially address the needs of the tutee or the tutor.

Role theory uses the concept of “social role” to designate a set of expectations that are associated with particular positions in the social structure (e.g., teacher, student). These expectations define rights and duties. Behavior adheres to the role and not to the actor. Thus, when a student tutor assumes the social role of teacher, behavioral expectations shift for the student and for the students being taught. Responsibility is one of the new roles associated with tutoring. Successful tutoring programs result in observable improvements in the attitudes of student tutors, their cooperation with the teacher and assumption of greater responsibility for their education. Tutors are perceived by tutees to occupy roles closer to them than to the teacher. Success occurs when there is improvement in the academic performance of tutees.

The **behaviorist theory**, associated with the work of the psychologist B. F. Skinner, asserts that effective learning occurs when every correct answer is rewarded. Tutoring programs that are based on the behaviorist theory are highly structured, with the tutor presenting materials in a specific order. Both tutee and tutor experience success. The tutee is rewarded by the tutor’s positive acknowledgment for learning the material presented. The tutor experiences success when the tutee accomplishes greater proficiency with the material.

According to **socio-linguistic theory**, a student’s perceptions and ability to perform well in school are determined by speech patterns acquired in early childhood. This theory holds that disadvantaged children learn a ‘restricted code’ of speech (weak in general concepts) that limits their learning capacity, while middle class children learn an ‘elaborated code’ of speech that gives them an advantage in the classroom. Tutoring is the technique that is probably best suited to assisting disadvantaged students to expand their speech, and therefore, their potential to succeed academically.

Gestalt theory asserts that learning occurs when the learner can “locate” an item in an intellectual structure or field, or relate an idea to a larger context. This theory suggests that tutors will be the primary beneficiary of the tutoring experience because they have to struggle to

make the material meaningful to the tutee through reflecting on their own learning process. This opportunity increases the tutor's awareness of the patterns of learning and consequently helps to develop the ability to see problems in new and different ways.

These educational theories underlay specific benefits sought for the participants in tutoring programs (Goodlad and Hirst, 1989: 61-63):

1. Tutors develop their sense of personal adequacy (Role theory).
2. Tutors find a meaningful use of the subject matter of their studies (Gestalt theory).
3. Tutors reinforce their knowledge of fundamentals (Gestalt theory).
4. Tutors, in the adult role and with the status of teacher, experience being part of a productive society (Role theory).
5. Tutors develop insight into the teaching/learning process and can cooperate better with their own teachers (Gestalt theory and Role theory).
6. Tutees receive individualized instruction (Behaviorist theory).
7. Tutees receive more teaching (Behaviorist theory).
8. Tutees may respond better to their peer than to their teachers (Role theory, Gestalt theory).
9. Tutees can receive companionship from tutors (Gestalt theory).

THEORIES AND MODELS UNDERLYING MENTORING

Theories about individual behavior, learning and society influence the design and evaluation of mentoring programs. As with the theories associated with tutoring, these theories are not mutually exclusive.

Human Development

According to the preeminent developmental psychologist Erik Erikson, transition to young adulthood requires converting childhood knowledge of the "world of skills and tools" into a larger social context by which to understand one's place in the world. This process requires that adolescents form a sense of self that is distinct and separate from their caretakers and others, become more autonomous, and commit themselves to a course of work and study that is distinctly their own and fits into their social world.

Developmental theory holds that the task of adolescence is to determine where one fits in the larger social context outside of the family. Early social learnings, identifications and personal endowments place limits on the adolescent identity. However, opportunities within the larger environment offer a second chance for new social learnings and formation of expanded internal identifications.

Role confusion occurs if the adolescent is unable to establish an individual identity or over-identifies with others (such as peers, cliques, or social stereotypes). Erikson's model shows that

the identifications and personalities of adolescents powerfully combine with their cognitive states. Mentoring programs can facilitate this transition and can also be an agent that motivates positive identity formation.

Developmental processes appear to vary by socioeconomic status. Advantaged middle class youth tend to have experiences that reinforce earlier identities and roles. In contrast, less socially, economically and educationally advantaged youth, often from urban and minority backgrounds, may find expected social roles to be less congruent with their backgrounds and therefore more confusing. Defining an identity and a role for themselves may pose a far greater task and be deeply conflictual. Disadvantaged youth may move between two or more conflicting worlds, transferring their readings of social rules and conventions from one setting to another without a sense of cohesion or equilibrium. The likely consequence is role confusion and difficulties in developing a separate unique personality.

Learning Theories

Careful analysis of learning models reveals different assumptions that influence the design of mentoring programs and assessment of the needs of the protégé.

- The *accumulation model* assumes that the protégé lacks information and that information is all that is required. Cognitive abilities, emotional orientation, and attitudes and beliefs are not relevant.
- The *personality model* assumes that previous interpersonal experiences play a role in the learning process, independent of the environment in which the learner lives. Thus the learner comes to each new experience with presuppositions, identifications and personality orientations which must be addressed.
- The *cognitive developmental model* portrays learners as being in different developmental stages that are associated with particular kinds of learning. Thus the learner is able to master only those tasks and conflicts specific to a particular stage of development.

In practice these three types of learning are related. Content cannot be learned if the method of communication is not developmentally appropriate and/or the learner is not well motivated. The context of the information and the mentor's activities must be significant to the personality and development of the learner. Similarly, although mentoring seems to depend on the protégé's personality or developmental stage, it is not content free. As the protégé is being helped to develop, he or she also accumulates knowledge about the adult world. Thus mentoring programs that are built on one type of learning theory to the exclusion of others may be less successful.

Social Intervention Theory

One of three prevailing conceptions of society, its institutions and the role and responsibilities of the individual is implicit in all mentoring (natural and planned). The design of a mentoring program (as well as other child and youth development programs to which mentoring is often connected) is dependent on one's view of society. Accordingly, the intervention model defines the purpose and role of the mentor.

In one view, society is open and access to institutions is unrestricted at all levels and spheres. Open societies are benign and assumed to be a fertile environment for individual development. Barriers to individual growth thus reside in individuals, not in society. If individuals do not succeed, they are seen as lacking a particular ability or coming from homes and communities that have not adequately prepared them for the larger society. In this view, the locus of intervention is the individual. Mentoring is designed to enrich individual development or remedy deficiencies.

The second conception perceives society as blocked or stratified by social divisions that are difficult or impossible to cross. Inequities and the uneven distribution of resources in every institution characterize society. This view often prompts laws that address issues of equity — directly by opening up opportunity (i.e., affirmative action), or indirectly by making resources available and providing youth with better skills. The mentor advocates for the protégé's right to equal access and opportunity, provides resources otherwise lacking and/or teaches the skills required for success.

A third view is that society is organic, growing or evolving. Individuals, as long as they have certain skills and prerequisites, can get as far ahead as their capabilities allow. An individual's failure to develop results from a bad fit between the individual and the social placement, not from personal failure. In this view, while there are "haves" and "haves-not," resources can be distributed on the basis of the individual's performance, rather than on the basis of status characteristics (gender or race). Societal growth is linked to, and dependent upon, individual growth and development, and thus society cannot afford to be indifferent to personal development or discrimination. The role of mentoring here is to provide the individual with the necessary skills in order to achieve a higher degree of success.

Youth who become successful adults are often fortunate to have a combination of opportunities and resources, as well as a particular personality and character. Resources include the presence of one or more family adults who serve as positive role models, advocates and sponsors, and peer support, mentors or other help offered by community resources including churches, social agencies, and ethnic or youth organizations. Highly advantaged individuals often have redundant social supports and opportunities that fill any gaps that might occur if the family fails in some way.

For disadvantaged youth, the relative absence of such psychological and social resources is of concern. The well-planned mentoring program provides resources similar to those available to the more advantaged children and youth, as well as compensating for other deficiencies. This suggests that the psychosocial and instrumental aspects of mentoring may be even more important to disadvantaged youth' success.

An implicit goal of most mentoring programs for at-risk youth is to instill an orientation to individual achievement, and to provide the support to make individual achievement possible. Youth are encouraged to attempt moderately difficult tasks and to view their success as part of a long-range plan. Success is measured against a personal standard; the achiever is autonomous, independent and initiating. Very significantly, individuals with such an achievement orientation

often feel personally productive and responsible for what happens to them. External forces are not in control. Rather, individual action determines one's ability to succeed or fail.

At-risk Minority Youth and Mentoring

Many at-risk and other disadvantaged youth do not have an individualistic achievement orientation. Minority youth, females in particular, may frame their social and personal understanding in the context of relationships and connections. The group has an identity with which individual members maintain solidarity. Achievement is viewed as the result of cooperation, in which each person's actions help the entire group to meet its goals.

Ethnic categories are inherently group identities because individuals generally share a common history and experience a sense of sameness in different social situations, particularly when they are treated similarly despite their individual uniqueness. Personal ideals and values may be linked to the group. Planners of mentoring programs for minority youth need to recognize a group, as well as individual, identity and orientation. For example, some disenfranchised minority groups may develop a social identity that inverts symbols, finding different meanings in "white" words and statements. This social identity may value different dialects and communication styles, reject mainstream behaviors and appropriate outsider images in order to draw a boundary between the dominant and minority cultures.

Minority youth may feel that they have to make difficult choices in order to succeed in the larger society:

1. reject family background, breaking allegiances with the family and community and seeking resources elsewhere;
2. maintain a group identity and achieve for the group; or
3. remain loyal to the group by not submitting to the majority culture.

Some youth make all of these choices at different times and act out different identities. They may improvise the required behavior without internalizing the identity. Switching identities can cause their social relationships to become shallow and brittle, and they may become emotionally isolated.

All adolescents need modeling and cultural support to reduce the confusion of the conflicting paths before them. Mentoring must compete with other messages which may be more powerful, more homogeneous, more experientially realistic and even more supportive. Some mentoring messages may be accepted only if they clarify ambiguities and resolve contradictions. Mentoring can make new identities available, leading participants to re-evaluate their beliefs and reshape their social perceptions. Mentoring must also offer a mode of behavior that draws together personal rules and conventions, along with family and community values, in order to be successful.

CHAPTER II: TUTORING

This chapter presents information from the book *Peer Tutoring: A Guide to Learning by Teaching*, by Sinclair Goodlad and Beverley Hirst, and reviews the findings from the report *Educational Outcomes of Tutoring: A Meta-analysis of Findings*, by Peter A. Cohen, James A. Kulik and Chen-Lin C. Kulik.

Tutoring is defined as assistance that is provided to students (“tutees or learners”) by non-professionals to help them attain grade-level proficiency in basic skills and, as appropriate, learn more advanced skills. Tutoring usually involves assisting with homework assignments, providing instruction and fostering good study habits. Classmates, older students, college students, academicians, professionals from other fields, parents and senior citizens can be tutors. In the education research literature this is referred to as “peer tutoring.”

Research suggests four general positive outcomes of tutoring programs:

1. Tutoring can improve student performance and skills, and provoke student interest in participating fully in the educational process.
2. Tutoring benefits can improve the learning of both the tutor and the tutee.
3. Tutoring can relieve the strain on teachers of trying to teach large, often mixed-ability classes.
4. Tutoring is relatively inexpensive and greatly enriches education.

This examines different tutoring approaches and programs. It discusses how different models have been utilized and their relative effectiveness. Finally, a meta-analysis of 65 studies (conducted in 1982) provides an overview of the research literature.

AN OVERVIEW OF TUTORING MODELS AND PROGRAMS

There is an extensive range of tutoring program models, involving individuals of different ages and experiences (Goodlad and Hirst, 1989). For example, undergraduate science and technology students have coached secondary school students who in turn tutored younger elementary and middle school students. Tutoring is promoted within higher education in order to encourage learning and to prevent dropout among at-risk students.

Underachieving teenagers have helped elementary school children from disadvantaged neighborhoods. Secondary school students have provided tutoring in homework helper centers. Entire schools have been organized so that each child acted as a tutor for part of each day and was tutored part of the day. Many schools have paired reading projects.

Adult tutors have included professional mathematicians and scientists from major universities and research corporations who have taught mathematics to disadvantaged school children. Senior citizens have worked in schools with adolescents who were experiencing failure due to

academic, physical, social, or emotional difficulties. Parents in low-income areas were trained to tutor their own children. Adults have volunteered to help in adult literacy campaigns.

Finally, there are numerous tutoring programs specifically designed for the mentally and physically handicapped and individuals with behavioral disorders.

College Student Tutors: Programs for Primary and Secondary School Students

Project Technology Power, University of Minnesota

The primary objective of Project Technology Power is to increase interest in mathematics and science among low-income and minority youth in inner-city schools by training students from those schools to teach mathematics or science to younger students (one or two grade levels below their own). The project features a multilevel system of teaching in which university professors train college students to coach older school children, who in turn tutor younger students in their schools. (The structure of the program could be readily adapted to other target groups and subjects.)

ASPIRA-MACE Bilingual Tutorial Reading Project, Chicago

The ASPIRA-MACE Bilingual Tutorial Reading Project in Chicago, Illinois, was designed to address the problem of low reading-achievement levels in ten public schools with predominantly Spanish-speaking students. The project used college students to provide tutorial assistance to selected students who were identified as one or two years behind in reading.

A total of 150 tutors were recruited from Chicago area universities and colleges. The tutors were bilingual and/or bi-cultural. They received approximately 12 hours of training and offered three hours of tutoring a week for 13 to 15 weeks. The logistics of linking tutors from the various college campuses with learners at one of the ten school sites proved to be significant and difficult. Not surprisingly, effective communication between project coordinators, tutors, students and teachers was difficult to achieve.

The Perach Project, Israel

The Perach Project in Israel is noteworthy because of its size and duration. The Project has provided one-to-one tutoring by college students to socially disadvantaged children since 1975. It has been steadily expanding, with more than 12,000 tutor-learner pairs as of 1995. The tutors are volunteer undergraduate students. The tutors and children meet regularly, usually two hours twice a week over a seven-month period. In return for tutoring, college students receive reimbursement for a portion of their university tuition.

The primary goals of the Perach Project are to increase the motivation, achievement and self-confidence of the children through establishment of a close personal relationship between tutor and child. The underlying philosophy is that these goals can be accomplished by demonstrating that someone outside the child's immediate family cares about the child. Tutors work at improving the children's motivation and attitudes towards learning and assist them with their

studies. While the tutors receive no formal training, they meet monthly with tutor coordinators for guidance and occasional lectures. The structure of the tutoring sessions are left to the tutor to decide based on the specific needs of each child.

The Perach Project has a hierarchical structure. Each university has a paid coordinator responsible for 35 to 50 tutors. A central government office manages the coordinators.

One evaluation found little academic difference between tutored and non-tutored children. However, the parents, teachers and children reported progress in school, more participation in class, more regular homework and more positive attitudes towards school. The researchers believed the Perach students to be at less risk for school failure and dropout, and concluded that the program results were meaningful. The lack of definitive academic improvement could be due in part to the testing devices, which might not have been sufficiently sensitive to changes taking place in the children.

A retrospective review of tutor-learner files found that many tutors concentrated on basic skills in mathematics, reading and English, rather than on the material taught in class. This finding, when combined with the fact that tutors decided on the content and goals of the tutoring activity, made construction of appropriate cognitive tests very difficult. Researchers familiar with Perach suggest that a different type of test needs to be constructed for each learner in order to detect any changes taking place. An evaluation that measured the effectiveness of Perach in influencing children's motivation and self-confidence found that tutors have a general positive impact on children's attitudes toward school. Learners reported greater satisfaction with school, were more certain of themselves in the classroom, and spent more time reading than non-Perach children.

College Student Tutors: Programs for College Peers

Tutoring exists in many forms in higher education. Four basic types have been identified: surrogate teaching; proctoring; co-tutoring; and teacherless groups. They are also appropriate models for children and youth tutoring programs.

- Surrogate teaching delegates teaching to selected students, often graduate students and Ph.D. candidates. The surrogate teachers learn while offering an educational experience for undergraduates.
- Proctoring involves students taking on the role of one-to-one tutors for fellow students who are at a similar or lower stage in study. It has been widely used in American universities and colleges. The goal is subject matter mastery. Study is often self-paced using guides and occasional lectures.
- Co-tutoring is informal, partnering students who are encountering difficulty with their studies with each other. Many colleges and universities have formalized co-tutoring so that all students can take advantage of this opportunity for shared learning. Co-tutoring has also been found to be successful with high school students.
- Teacherless groups are a variation on tutoring in which peer-led discussion groups meet in the absence of the teacher. The purpose of these groups is to motivate students to become more involved with their own learning, so that they become more

active and self-directed in their work. Teachers usually assign work to groups of four to eight students for discussion.

Children Teaching Children

National Commission on Resources for Youth, Inc.

The National Commission on Resources for Youth, (NCRY) Inc., was founded by a group of social scientists, educators, judges and businessmen. Concerned that modern industrial society provides few opportunities for meeting the needs of young people to prepare for adulthood, the Commission's mission is to promote the idea that youth can be integrated into adult society at an earlier age. NCRY initiated one of the first efforts to develop the concept of structured community service by students as part of the educational experience. The program identifies activities that give youth the chance to assume responsible roles, particularly those giving valuable human services which might motivate significant change in the community.

One of the major programs to come out of this effort is Youth Tutoring Youth, in which youth who are not achieving well and have fallen below grade-level in reading, are trained as paid tutors for elementary-school children from disadvantaged neighborhoods. The intent of the project is to demonstrate to the tutors that teaching is a powerful learning experience, and to give them a sense of being needed. Positive qualitative changes in the participating children include:

- The care and excitement with which the tutors lead their charges through the lessons, which the tutors learn along with their charges.
- The tutors' sustained interest and participation.
- The expanding aspirations of the tutors and their greater understanding of and sympathy for classroom teachers.
- The rapport between tutors and learners.
- The increased use of books by tutors and learners as the written word enters their lives in a meaningful way for the first time.

Program evaluations found few tutors dropped out, usually because of health or better employment opportunities. Results from a six-week test were remarkable. At the Newark site, tutors achieved significant gains in reading skills, and reading-age equivalents increased 3.5 years. The Philadelphia program, which was less structured than the other sites, reported that tutors' reading-age increased an average equivalent of one year.

New York High School Homework Helper Program

In 1962, the New York High School Homework Helper Program, developed by the New York City Board of Education and Mobilization for Youth, Inc., trained high school and college students and employed them as tutors for high school students in ten local school districts serving disadvantaged neighborhoods (see also Cloward, 1967). The program objectives included:

1. providing tutorial services in mathematics, reading and English as a second language;

2. improving study skills and work habits of participating students so that they would be able to satisfactorily complete homework assignments;
3. improving the attitudes of participants towards school and school-related activities;
4. providing academic models in order to increase the educational aspirations of participating students.

Tutoring services were provided after school for two hours, two days a week. Teachers, paraprofessionals and tutors participated in orientation and monthly staff conferences. Extensively evaluated, this program demonstrated that tutors have as much to gain from tutoring as the learners. The program evaluation also concluded that given enough administrative resources, tutoring could be operated on a very large scale. The key to success appeared to be the effective assignment of roles among teachers, tutors and tutees, and adequate training sessions for tutors.

Tutorial Community Project, Pacoima School, California

The Tutorial Community Project, Pacoima School, California, was one of the largest single tutoring demonstration programs undertaken. The entire school was organized on the tutoring principle. Rather than limiting tutoring to an after-school activity, the intent was that each elementary child would receive tutoring as part of normal school instruction. Tutoring was introduced gradually. One grade-level was added each successive year for seven years. Elementary school children were tutored by older children and youth: kindergartners by seven- and eight-year-olds (grades 2 and 3); 1st and 2nd graders by 8-to-11 year-olds (grades 4-6); and 3rd through 5th graders by junior high school students. Eventually all classes had tutors, and tutors were paired with lower grade students. The community was involved in the program from the outset.

There were no significant logistical problems in the early stages of the project. However, as more classrooms were brought into the project, logistics became increasingly complicated and timetable breakdowns developed. Other difficulties occurred, not the least of which was the emergence of organizational and administrative complexities that led to extra work by everybody concerned.

Improvements in reading scores were reported for both tutors and learners. However, the notion of a tutoring community fell short; tutoring became a much more limited program. Important lessons were learned from this experiment. Most significant was the recognition that these models require institutional arrangements that are as simple as possible. In addition, tutor training must be provided and valued by the school as an integral component of the educational experience.

Paired Reading Models

Paired reading usually consists of matching students within the same grade level on a one-to-one basis. Usually one student is slightly more skilled in reading and comprehension than the other student, who is usually reading at or below age-level. Paired Reading is used primarily with

children reading at or below age-level, with some ability to read, who are usually junior high school students.

Paired reading is used with some frequency in the United Kingdom. Results are encouraging, including accelerated gains in reading accuracy and comprehension for children of all reading levels, and for children with special needs in particular.

Both tutor and learner receive special training. Sessions are 15 minutes in duration; the optimal intervention period is six weeks. Evaluations found that learners were able to read out loud faster make fewer errors and more frequently self-correct mistakes. Parents and teachers reported children had improved self-confidence and showed greater interest in reading. Teachers reported some attitudinal shift from competition toward cooperation and helpfulness in the classroom.

Project SEED, Berkeley, California

Volunteer professional mathematicians and scientists from major universities and research corporations teach disadvantaged elementary school children abstract, conceptually oriented mathematics. Project SEED postulates that:

1. This student population performs poorly in school primarily because they believed themselves to be inferior and their teachers have low expectations.
2. The most effective response is to give the children a meaningful experience of success.
3. Children would succeed with advanced algebra when taught by a highly trained person using the “Socratic” or “discovery” method of asking questions in class.

The Project seeks to give children success in a high-status subject and thereby improve their overall interest in study. Instruction is a class period (40 minutes) 4 to 5 days a week.

Started in 1963, over 12,000 students had been reached by 1996, most of whom were black children from poor neighborhoods. The program is unique because of the use of volunteers to teach entire classes rather than provide one-to-one tutoring. Training is done through apprenticeships; new volunteer mathematicians observe experienced volunteer mathematicians in the classroom, followed by joint teaching, and finally individual class instruction. The regular teacher is always present when the mathematician is working with his or her class. It is reported that the children are stimulated by the experience, and that volunteers find the experience rewarding and intellectually stimulating.

Seniors as Tutors

Numerous schools have developed tutoring programs in which seniors serve as tutors. Researchers report that these programs have many benefits. Seniors often become friends with the young people and with each other. They have the rewarding experience of being part of a school, and of being needed and appreciated. Adolescent students value these ‘surrogate parents’ who give them more time and personal attention. Teachers appreciate the help and find seniors to be less critical of teachers and schools than parents.

Seniors generally receive training after being screened for suitability. A typical commitment is three hours of tutoring over a three day a week period.

Parents as Tutors

While many parents are involved informally in their children's education, some participate in structured tutoring programs. There appears to be increasing acceptance by school administrators of parent participation in schooling. The parents' role is often limited to the specific skills and experience they bring to the tutoring setting. Special efforts to develop parent tutor programs have focused on reading skills. Evaluation results are encouraging. Of particular significance is the finding that parents who hear their children read at home have a major impact on reading development, regardless of other factors such as socio-economic status.

One of the early studies (conducted in London) examined a two-year program in which parents were asked to have their children read to them at home. There were two control groups; children who received extra teacher instruction at school and children who received no attention. A comparison of the parent-tutored children with the control group revealed highly significant differences. Parental help reduced the number of failing readers, and gains were made consistently by the parent-tutored students at all ability levels. Follow-up studies reported that parent-tutored children continued to perform at a higher level than the control group children. In an evaluation of another type of paired reading tutoring program in which parents were paired with their 8 to 11 year old children in the classroom setting, children experiencing reading difficulties made substantial improvements in their reading abilities.

Tutoring for Special Needs

Special tutoring programs are a recent development for the developmentally and physically handicapped, and the emotionally and behaviorally disordered. They are designed to address both social rejection and academic deficiency, the two primary problems handicapped students face, particularly as they are increasingly mainstreamed within secondary schools. As with other tutoring programs, both tutees and tutors benefit academically. Tutoring programs have also succeeded at increasing social acceptance of the handicapped.

These programs vary in design and focus. Some utilize non-handicapped persons as tutors. In addition to assisting handicapped students to learn, the program overcame the difficulties that non-handicapped students often have when interacting with their handicapped peers. A study of a program designed to improve attitudes towards moderately- and severely-handicapped students within the sixth grade found that negative attitudes held by non-handicapped students towards the handicapped students decreased significantly when they served as tutors, approaching levels of acceptance similar to non-handicapped peers.

Some programs employ handicapped and emotionally disordered students as tutors for both handicapped and non-handicapped students. One program trained mildly handicapped children ages five through eight years to work with similarly aged autistic children. The evaluation of this program found it to be successful. Similar success was reported for programs utilizing handicapped children as tutors for classmates who were withdrawn and unsociable. Cross-age

tutoring, in which mildly-handicapped high school students tutor non-handicapped elementary school children (referred to as “reverse-role” tutoring), has also demonstrated success in teaching reading, mathematics and other topics.

Studies of tutoring involving behaviorally disordered students were reportedly successful when the content areas were carefully selected. While either the tutors or tutees did not report improvement in self-esteem, the evaluation did report parents and teachers as observing such improvements.

COHEN META-ANALYSIS OF TUTORING

A meta-analysis of 65 studies examining tutoring programs in which children tutored children (Cohen, 1982) reports definite and positive effects on the academic performance and attitudes of the children who received tutoring. The 65 studies assessed effects in three major areas:

1. student achievement as measured on examinations;
2. favorability of student attitudes toward the subject matter;
3. favorability of student self-concept.

Tutored students outperformed their peers on examinations, and expressed more positive attitudes toward the subjects in which they were tutored. Tutoring was particularly beneficial among children from disadvantaged socioeconomic backgrounds, with learners showing greater than average gains in reading and mathematics achievement and less absenteeism than nonparticipating counterparts. Although both structured and unstructured programs produced measurable academic effects, the effects of more structured tutoring programs were greater.

Tutoring programs also achieved positive effects on the children who serve as tutors. Tutoring benefited both tutors and learners on cognitive and affective levels. The tutors developed more positive attitudes toward the subjects that they were teaching, and gained a better understanding of these subjects. However, tutoring was not found to improve the self-concept of either the tutor or the tutee.

Achievement

In 45 of the studies, the examination performance of tutored students was better than that of students in a conventional class. Only six studies showed reduced performance by tutored students and one study showed no change. Although the effects of tutoring were modest, the size of the effect varied from study to study.

Some tutoring program features were associated with strong results. For example, tutoring effects were larger in more structured programs and in programs of shorter duration (between three to six months and one school year). The effects were also larger when lower level skills were taught and tested on examination, and when mathematics rather than reading was the subject of tutoring. The type of test administered influenced the results. [The effects were larger when locally developed tests were administered instead of nationally standardized tests.]

Attitude Toward Subject Matter

Eight studies examined student attitudes toward the subject matter that they were being taught. They found that student attitudes were modestly more positive in classrooms with tutoring programs. The results were consistent enough to be statistically significant and meaningful.

Four of five studies found more positive attitudes among tutors (although the findings of only one study were statistically significant). In contrast, one study found that non-tutors held the more positive attitudes.

Thirty-three of 38 studies found that student tutors performed better than control students on examinations in the subject being taught (10 of these studies reported statistically significant results). In contrast, five studies reported that students that tutored did not perform as well as control students.

Self Concept

Nine studies examined the effects of tutoring programs on tutee self-concept. Seven of these studies found self-concepts were slightly more favorable for students in classrooms with tutoring programs, while two studies found self concepts were more favorable in classrooms without tutoring programs. Whatever improvements in self-concept were observed were very small and not considered to be statistically significant.

Sixteen studies reported on the effects of tutoring programs on the self-concepts of the tutors. The average effect was small. Self-concept was higher among student tutors than their non-tutoring counterparts in 12 of these studies; four reported statistically significant results. In contrast, four studies found self-concept to be slightly higher for those who did not serve as tutors (none showed statistically significant differences).

Conclusions

At the time that the Cohen meta-analysis was done (1982), the educational research literature on tutoring programs generally reported definite and positive effects on the academic performance and attitudes of students who received tutoring. Tutored students outperformed their peers on examinations, and expressed more positive attitudes toward the subjects in which they were tutored. Tutoring programs also reported positive effects on children who served as tutors. Tutors developed more positive attitudes toward the subjects that they were teaching, and gained a better understanding of these subjects.

Although structured and unstructured programs produced measurable effects, the effects of more structured tutoring programs were greater.

CHAPTER III: ACADEMIC TUTORING AND MENTORING

This chapter reviews two major research reports, *Peer Tutoring and Mentoring Services for Disadvantaged Secondary School Students*, by Beverly Pringle, Leslie M. Anderson, Michael C. Rubenstein and Alexander W. W. Russo (1990), and *College Sponsored Tutoring and Mentoring Programs in Primary and Secondary Schools* by Margaret Cahalan and Elizabeth Farris (1990).

ACADEMIC TUTORING AND MENTORING SERVICES FOR DISADVANTAGED SECONDARY SCHOOL STUDENTS

In 1988, the Congress enacted a one-year demonstration program, the Secondary Schools Basic Skills Demonstration Assistance Program, aimed at improving the academic achievement of disadvantaged children with mentoring and tutoring services (Pringle, et. al., 1990). The evaluation report prepared upon the completion of this demonstration offers one of the most significant studies of school-based tutoring and mentoring in the nation.

The demonstration program used the following definitions (Pringle, et. al.: 6):

- **Mentor:** An adult from the community who assists educationally deprived secondary school students (protégés) to attain grade-level proficiency in basic skills and, as appropriate, learn more advanced skills.
- **Peer Tutor:** A secondary school student who assists educationally disadvantaged peers (tutees) to attain grade-level proficiency in basic skills and, as appropriate, learn more advanced skills by assisting with homework assignments, providing instruction and fostering good study habits.
- **Learner:** A student who receives tutoring (tutee), mentoring (protégé), or both.

The evaluation's goal was to determine whether the academic achievement of secondary school students improved with participation, and which strategies accounted for improvements. It reviewed data collected by the 31 grantee school districts, included 10 case studies and analyzed student outcomes from 13 grantee projects.

Evaluation Findings

The evaluation found tutoring and mentoring could positively affect academic achievement as evidenced by improvements in test scores, grade point averages (GPAs) and course pass rates. In addition, students showed improved social integration as evidenced by improved attendance, reduced disciplinary referrals and improved student attitudes toward school. The most promising results were found in programs that selected low achieving students to tutor much younger children. The researchers concluded that tutoring and mentoring may be particularly helpful in improving the classroom performance of learners who receive both tutoring and mentoring services that assist them with daily assignments, and help them to develop efficient organizational and study skills.

Tutoring and mentoring appear to produce positive effects in different ways. Tutoring was perceived by parents as having an immediate and beneficial impact on learners' attitudes toward school, both in improved academic performance and attachment to school. Mentoring appeared to have broader influence, receiving community support and recruiting goodwill ambassadors along with mentors.

Analysis of observations, surveys and interview data provides some insight into how and why tutoring and mentoring may be effective at improving the academic achievement of disadvantaged children. Tutoring and mentoring have the potential to alter the low achiever's self-perception as an incompetent learner. Working with a tutor or mentor affords the learner a non-threatening way by which to learn how to set and accomplish goals, reason through dilemmas and solve problems. The evaluators report that, "In this way, tutoring and mentoring can break the isolation that characterizes much classroom work and demystify the learning process by making public the effort that accompanies achievement (but is so often invisible to the low achiever)" (p. 39). Interviews of learners revealed that disadvantaged students often found their peers more approachable than teachers for extra assistance, perceiving their teachers as too busy.

Tutoring and mentoring were also found to raise the academic achievement of both the tutors and tutor-mentors, particularly when they themselves were: (1) at-risk; (2) working with younger children in a cross-age tutoring program; and (3) receiving focused and related services, such as mentoring, intensive training or monitoring. Improved self-concept and attitudes toward school were also reported. This is consistent with prior research by Webb (1987) and Cotton (1988), who report that being selected to tutor conveys three important messages to that student: (1) you are knowledgeable about something; (2) you can help someone; and (3) you are trusted enough to be put in a responsible position. Consistent with Webb (1987), these researchers concluded that tutors achieve academic improvements because they experience increased understanding of the subject matter due to the reinforcement gained from teaching the material to their tutees.

The researchers caution that tutoring should not be seen as a substitute for high quality instruction. The evaluation reported that when weak instruction was observed, tutoring made the class more palatable to students but did not increase the quality of instruction. Indeed, the evaluation revealed that program success is positively associated with teacher involvement and participation.

Tutoring and mentoring were found to be particularly powerful ways of increasing students' feelings of belonging to the school community when:

1. Personal compatibility was used as a factor in matching tutors and learners.
2. Mentors or tutors were matched one-to-one with learners in large schools.
3. Tutoring and mentoring services included counseling or problem-solving sessions to help learners constructively address their conflicts with teachers, other school staff or fellow students.

Most projects reported difficulties recruiting enough mentors. The more successful projects had mentoring services that arranged for protégés to spend regularly scheduled blocks of time with

their mentors in a local business or community agency. In one project, the mentor and school worked closely to coordinate job-site activities with academic work in order to help the students recognize the link between schoolwork and the real world. The data suggest that job shadowing may spur secondary school students to assess their own skills and plans for post-secondary education. A well-structured tutoring program can be similar to a job shadowing experience or an apprenticeship.

Tutors in some projects were observed to have internalized some of the teaching strategies they learned during training and service. Tutors gained valuable insights into the teaching profession. Some tutors subsequently reported an interest in teaching as a career path; for others, it reaffirmed a self-assessment that their interests and skills would ultimately enrich their success as a teacher.

Effects on teachers and school-community relations emerged as two additional program outcomes. Teachers' responses were generally positive, with those who were involved in design and implementation the most enthusiastic. Negative responses were reported by teachers who tended to not fully understand the project goals and objectives, and who were asked to complete project-related paperwork viewed as unnecessary, burdensome or counterproductive. The evaluators concluded that while expending resources to develop mentoring relationships is a worthwhile endeavor, establishing effective mentoring services through a school program could be difficult.

Overview of Projects

Goals for learners (tutees and protégés) focused on academic achievement and high school graduation, and included (in order of importance):

- improving basic skills in English and math;
- preventing school drop-out;
- improving study skills;
- building self-esteem;
- improving students' attitudes toward school subject matter;
- increasing attendance;
- facilitating transition from middle or junior school to high school;
- improving advanced skills in English and math;
- developing employment skills.

Goals for tutors included building self-esteem and leadership skills while improving academic achievement and communication skills.

Projects were operated in various demographic and educational settings with diverse student populations who experienced a range of barriers to academic and personal success:

- 46 percent were located in urban areas and 35 percent in rural areas.
- An equal number of black, white and Hispanic students were served, and 11 percent were bilingual.

- An equal number of blacks and whites served as tutors (38 percent each); 16 percent were Hispanic.

Tutors, Mentors and Learners

The 29 projects responding to the evaluation survey reported serving a total of 7,466 students, 2,207 tutors and 591 mentors. The grade levels represented by learners (tutees and protégés) ranged from grades 1 to 12, with the largest concentration in grades 6 to 12. Most tutors were in grades 8, 11 and 12.

Learners across projects were similarly disadvantaged in terms of academic standing:

- 29 percent of them were receiving Title I⁵ services;
- 29 percent were receiving dropout prevention service;
- 12 percent were receiving alternative education services;
- 11 percent were participating in bilingual/ESL programs.

The educational background of the adult mentors varied, with over three-quarters having at least one year of college. A high percentage (87 percent) had already completed one semester or one year as a mentor. Community groups, local businesses, colleges and universities, religious organizations, local media, school newspapers and senior citizen homes recruited mentors.

Several factors were identified as important in selecting tutors:

- academic achievement (24 percent);
- teacher/counselor recommendation (17 percent);
- expressed interest (17 percent);
- leadership qualities (14 percent);
- dependability (7 percent);
- course activity (3 percent);
- availability (3 percent).

Tutoring and Mentoring Duration

Research indicates that there is no consensus on how long tutoring relationships should last, or what the optimal duration and frequency of tutoring and mentoring sessions should be. Jenkins and Jenkins (1985, as referenced in Pringle, et. al, 1990) conclude that secondary level tutors and learners should meet one class period each school day, reporting that programs that were continuous and of moderate duration were the most successful. They also concluded that the longer the program and more frequent the sessions, the greater the academic gain. However, Cohen (1982) found in a meta-analysis of 65 evaluations of tutoring programs that the shorter the duration of services (between sixteen and twenty-six weeks), the better the results (see discussion in Chapter II).

⁵ Title I, formerly entitled Chapter I, provides federal financial assistance to school districts to meet the special education needs of educationally deprived children.

The average duration of 72 percent of the projects was 16 or more weeks. The average number of weekly sessions ranged between 1 and 5 sessions, with hour-long sessions in 83 percent of the projects.

Scope and Complexity

The scope and complexity of operational design varied widely among the projects. The most basic design involved discrete sets of participants who were either tutors or mentors or learners. The most common design provided both tutoring and mentoring to a single group of learners. There were, however, several projects that also provided mentoring to tutors. The most complex of these “scaffolding” designs utilized adults from the community to mentor 11th and 12 graders, who tutored middle school 8th graders, who in turn tutored primary grade students.

Academic Content

Academic content varied by project, influenced by three primary considerations:

1. teacher recommendations;
2. homework assignments;
3. diagnostic evaluations.

Across all projects tutors and mentors spent 20 percent of their time on basic reading skills, 10 to 30 percent on basic math skills, up to 20 percent on advance reading skills and 10 percent each on composition and short writing tasks. Three-fourths of the projects also provided counseling, 69 percent offered employment-related assistance or career awareness activities and 62 percent offered social, recreational and cultural enrichment.

Factors Affecting the Longevity of Tutor and Mentor Relationships

Numerous factors were identified as affecting the longevity of the tutor and mentor relationships with learners:

1. initial screening and matching of tutors and mentors with students who had similar characteristics;
2. degree of coordination among tutors, mentors and classroom teachers;
3. frequency and duration of tutoring and mentoring sessions;
4. time of day when tutoring and mentoring sessions occurred;
5. location of tutoring and mentoring sessions;
6. level of parental participation and support;
7. amount and quality of training for mentors and tutors.

Factors Used to Match Learners with Tutors and Adult Mentors

The factors used by the projects to match learners with tutors and adult mentors included:

1. ability to work together (86 percent);

2. student's area of special need (79 percent);
3. skilled or confident tutors or mentors matched with more needy or "difficult" students (67 percent);
4. personal preference of tutors and mentors (55 percent);
5. personal preference of learners (55 percent);
6. similarity of cultural background (55 percent);
7. same gender pairing (48 percent);
8. cross-age pairing (48 percent);
9. similarity in language background (48 percent);
10. same age pairing (21 percent).

Program Costs

Grants were used for personnel and benefits (57 percent), supplies and equipment (12 percent), contractual services (9 percent), training (1 percent), indirect costs (1 percent) and travel (1 percent). Staff activities included supervising and monitoring tutors and mentors; training teachers, mentors and tutors; coordinating services with other special services or classroom teachers; recruiting, selecting and matching tutors and mentors with learners; and evaluating project activities.

Planned program costs per learner varied significantly, from \$231 to \$7,333. The least expensive model was a tutoring program in a large urban school district (Chula Vista, California). The most expensive model was a rural school district in Oaks, Oklahoma; it had a small number of tutors and protégés, paid tutors and mentors and transported learners to the university 30 miles away twice a week for the services.

Program Challenges

The evaluators identified several challenges. Due to variations in the type and quality of data collected by the 31 grantees, the evaluation was unable to conclude that the demonstration program was universally successful. In addition, the one-year demonstration period thwarted planning and start-up activities. Many projects did not achieve full implementation, and half ended up requesting extensions. Nonetheless, eight of the projects did report multiple outcomes that met the evaluation screening requirements (reporting sufficient quality data) and showed modest positive effects, including gains in standardized test scores, GPAs and course pass rates, increased attendance, decreased numbers of disciplinary referrals and positive responses to attitudinal surveys.

The unusually rich racial/ethnic diversity among tutors was reported to be a notable achievement, meriting further investigation in light of prior research suggesting that shared cultural background may increase the likelihood that a learner will benefit from the tutoring experience.

Features of Effective Academic Tutoring and Mentoring Services

Analysis of the eight most successful projects reveals a set of five categories of promising practices.

1. Reducing the stigma associated with receiving help was accomplished by recruiting at-risk students to serve as tutors, and training them to act as mentors for their tutees. At-risk students who served as tutors experienced, often for the first time, confidence, prestige, pride and positive feedback from others. They were found to need substantial support to be successful in their new role as helpers, so effective projects included preservice training, ongoing debriefing and problem-solving sessions, and reflective journaling. In one project, the tutors and tutees shared giving and receiving assistance. Tutors were trained to also serve as mentors during tutoring sessions, discussing social issues of mutual concern. Several projects went a step further, taking special care to convey to tutees that they were not stupid because they needed help and that they would be called upon to reciprocate.
2. Providing incentives was often necessary to help tutors see their tutoring responsibilities as important and productive work.
3. Training tutors and supervising classroom teachers needed to be frequent, focused on instructional and problem-solving strategies, and congruent with tutoring activities in order to be effective. Effective teacher training explained project goals and the importance of developing and making full use of the tutors' leadership skills. In some projects, as teachers learned to relinquish some classroom control they behaved more like coaches and managers, rather than dispensers of knowledge. The evaluators suggest that training should be expanded to recognize and support teachers as influential role models for the tutors and to assist them in learning how to develop tutors' teaching skills (rather than managing their behavior).
4. Matching tutors with their tutees on a one-to-one basis, relying on interpersonal bonds, proved to be the most effective method.
5. Collaborating with local colleges, universities and other professional organizations brought new ideas and research into schools and strengthened school-community relationships, in some cases lending credibility to new and innovative practices.

Common Problems and How to Overcome Them

A number of problems were experienced by the projects over the course of the demonstration period; some found creative ways to overcome them. Maintaining high levels of tutee participation was a common problem. As part of its training, one project emphasized to tutor-mentors that problems could result from putting too much emphasis on a learner's inadequacies. The tutor-mentors were instead taught to develop positive and reciprocal relationships.

This approach is consistent with the work of Reisner (1990) (who was also involved in developing one of the projects in this demonstration), who suggested a new paradigm for human services to bypass the "help paradox," so that there is an opportunity for those who are helped to also help others. One benefit of this role shift is the broadening of help-giving resources in a

school (and elsewhere). As noted above, it also makes it easier for the tutees to accept help, knowing that they too will become tutors at some point in the future.

In-class tutoring sessions often proved to be difficult for teachers and unrewarding for tutors. Teachers reported that the tutor's presence was somewhat disruptive; tutors found they had to follow course curriculum instead of working with tutees on the skills they needed most. The researchers did not suggest that schools abandon this model, but they did draw the following conclusions:

1. When projects call for tutors to work with tutees on material not directly related to classroom instruction, in-class tutoring will almost always result in conflict between the tutor and teacher.
2. When tutors are required to utilize class material first presented by the teacher, the teacher must develop meaningful and productive strategies for the tutor.
3. Tutors directed to serve as roving classroom assistants are not able to take full advantage of their potential to help educationally disadvantaged students.

Policy Implications

In conclusion, the demonstration program achieved some success and was delivered at a per-learner cost comparable to that of federal Title I service. Modest positive effects on the academic performance and/or social integration of participating students in the first year suggests that, given the chance to mature, these and similar programs could yield positive results for more students on a sustained basis.

Peer assistance appears to be instrumental in helping disadvantaged youth improve academically and develop feelings of belonging in school. Properly matched tutors and tutees can develop positive personal bonds. Cross-age tutoring in particular seems to foster bonds so that participants come to regard one another as surrogate siblings or extended family members.

Expanded use of tutoring and mentoring services in several other specific contexts appears to be promising, particularly in schools with large student populations.

1. New or limited English proficient (LEP) students, when paired with older students who serve as tutor-mentors, may socialize more successfully into the mainstream school culture. Tutors help them negotiate the rules, schedules and activities, and foster academic growth.
2. Using Title 1 eligible adolescents as tutors could produce a range of positive effects similar to those reported in this demonstration program.
3. A strong training and ongoing monitoring program would be essential to this model. Providing mentoring services to Title 1 eligible adolescents offers a different set of important benefits: (1) successful role models; (2) personal assistance and support; (3) exposure to new career paths; (4) job shadowing experiences; and (5) tutoring.

The evaluators identified three areas in which the demonstration programs could be improved. First, take advantage of grantees with prior tutoring and mentoring experience, and pair them

with inexperienced grantees. Second, provide inexperienced school grantees with technical assistance. Finally, award multi-year grants so there is sufficient time for development and implementation.

For many teachers and students, recognizing and structuring in-school learning as a social and cooperative endeavor represents a fundamental shift. Such a shift may require a conscious decision and concerted effort to break with the conventional teaching-learning mold in which students listen to teachers or study quietly in isolation.

COLLEGE SPONSORED TUTORING AND MENTORING PROGRAMS IN PRIMARY AND SECONDARY SCHOOLS

In 1990, a study was commissioned by the U.S. Department of Education to gather information about college sponsored tutoring and mentoring programs for disadvantaged elementary and secondary school students (Cahalan and Farris, 1990).

The study defined tutoring and mentoring programs as programs that involve college students working with preschool, elementary, or secondary school students to help the younger students improve their academic skills and motivate them to continue their education. The programs were in operation in 1987-88.

While the report relates no outcome data regarding the effectiveness of college-sponsored tutoring and mentoring programs in primary and secondary schools, it does provide insight into the nature of cross-age mentoring programs, particularly from the perspective of a program that operates outside the children's organization served (e.g., elementary and high schools, churches, juvenile justice programs).

Seven important findings were reported:

1. Nearly one-third of all two- and four-year colleges in the United States sponsored programs involving college students in tutoring or mentoring elementary and secondary school students. Nationally, there were an estimated 1,700 programs.
2. These programs involved about 71,000 college students serving 240,000 elementary and secondary school students.
3. One third of these programs reported that students were recommended for the program but were unable to participate due to a lack of tutors or mentors. This percentage was highest for larger programs (46 percent) as compared with smaller programs (22 percent).
4. Most of these programs worked with local school systems (86 percent); the remainder worked with social service and church sponsored groups.
5. Of the students tutored and mentored, most were elementary students (40 percent), 27 percent were middle school students and 27 percent were high school students.
6. The primary source of program funding for 40 percent of the programs was the sponsoring college; federal funding was the primary source for 18 percent and state funding was the source for 13 percent.

7. Ninety percent of the programs most frequently rated themselves as very successful at “providing role models” and 74 percent rated their program as very successful at “improving basic skills.” However, no data was provided by the tutored/mentored children’s school or agency to determine the accuracy of these self-assessments.

Number of Programs

An estimated 1,701 programs were identified nationwide, with the largest located number in the West (509) and Northeast (543). Sponsoring colleges often had more than one program, averaging 1.8 programs each. Larger institutions, with enrollments of 6,000 students or more, averaged 2.46 programs, compared with 1.49 programs for smaller institutions with less than 1,500 enrollment.

Program Focus

While all the programs included in the study provided tutoring or mentoring (90 percent and 63 percent respectively), many had other goals. Two-thirds identified tutoring as their primary focus and 17 percent had mentoring as their primary focus. The remainder were diagnostic evaluation programs (3 percent) and other types of programs (13 percent) that included such activities as dropout prevention, respite care, music lessons, cultural enrichment, athletic development, therapy and counseling.

Number of Students Served

In the school year during which the survey was conducted (1987-88), 71,300 college students (about 1 percent of the total full-time enrollment in higher education that year) were serving 240,000 elementary and secondary students (.06 percent of elementary and secondary students). Participation was as follows (Cahalan and Farris, 1990: 7):

ACTIVITY	COLLEGE STUDENTS	ELEMENTARY AND SECONDARY STUDENTS
Total	71,329	238,439
Tutoring	52,410	161,026
Mentoring	10,796	37,287
Diagnostic Evaluation	1,205	2,775
Other	5,055	3,2173
Source: Cahalan and Farris, 1990.		

Program Size

Most of the programs were small in size. The median number of tutors/mentors participating in a typical week was 15, and over the course of the year, 20. The median number of younger students participating per typical week was 40, and over the course of the year, 60.

College Sponsorship

The majority (80 percent) of tutor/mentors attended public colleges, with the remaining 20 percent in attendance at private colleges. However, upon closer examination, private college students provided a higher level of service, representing 43 percent of the tutors/mentors participating in a typical week.

Program sponsorship varied. A college division or department sponsored almost one-half (49 percent). College public service centers sponsored 13 percent and administrative offices sponsored 11 percent. The remaining 16 percent were sponsored by some other unit, often with strong outside sources of funding and identity, such as the federal government, campus ministry, or the state department of education.

Numerous programs reported affiliations with outside organizations. Affiliation with national organizations was reported by 18 percent of the tutoring/mentoring programs; 14 percent with a state group; and 5 percent with some other group. National organizations with which these programs affiliated included Upward Bound; Big Sister/Big Brother; National Council of Educational Opportunity; Change, Inc.; National Trio Programs; Boy Scouts of America; Boys and Girls Clubs; Career Beginnings; Council of Black Independent Institutions; National College Athletic Association; NAACP; Urban League; Washington Education Project, Office of Migrant Education; and the U.S. Department of Education.

TABLE II-2. COMMUNITY ORGANIZATION AFFILIATIONS		
TYPE OF PROGRAM	AFFILIATIONS (MULTIPLE)	MOST FREQUENT AFFILIATION
Local School System	86 percent	74 percent
Social Services Agencies	26 percent	6 percent
Church Groups	26 percent	5 percent
Courts and Correctional Facilities	9 percent	1 percent
Home of Student	1 percent	0 percent
Other	30 percent	15 percent
Source: Cahalan and Farris, 1990.		

Length of Program Operation

Many college tutoring and mentoring programs had been in operation for more than seven years.

Before 1980	More than seven years	41 percent
1980 - 1984	Five to seven years	18 percent
1985 - 1987	Two to four years	25 percent
After 1987	Less than two years	16 percent
Source: Cahalan and Farris, 1990.		

Due to the lack of information about the frequency with which programs go out of operation, or are reorganized with different names and staff, the study could not conclude if there was a recent increase in the number of programs.

Reasons for Student Participation as Mentors and Tutors

Students participated as mentors and tutors for various reasons:

1. 40 percent participated voluntarily with no school requirement;
2. 29 percent were paid to participate;
3. 28 percent received course credit;
4. 3 percent participated because it was a graduation requirement.

Over half of programs relied on volunteers (55 percent). Private school-sponsored programs were more likely to rely on volunteers (51 percent compared to 23 percent in public schools). Students in public school programs were more likely to be participating because they were paid (41 percent compared to 20 percent in private school programs).

Mentoring programs more frequently relied on volunteers than did tutoring programs. Two-thirds of the mentoring programs stated that participants most frequently were volunteers, as compared with 35 percent of tutoring programs.

Socioeconomic Characteristics of Students

An estimated 23 percent of the tutors/mentors were members of a racial/ethnic minority. Nineteen percent were socio-economically disadvantaged. Less than a third were male. The students they mentored differed markedly from this profile. Three quarters were members of a racial/ethnic minority; 69 percent were socio-economically disadvantaged; 52 percent were academically disadvantaged; and 49 percent were male. (Individual programs differed markedly,

as some were located in parts of the country with very few minorities.)⁶ Most of the tutored and mentored students were in elementary school (40 percent). Five percent were in pre-school; 27 percent in junior/middle high; 27 percent in high school; and 2 percent had dropped out of school.

Program Operations

Most programs (94 percent) expected student tutors and mentors to commit to half a school year. The average amount of time was 19 weeks. Nearly all students (96 percent) completed their commitment.

Most programs operated throughout the academic year, with semester colleges averaging 15 weeks per semester and quarter colleges averaging 10 weeks per quarter. About 45 percent of the programs also reported operating summer programs of about 6 weeks in length.

The college campus was the most common location for programs (46 percent). Elementary and secondary schools were the second most frequent location (39 percent of the programs). Only 8 percent of the programs used community centers, and 1 percent took place in the students' home.

Eighty-nine percent of the programs provided some one-to-one tutoring/mentoring sessions. One-to-one sessions were the most frequent form of interaction (61 percent), followed by small group sessions (22 percent) and larger group sessions (17 percent). Larger group sessions were used more frequently by mentoring programs than by tutoring programs (37 percent compared to 8 percent).

College students spent a median of three hours tutoring or mentoring per week.

1. In 37 percent of the programs, tutors/mentors spent 2 or fewer hours per week,
2. In 30 percent of the programs, tutors/mentors spent 3 to 4 hours per week,
3. In 15 percent of the programs, tutors/mentors spent 5 to 9 hours per week,
4. In 18 percent of the programs, tutors/mentors spent 10 or more hours per week.

Each tutor/mentor was responsible for an average of 3 students.

1. Thirty-four percent of the tutors/mentors had only one student,
2. Thirty percent had 2 to 4 students,
3. Twenty-two percent had 5 to 9 students,
4. Fourteen percent had 10 or more students.

Staff met regularly with tutors/mentors in four-fifths of the programs, most often on a weekly basis. Tutors/mentors were required to report in writing in 48 percent of the programs, and were

⁶ Some caution should be exercised in interpreting the demographic information. A number of the study respondents did not keep records regarding the ethnicity, socioeconomic status, or gender of program participants; these programs instead provided estimates.

encouraged to do so in 19 percent of the programs. One-quarter of the programs did not monitor their tutor/mentoring students.

For programs having tutoring as the primary focus, on average most of the tutors' time was spent on basic skills remediation (59 percent) or homework assistance (28 percent). However, some time was also allotted to recreational (8 percent) and cultural activities (4 percent).

In contrast, programs with mentoring as the primary focus spent the largest average percentage of time on recreational or cultural activities (39 percent) and other activities (30 percent). However, some percentage of time was devoted to basic skills (21 percent) and homework assistance (10 percent).

Programs indicated several areas of high need. The three most frequently cited were transportation (41 percent), physical space (32 percent), and coordination with parents (31 percent). Transportation was rated as a high need for mentoring programs. Tutoring programs most frequently identified needing physical space and improved coordination with parents. Few programs rated retention of tutors/mentors (10 percent) or retention students who were tutored/mentored (14 percent) as an area of high need.

Program Budgets and Funding

Nearly half of the programs did not have a separate identifiable budget apart from overall general institutional operations. An additional 13 percent of the programs shared their budget with other activities. Budgets also varied considerably in the types of costs included. Keeping these limitations in mind, 34 percent of the programs reported budgets of less than \$10,000, while 19 percent had budgets of over \$150,000. The median budget was \$30,000.

Mentoring was clearly less costly than tutoring, reflecting the larger groups and emphasis on non-academic activities. The median budget of programs having mentoring as a primary function was \$4,225, compared to \$30,000 for tutoring programs.

The median budget for smaller programs (with 8 or fewer tutors/mentors) was surprisingly high — \$60,000, compared to \$18,000 for larger programs (with 21 or more tutors/mentors). This difference occurred because a larger percentage of the small programs had paid tutors/mentors (who also worked more hours) than did the large programs. Overall, somewhat over half (55 percent) of the budgets included tutor/mentor compensation, and 64 percent included coordinator salary.

TABLE II-4. PROGRAM FUNDING SOURCES		
	SOURCE OF PROGRAM FUNDS*	PRIMARY FUNDING SOURCE
College Institution	61 percent	40 percent
Private Foundations	25 percent	7 percent
Individuals	24 percent	6 percent
Federal Government	21 percent	18 percent
State Government	21 percent	13 percent
Student Fund Raising	16 percent	2 percent
Business	12 percent	1 percent
Local School Systems	12 percent	2 percent
Local Government	5 percent	1 percent
Other	14 percent	10 percent
*Total is more than 100 percent as many programs received from multiple sources. Source: Cahalan and Farris, 1990.		

Program Goals

There were a range of program goals established for both the elementary and secondary school students served and the tutors/mentors.

The primary goals for students included:

1. improving basic skills (61 percent);
2. improving self-esteem (12 percent);
3. providing role models (8 percent);
4. preventing school dropout (5 percent);
5. assisting talented and gifted students (2 percent).

The primary goals for tutor/mentors included:

1. providing practical experience in their professional field (77 percent);
2. developing a commitment to public service (71 percent);
3. exposure to a non-campus experience (54 percent).

Other primary goals identified included employment/earning money, developing/practicing religious commitment, class requirement, friendship, developing self-esteem, global service, providing exposure to immigrants and serving the less privileged.

The colleges generally self-evaluated their programs as “successful or very successful” in providing the students with tutoring or mentoring services, and in meeting mentor/tutor goals. The survey did not report data about changes in school attendance and performance or other similar outcome measures for the tutored/mentored students that would confirm these program self evaluations.

TABLE II-6. SELF-EVALUATED PROGRAM EFFECTIVENESS	
FOR ELEMENTARY AND SECONDARY STUDENTS	
Providing role models	90 percent
Improving self-esteem	81 percent
Providing exposure to college	82 percent
Improving basic skills	74 percent
Preventing school dropout	47 percent
Improving vocational skills	42 percent
FOR COLLEGE STUDENTS	
Assisting talented and gifted students	21 percent
Providing practical experience in a professional field	86 percent
Exposure to a non-campus experience	84 percent
Developing a commitment to public service	77 percent
Source: Cahalan and Farris, 1990.	

CHAPTER IV: MENTORING

This chapter summarizes information from three major research reports: *Youth Mentoring: Programs and Practices*, by Erwin Flaxman, Carol Ascher and Charles Harrington; *Making A Difference: An Impact Study of Big Brothers/Big Sisters*, by Joseph P. Tierney and Jean Baldwin Grossman, with Nancy L. Resch; and *Guiding Boys through the Transition to Adulthood: The Role and Potential of Mentoring*, by Susan J. Weiner and Ronald Mincy.

The word *mentor* first appears as a character's name in Homer's *Odyssey*. Mentor was an old friend of Odysseus, to whom the king entrusted his household and the safekeeping and development of his only son, Telemachus, when he left for the Trojan Wars.

Mentoring is most commonly defined as a one-to-one relationship between an older person a (mentor) and a younger one (mentee or protégé). The purpose of mentoring is to improve a child or youth's chances for achieving his or her goals by linking them to resources and support not otherwise available. The role of the mentor is to pass on knowledge, experience and judgment, and/or to provide guidance and support (Lund, 1992). Also, mentoring can offer psychosocial support for changes in behavior, attitudes and ambitions. Flaxman and his colleagues (1988: 45) also suggest that mentoring "must occur between a younger person and an older person who is ahead of the mentee, but not removed by great social distance... (so that) the mentee can achieve a modest targeted goal, already achieved by the mentor." Mentoring programs link an adult to a younger person to reassure innate worth, instill values, guide curiosity and encourage a positive youthful life. Distinguished from child rearing and friendship, the mentoring relationship is intended to be temporary, with the objective of helping the protégé reach independence and autonomy.

Mentoring has become fashionable in recent decades. This has created a tendency to call a wide range of programs "mentoring": "grandmothers sharing child care with teenage mothers, community women hanging out with pregnant teenagers, lawyers interacting with a class several times a semester, job supervisors talking to their adolescent workers about more than just work assignments, college students discussing college prospects with high school students, and teachers expanding their concern for students are among the many interactions called mentoring." (Flaxman, et. al., 1988: 26) While all these represent a form of guidance by an older individual, the relationships generally lack sufficient intensity for attachment and identification to occur. Freeman (1992), Tierney, et. al. (1995), and other researchers at Public/Private Ventures share this view.

Researchers urge that greater care be taken when using the term "mentoring." While mentoring does not preclude concrete and practical help, it does presuppose an interpersonal attachment of sufficient intensity or magnitude that some identification can take place between protégé and mentor.

Instrumental and Psychosocial Mentoring

Instrumental mentoring encompasses teaching, advising, coaching, sponsoring, guiding, advocating, and dispensing and sharing resources. These activities have direct and measurable consequences for the protégé. Mentors provide opportunities to the protégé, and remove barriers to progress, advancement, or success; for example, opening doors to schools and jobs. Instrumental mentoring can also be protective and reduce risks faced by the protégé. An instrumental mentor serves as a coach and advisor, helping the protégé negotiate the environment. In these relationships, a mentor's effectiveness is based on his or her direct life experiences. In addition, instrumental mentoring can seek to open access to resources; some programs have had an affirmative action goal. (Flaxman, et. al., 1988).

Psychosocial mentoring involves role modeling, confirmation, counseling and providing emotional support. The psychosocial mentor role is to change the social circumstances of the protégé, to impact the protégé personally and to serve as a role model to encourage, counsel and support the protégé. The mentoring relationship is based on the formation of trust and emotional attachment. The goal is for the protégé to identify with and imitate the mentor, receive reinforcement for positive behaviors and attitudes, learn how negative and inappropriate behaviors may interfere with emotional growth, and develop educational and work goals. Mentoring programs often provide psychosocial mentoring along with direct content teaching as a way of resocializing youth.

As a practical matter, aspects of instrumental and psychosocial mentoring are often intertwined. Role models can also be peers, public figures and even media celebrities. The learner can have multiple identifications through direct and vicarious experiences. The frequency and intimacy of interaction affects how much a learner identifies with a mentor. This identification is often transferable to others who share characteristics with the mentor. The mentor's status and prestige can also influence whether the protégé will emulate or match the modeled behavior.

Who Can Benefit From Mentoring?

There are a number of "at-risk" populations that have been identified as potential beneficiaries of mentoring:

1. children in poverty;
2. children and youth, particularly males, with single mothers;
3. children of substance-abusing parents;
4. children who are not succeeding in school;
5. childhood victims and witnesses of violence;
6. children and youth at risk for detrimental, often self-destructive, behaviors (drug use, unprotected sex, crime);
7. teens at risk of pregnancy;
8. pregnant and parenting teens;
9. low income, disadvantaged and certain minority youth attending college;

10. low income, disadvantaged and certain minority adolescents and young adults seeking employment;
11. youthful offenders.

No doubt there are other populations that could be added to this list.

The Effective Mentor

Effective mentoring requires a unique blend of talent and skills, such as the ability to actively listen and provide guidance about consequences and alternative options without imposing personal judgments on the attitudes and actions of the protégé. There is a great deal of discussion in the literature as to who is best suited to serve as a mentor. Some researchers suggest that the mentor have a similar background or life experience and temperament as the protégé. Some also suggest that efforts be made to link mentors and youth of the same gender and race, although this is not absolutely necessary.

In addition, mentors require training. There are several mentor training curriculums and guideline publications available, as well as special programs and organizations dedicated to providing mentoring training. There is strong evidence supporting the need to combine mentoring with other forms of intervention such as tutoring to achieve school related goals.

Who Provides Mentoring Programs?

Natural Mentors

Some mentoring occurs naturally. Sometimes it is a more senior professional who is guiding the young new worker; other times it is an older family friend or neighbor who befriends a child. These relationships are often sustained because sufficient trust is present to offer the promise of rewards. It is common for there to be periods when the mentor, protégé, or both do not see the relationship as going well, when there is tension and frustration. Its continuation is based on the mutual trust and commitment that each person voluntarily brings to the relationship. Also, it is not uncommon for a relationship to naturally end because the protégé has sufficiently mastered the skills and knowledge offered by the mentor, or is in need of resources that the mentor cannot provide.

Successful natural mentoring relationships are of significant duration, sometimes life long. Communication patterns and styles usually reflect the ebbs and flows of the mentoring relationship. Natural mentoring relationships offer the potential that the mentors, who become increasingly important in the life of the protégés, can communicate with them about difficult, sometimes painful issues. In turn, the protégés are more willing to listen and deal with these sensitive issues.

Planned Mentoring

Planned mentoring is more formal and structured, and is bounded by a previously determined objective for both the mentor and protégé. Formal mentoring relationships are characterized by

less intense and less frequent contact and are not generally sustained over long periods of time. The ability of planned mentoring relationships to accomplish their goals is challenged by several factors. First, the basis of the relationship is formal and external, not voluntary. Second, the relationship usually has a defined (often limited) purpose. Lastly, these mentoring relationships are of a limited duration, with specific goals. Thus, communication in planned mentoring relationships is often constrained and limited to the issues that are the focus of the effort. Once both the mentor and protégé gain sufficient experience with one another to form a basis for mutual regard and trust, highly sensitive issues may also be addressed.

Mentoring programs are undertaken by a number of organizations. For example, public or private programs can provide mentoring services to attempt to reduce teenage pregnancy. The challenge is to be clear about how the positive behavior that the mentor is promoting is associated with a desired outcome. The mentor and the services provided in conjunction with mentoring can address a wide range of activities, such as youth employment, internships and/or improving scholastic performance.

There is considerable variation in how mentoring activities partner with related services. For example, a mentor may or may not have a direct role in providing a related service, such as tutoring or employment. Regardless, effective program models expect the mentor to provide the assistance and guidance needed for the younger person to succeed.

YOUTH MENTORING: PROGRAMS AND PRACTICES

In 1988, researchers at the ERIC Clearinghouse on Urban Education at Columbia University conducted an extensive review of the literature on youth mentoring programming (Flaxman, et. al., 1988). This is one of two studies which attempts to explain how and why mentoring works. It has contributed significantly to the subsequent formulation of mentoring models, programs and evaluations. Therefore, a review of its results is useful. The meta-analysis focused on youth and young adult mentoring efforts. However, much of the information is relevant to assessing the effectiveness of any planned mentoring program.

The study examines issues and concerns related to mentoring programs for disadvantaged and at-risk youth. In so doing, it has contributed to the development of new program principles. The authors presented extensive information regarding mentoring practices, the roles that mentors play, the characteristics of mentors and expected program accomplishments. They found that during mentoring, protégés were able to identify with, or form a strong interpersonal attachments to, their mentors. The authors found that mentoring “must occur between a younger person and older adult who is ahead of the protégé, but not removed by great social distance” — that is, a mentor who has experience negotiating and mastering challenges similar to those faced by the protégé. (Flaxman, et. al., 1988: iii and 45).

The researchers found that limited rigorous, scientific evaluation research on mentoring had been conducted. Their exhaustive review of social science data, current literature, theoretical works, research reports and program evaluations provides valuable information and insight into the formation of effective mentoring programs and their potential relative to other intervention strategies.

Flaxman and his colleagues reported that most efforts to develop mentoring prototypes or models were simplistic and lacked explanation of the scientific basis for their design, execution and evaluation. They suggested the need for additional case studies and better program descriptions and evaluations before conclusions could be drawn about effectiveness. They advocated for additional research in nearly every aspect of mentoring.

The researchers suggested that mentoring should be viewed as a modest intervention. Assuring that contact between the mentor and protégé is sufficiently frequent and long lasting is important and poses a significant challenge. Youth often have very powerful forces in their lives that diminish perceived and real opportunities for meaningful and fertile adulthood. Mentoring is part of a set of youth development interventions that together may have a positive impact.

A large segment of today's youth has few natural opportunities to sustain durable relationships with adults as positive role models and resources. Many of these youth are disadvantaged and considered at-risk due to the deleterious influences of broken families and street life. Changes in the structure of the family, in community and neighborhood relationships, and in workplace arrangements have created a paucity of natural mentoring. These factors also have contributed significantly to increased isolation, often leading to higher rates of school dropout, teenage pregnancy and other negative consequences.

Schools are not a sufficient substitute for inadequate home and community resources. Mentoring is one of a number of intervention strategies that can provide an alternative source of meaningful and positive adult relationships. Yet, according to Flaxman, et al, effective planned replication of mentor-protégé relationships is complex and challenging. Further, the limited evaluative research on mentoring raises more questions than it answers.

Mentoring of Disadvantaged Youth

Among successful individuals, natural mentoring is just as common in disadvantaged as in advantaged groups. Poor and minority people are generally mentored by others in their own organizations and communities, offering greater possibilities for mobility. However, natural mentoring can also be asocial or even anti-social. Youth may learn from older individuals who are involved in drugs and crime as a means of acquiring power and prestige. Formal planned mentoring programs seek to counteract these negative natural mentoring relationships in youth' lives.

The intervention of a supportive and constant adult is critical to youth development. The presence of an adult mentor, who enables a youth to reduce contradictions and resolve conflicts, may at least partially counter the negative orientation of some youth. It may also create a psychological opening to a new level of integration. However, psychosocial interventions are not enough. Mentoring must also lead to real opportunities. At-risk urban and minority youth need an extended network of social resources in which they can access ideas, influences, information, people and other resources that are socially distant from them.

At-risk and other disadvantaged students are diverse in their gifts and needs. Some personalities reach out and are receptive to information and help from other people. In contrast, other

individuals need to feel that they are helping themselves, either because they lack sufficient trust or because they experience change more easily as a result of a critical experience or event, or as part of a group, than through more narrow, but intense, individual mentoring encounters. Not all youth can be helped by mentoring.

Most mentoring programs assume that disadvantaged youth need social assistance to: (1) remediate or compensate for poor prior socialization; (2) provide enrichment; and (3) prevent failure as youth assume adult roles. Some programs also use social assistance interventions to create a closer fit between individual skills and societal openings, leading to such outcomes as obtaining a college education. Other programs rely on mentoring to break down social barriers and assist youth to advance through educational, work and/or social institutions otherwise closed to them — operating as a form of affirmative action.

Planned Mentoring

Mentoring in organizations has historically occurred naturally, but recently is also being arranged and even institutionalized. Planned mentoring is the intentional pairing of a more experienced, older adult with a less experienced young person in order that the young person can learn from the experienced adult. Planned mentoring programs were initially begun in response to the perceived success of natural mentoring. Some proponents saw mentoring programs as potentially helping corporations to meet social goals. Others wanted to enhance the skills of rising professionals or to compensate for any deficiencies. Finally, others saw mentoring as a means for improving the fit of new employees with the style and methods of the organization.

Selection criteria for formal mentoring programs proceed from observations about natural mentoring. Mentors need to be people-oriented, confident, secure, flexible, trusting and sensitive to protégés' needs. Protégés should be receptive to the program and take responsibility for learning what the mentor has to offer. Studies suggest that the mentor and protégé should have already worked together or are in close proximity. It may be advantageous to give participants as much control as possible in selecting each other.

Programs that provide for individual mentoring structures may also seek to create institutional change or growth. In these programs, the fit of protégé resources to the social environment is the focus, with an effort to find the best arena for that individual's unique skills and resources. Mentoring services provide content learning by communicating skills and valued behaviors, along with social and networking opportunities.

Training appears to be very important to institutionalizing mentoring programs, based on the assumption that mentoring is a learned behavior that can be taught. Most planned organizational mentoring programs have specific goals, criteria for participation and methods for mentor-protégé interaction. Frequency and duration of mentoring interactions are defined. Monitoring and evaluation are central.

Review of organized mentoring reports reveals ten critical features for success.

1. Programs are supported by top management.

2. Mentoring is one component of, and integrated into, a broader individualized development effort.
3. Participation is voluntary.
4. Program duration may be relatively short (up to a year).
5. There are specific goals toward which the mentoring relationship is focused.
6. Mentors and protégés are selected carefully.
7. Mentor and protégé roles are delineated.
8. Orientation and training is provided for both mentors and protégés.
9. Programs have “structured flexibility” to allow mentors to use their own style.
10. Programs are carefully monitored.

These features suggest that a successful program results from significant commitment and ownership by the host organization, mentors and protégés. All have significant responsibilities and roles that are critical to a positive mentoring relationship and program success. Several researchers have suggested that an effective alternative would be to promote organizational policies that encourage spontaneous natural mentoring. Strategies could include: (1) creating a reward system that emphasizes human resource development; (2) instituting organizational designs that encourage interaction between individuals; and (3) and evolving an organizational culture that makes mentoring essential.

Alternatives to mentoring (such as informal networks), also merit consideration. One-to-one mentoring may not be the most efficient way for protégés to gain emotional support, information and access to networks. Some people may not react well to having, or being, a mentor. Extended networks can become a channel for new ideas, influences and resources for mobility. The less personal and intense social ties fostered by networks offer broader relationships that connect otherwise different social worlds. Most people are more likely to develop a variety of relationships that provide some mentoring functions, rather than find a single mentor that meets all of their developmental needs.

Program Planning and Evaluation Issues

Flaxman and his colleagues identified serious weaknesses in the research that made it difficult for them to draw concrete and definitive conclusions about mentoring programs. The lack of data is often reflective of the absence of clear program goals and inadequately defined interventions, target populations and outcomes. Vague and incomplete program descriptions preclude careful and meaningful study. Few studies have described all program components with sufficient detail to measure success. The lack of good program descriptions and meaningful evaluations may be due to program funding which values immediate service provision over careful long-term results. For example, there is a critical need for longitudinal data.

Mentoring is generally only one programmatic intervention among several, and the mix of mentoring with other types of interventions (such as job placement and training, classroom tutoring, or counseling) makes it difficult to evaluate the unique contribution of mentoring. Most

programs that provide mentoring also provide other complementary services simultaneously, or students may independently tap into other outside resources. These factors make evaluating the effectiveness of mentoring, in isolation from other services, extremely difficult.

Even when mentoring is the sole service provided by a program, it is difficult to evaluate effectiveness due to the complexity of the mentoring relationship and individual mentor approaches to the unique needs and circumstances of the protégé. Once again, uniformity is lacking and the precise components of the relationship cannot be standardized or measured.

Researchers conclude that (1) clear goals from which measurable outcomes can be established are essential, and (2) the impact of mentoring will remain unclear due to the confounding nature of programs in which mentoring is one of several interventions.

Most studies of mentoring in businesses and the professions are very positive. However, concern has been raised regarding the quality of evaluations, which reportedly leave important questions uninvestigated and suffer from methodological problems. For example, they often do not define mentoring, may interview only successful business persons who were mentored, may rely on retrospective memories that do not control for nostalgic reshaping over time, and may report only the views of the protégé about his or her relationship with the mentor. Also, organization and professional mentoring efforts have primarily benefited middle-class white men, which raises questions about the transferability of findings to other populations.

Factors Contributing to Success

Protégés

Participation should be voluntary. Youth should be asked if they want a mentor. Recruiters should inform the youth of what mentors do, and of other services that might also be useful to them.

Selection criteria for both mentors and prospective mentees should be clearly articulated. A few programs suggest a means of diagnosing in advance which students will do better with mentors than with other types of intervention.

The screening process needs to assess the readiness of the youth for mentoring. There is little research about this. One study reports as important a youth's eagerness to learn, curiosity, ability to listen and ask questions, receptivity to new ideas, enthusiasm and commitment. These are the same qualities that make for smooth teacher-student and peer-tutoring relationships.

Mentors

Recruitment processes and organizational homes can be either formal or informal. One approach is to partner with an agency or organization (e.g., businesses, nonprofit organizations or colleges) that has a pool from which to draw mentors. Offering incentives, such as college course credit and stipends, merits careful consideration. Research into the factors that motivate mentor participation is inconclusive. However, there is some evidence that incentives may reinforce a

mentor's patience during difficult periods in the relationship. There do not appear to be any studies examining a protégés' feelings about mentoring incentives.

Seeking out mentors with the appropriate qualities is critical. Youth mentors, especially require an ability to communicate with teens, to understand their concerns and to be impartial. A mentor's social position and psychological qualities need to fit with program goals.

Mentor/Protégé Matching

There is some evidence that giving the protégé greater control in mentor selection increases the potential for successful high quality relationships to form. Consideration should be given to age, gender, race, culture, life experiences and geographic proximity, as well as to similarities in hobbies, career and schedules. However, the fit between what the protégé wants to learn and what the mentor has to offer appears to be of primary importance and is more important than race or gender similarity.

Failed mentor/protégé relationships are often due to distance, lack of a common perspective and personality conflicts. Unfortunately little research examines the matching of mentors and protégés. For example, there is no data regarding cross-gender and cross-race matching. While social disparities appear to cause difficulties, closer examination often reveals that the problem is due to the unavailability of other needed resources, such as tutors and job training programs.

In a successful relationship, the mentor and protégé learn to form an identity. The protégé sees the mentor as a role model, wanting to become like the mentor. The mentor sees his or her past struggles in the protégé. Ambitious protégés understand that they are to respect, be grateful to, and emulate the mentor. Mentors learn they should feel proud and protective of their protégés.

Preservice and In-Service Training

All the programs for disadvantaged youth reviewed in the Flaxman et. al. meta-analysis had preservice and in-service training components. Preservice training ranged from short workshops or get-togethers to more comprehensive curriculum. In-service activities varied widely. There did not appear to be much analytical basis or uniformity to the design of mentoring training activities. Further, training for the instrumental and psychological aspects of mentoring was usually mixed and often unrelated to program goals.

Length and Frequency of Contact

Literature on natural mentoring suggests that relationships develop through daily contacts over periods of two to eight years. Planned mentoring programs are much shorter, with less frequent contacts between mentor and protégé. Some programs are structured so mentors have more than one protégé. Some of the research suggests that these relations should be ended or re-negotiated after six months.

No data was found regarding the optimum length and frequency of contacts; however, the researchers concluded that the psychosocial aspects of mentoring are not developed in a few

well-spaced meetings. Youth mentoring programs reported contact length as short as six weeks, raising serious doubt that there was sufficient time for a deep and lasting connection to develop. Testimonials of great friendships at the end of a six-week program are likely a reflection of efforts by the protégés and mentors to please the program officials.

Multiple Interventions

Mentoring takes place in the context of relationships with others -- including peers, teachers, family and social agencies. The power of mentoring depends in part on its fit as a component of large-scale interventions and its relevance to the problem being addressed. An example may illustrate this point. Three types of interventions for at-risk youth include dropout prevention programs, college preparation programs and programs for entry-level workers. All require multiple programmatic approaches in an integrated fashion to be successful.

Family poverty and unemployment are important precursors to dropping out, and poor schooling often causes students to drop out. It is well documented that behavior problems, truancy and poor performance can identify a potential dropout by the third grade. Other research demonstrates that early childhood education programs and effective elementary schooling are the most powerful interventions to prevent dropout. While mentoring can resocialize at-risk students, it does not provide them with the education they should be receiving.

Mentoring can be more relevant and effective when it comes to college entry programs. However, mentoring must be provided in tandem with other services such as tutoring, campus visits and enrichment activities to motivate youth to consider college and seek admission. Mentoring is potentially more powerful here because it fits the needs of the student. Also, the goals are more circumscribed and reachable, and the appropriate behaviors of the mentor are explicit. Similarly, mentoring programs for entry-level workers operate at the source of the workers' problems and needs, offering concrete instrumental help in mastering the codes, culture and demands of the workplace.

The power of mentoring as an intervention is diminished when the source of the problems is a student or worker's problems or poor preparation for work. In these instances, the mentor must work in tandem with remedial or developmental education and training, serving as an adjunct or supportive service by offering environmental support. Mentoring can also serve as a safety net, preventing or reducing alienation and conflicts over new demands.

Researchers conclude that formal mentoring is not an independent intervention in most youth programs. Rather, it often is built around and coordinated with other program components. Success depends on the power of other program features. Multiple interventions work in tandem; Head Start is such an example. Flaxman and his colleagues suggest thinking about mentoring as part of an overall intervention that offers multiple opportunities.

Youth Mentoring: Research Summary and Conclusions

Mentoring is a powerful way to provide adult contacts for youth isolated from their schools, homes, communities and workplaces. Mentoring goals are to socialize and otherwise prepare

youth for a meaningful, productive adulthood, preventing them from giving up, dropping out and otherwise becoming socially marginal.

To succeed, Flaxman, et. al., believe that mentoring needs to occur between a younger person and an older person who is ahead of the protégé, but not removed by great social distance. The protégé can reasonably expect to achieve modest targeted goals already achieved by the mentor. Mentoring can not make up for the absence of caring and knowledgeable adults during a youth's development. Mentors offer resources to youth who need to overcome limited personal skills and abilities and/or identifiable social barriers, so long as the resources are relevant to a youth's circumstances and needs.

This limited yet important goal underlies the success of mentoring in organizations. In planned corporate mentoring, an employee is helped through an early stage of adaptation into the culture, rules and demands of the business. The mentor is not socially apart from the protégé, but rather just ahead. Goals are clear and achievable, and are bound within the environment in which mentoring takes place. Most young people can benefit from a close relationship with an adult. However, unless it is clear how the mentor's skills, knowledge and networks are applicable to the youth, the relationship will not achieve the desired impact.

The research suggests that mentors and protégés need not be of the same race, gender or social class. For minorities and women, particularly those pursuing professions and social mobility, cross-race and cross-gender mentoring may afford important contact skills and insights. However, similarly in race and gender in American society are likely to lead to common experiences and trust.

Social distance is a critical consideration when gauging the ability of a mentor to identify a protégé's problems, needs and strengths, and for the protégé to connect to the mentor. The mentor's behavior and values have to be meaningful and visible to the youth, and the youth must be able to emulate the mentor without conflict, suspicion or failure.

Mentoring can succeed with at-risk and disadvantaged youth under both natural and planned circumstances. However, there may be some areas in which natural and planned mentoring are too different to expect comparable results. The bonds between natural mentors and protégés are stronger and are likely to be more intense, fluid, broader in scope and exist over a longer period. Planned mentoring is most successful when linked to clear, well-defined and achievable goals.

Mentoring needs to be contextual, taking into account other relationships, institutions, and real and perceived opportunities. Planned mentoring often leans on, and works in tandem with other interventions, and they affect its success. The degree to which mentoring is integrated with other interventions affects its potential for success.

Socialization and skills development are the general goals of most mentoring programs, along with creating an environment in which neither the social structure nor a youth's deficiencies interfere with growth. Therefore, mentoring should contain both instrumental and psychological components, depending upon the needs of the protégé.

Researchers conclude that the social assumptions underlying mentoring programs must be clear to the program planners. Mentors must be more than just a substitute for a missing positive adult. This requires programmers to articulate their assumptions as to why they view the youth to be at risk.

Common factors include:

1. a lack of skills, knowledge and/or appropriate socialization;
2. socially restricted access to needed resources;
3. changing strengths and skills are required to accommodate a changing world.

The research concludes that mentoring should be considered a modest intervention. The power of the mentor to provide the substitute positive adult missing in the lives of at-risk youth is limited, in large part because the frequency and duration of the relationship is insufficient. However, mentoring can have two important impacts: (1) it can improve a youth's chances by accessing resources not otherwise available; and (2) it provides psychosocial support for changes in behavior, attitudes and ambitions. Achieving these limited goals depends on accurately diagnosing protégé needs and deciding that mentoring is the most appropriate intervention for attending to them.

Mentoring evaluations should examine both short- and long-term outcomes. The studies reviewed and reported on in this meta-analysis provided only short-term results. Measuring long-term impact is difficult due to other intervening positive and negative experiences.

The researchers advise that special care be taken to not oversell the value and merits of mentoring. Doing so creates the potential for diverting attention and resources away from other needed changes (such as educational reforms), particularly those with more reliable benefits. Interventions more directly associated with the deficiency (such as an unstable family situation) that is judged to be causing the problem are likely to be more effective.

MAKING A DIFFERENCE: AN IMPACT STUDY OF BIG BROTHERS/BIG SISTERS

Public/Private Ventures' *Making A Difference: An Impact Study of Big Brothers/Big Sisters* (Teirney, et. al., 1995) represents the first extensive evaluation of the effectiveness of Big Brothers/Big Sisters (BB/BS) programs. This evaluation is considered the centerpiece of Public/Private Ventures' (P/PV) eight-year investigation of a range of adult-youth⁷ relationship projects.

There are several questions addressed by the P/PV mentoring research initiative:

1. What are the qualities, characteristics and/or features of effective mentors? (see Morrow and Styles, 1995)
2. Are there large numbers of adults with the time and emotional resources available to become mentors? (see Roaf, et. al., 1994)

⁷ The term "youth" in this study includes children aged 10 through 14.

3. What are the best practices of well-administered mentoring programs? (see Furano, 1993)
4. Can mentoring be integrated into large-scale youth-serving institutions? (see McCartney, 1994)
5. Will mentoring result in important, observable changes in the attitudes, perceptions and behavior of at-risk youth?

Several other major P/PV demonstrations and evaluations were part of this broad mentoring evaluation initiative:

1. *Campus Partners in Learning* studied the impact of using college students as mentors for middle school students at risk of academic failure.
2. Local *I Have A Dream* tuition-guarantee and mentoring programs in the Washington, D.C. area were assessed.
3. A component of Temple University's *Linking Lifetimes* program, in which older citizens were utilized as mentors for at-risk youth, was evaluated.
4. Mentoring demonstrations in two state juvenile justice systems (Georgia and Missouri) were studied.
5. Four other studies of the content and effectiveness of the BB/BS program.

These demonstrations and evaluations have yielded several important findings:⁸

1. The challenge for mentoring programs lies in strengthening infrastructure and improving program practices so that mentors and youth can meet long and consistently enough to form meaningful relationships. Consistency and time commitment are critical to forming and maintaining relationships.
2. There is much that the mentoring field can learn from the practices of the Big Brothers/Big Sisters one-to-one model.
3. There are adult practices that increase the chances that a mentor and youth will form a lasting, mutually satisfying relationship.
4. While more adults are willing to mentor youth, many were found to be inappropriate for the task.
5. Embedding mentoring in existing institutions and programs is very difficult.

Researchers at Public/Private Ventures have concluded that BB/BS's intensity (frequency and duration of mentoring contacts) and extensive infrastructure (selection, training and monitoring) contrasts sharply and favorably compared to the laissez-faire structure of many programs.⁹ The appeal for mentoring programs during the 1980s was their seeming simplicity, with program advocates arguing that adults could "naturally" work with youth. Open and flexible programs

⁸ The reports that discuss these prior P/PV demonstrations and evaluations are listed at the end of this report in Related Readings.

⁹ This is consistent with the findings of Erwin Flaxman, et. al. (1988), described previously in this chapter.

were created so adult volunteers could come forward and participate. Subsequent evaluations have reported disappointing results. Marc Freedman (1992: 57) concludes:

Fervor without infrastructure is dangerous. It is dangerous at the program level because it leads to disappointed mentors and youth. It is dangerous at the policy level because it plays into the unfortunate tendency to lunge at new and glossy strategies, glorify them over the short term, and discard them as they tarnish.

The Big Brother/Big Sister Evaluation

In 1992 and 1993, P/PV studied nearly a thousand 10 to 16 year olds who applied to eight local BB/BS programs. The eight local agencies were selected because they each have large, active caseloads. The purpose of the evaluation was to determine whether a one-to-one mentoring experience made a tangible difference in the lives of the young people served. There were six areas identified for analysis:

1. antisocial activities (measured by initiation of drug or alcohol use);
2. academic attitudes, behavior and performance (grades, attendance and perceived competency);
3. relationships with family (trust, communication, and anger and alienation);
4. relationships with friends (social acceptance and self-confidence);
5. self-concept (self-worth, social acceptance or self-confidence);
6. social and cultural enrichment.

The Big Brothers/Big Sisters Program

Big Brothers/Big Sisters (BB/BS) has paired unrelated adult volunteers with youth from single-parent families for more than 90 years. Both the volunteers and the youth make a substantial time commitment, agreeing to meet two to four times per month for at least one year. The philosophy of BB/BS is that the relationship creates a framework in which the volunteer can support and assist the youth as he or she develops, moving between childhood and/or adolescence toward adulthood. Over 75,000 adult-youth matches were in place in 1995, through over 500 local BB/BS affiliate agencies.

BB/BS defines a mentor as a friend, not as a teacher or preacher. The mentor's role is to support the youth in his or her various endeavors, not explicitly to change the youth's behavior or character.

Program Standards

The Big Brothers/Big Sisters of America (BB/BSA) national office develops and publishes standards and required procedures that govern participant screening, orientation and training, and specifying how to create and supervise matches. These serve as minimum program practices; affiliate agencies may interpret them based on local philosophy, geography, budget and youth needs.

Volunteer screening procedures, designed to protect youth by identifying and screening out inappropriate volunteer applicants, are stringent. Researchers found that only 35 percent of volunteer applicants have been matched after being under consideration for three to nine months; 30 percent either withdrew or were rejected and 35 percent had not completed all of the steps of the process (Teirney, 1995).

Youth screening involves written applications, youth and parent interviews, and a home assessment. Most agencies require that youth have no more than one parent/guardian actively involved in their life; nearly all eligible youth live in single-parent households. Children and youth must be between the ages of 5 and 18 years, live in the affiliated agency service area, have a minimal level of social skills, and have agreed, along with their parent to follow the agency's rules.

Adult volunteers receive an orientation in program requirements and rules. Additional training includes presentations on the developmental stages of youth, communication and limit-setting skills, tips on relationship building, and recommendations on how best to interact with youth, particularly when the youth are from different racial or socioeconomic backgrounds. Many agencies also offer training on how to recognize and report sexual abuse.

BB/BSA recommends that matches be based on each adult volunteer's ability to help meet the needs of a specific youth. A previous study of local BB/BS program practices found that agencies have developed remarkably similar matching criteria, considering practical factors like gender, geographic proximity and availability. Volunteers, youth and parents are encouraged to express their match preferences. One aspect of the process that differs across agencies is whether volunteers choose the youth with whom they want to be matched. Some agencies select and present volunteers to each youth; others allow the volunteer to choose from several youth. The parent or guardian must approve the match.

Local agencies provide supervision to facilitate effective matches, and monitor the relationship through regular contact with the youth, parent and volunteer. They also provide support and guidance when problems arise in the relationship.

The Youth

The 959 youth who participated in the 18-month P/PV evaluation were initially between 10 and 16 years old (93% were between 10 and 14). The following describes their gender and racial makeup:

1. Sixty percent were boys and 40 percent were females.
2. More than half the youth were minorities (71 percent of the minorities were African American; 18 percent were Hispanic, 5 percent were biracial, 3 percent were Native American and 3 percent were from a variety of other ethnic and racial groups).
3. White females were the smallest subgroup (15 percent).
4. Minority males were the largest subgroup (34 percent).

All lived with one parent (90 percent), a grandparent (5.6 percent), or other guardian or relative. The educational level of the parents/guardians varied: 25 percent did not graduate from high school, 35 percent had completed only high school or earned a GED, and 25 percent had some college experience.

Many of the youth were from low-income households: over 40 percent were receiving food stamps and/or public welfare. Minority females were the most likely to live in homes collecting welfare (63 percent), and white males were the least likely (27 percent). For minority males and white females the percentage from low income households were, respectively, 45.8 and 40.1.

Significant numbers of the youth experienced difficult personal situations that included:

1. divorce or separation of parents (40 percent);
2. dead parent or guardian (15 percent)
3. substance abuse (40 percent);
4. domestic violence (28 percent);
5. physical, emotional, and/or sexual child abuse (27 percent).

The youth were randomly assigned to either treatment or a control group: 487 were assigned to the treatment group; 378 were assigned to the control group. Youth in the treatment group were immediately eligible for matches with adult volunteers. The youth in the control group were placed on waiting lists (18 months was a common waiting period in the selected agencies). The two groups were compared after 18 months.

Adult Volunteers

409 adult volunteers were recruited to be Big Brothers and Big Sisters to the youth in the treatment group. 236 were men with an average age of 30; the average age of the 173 women was 28. Over 13 percent of these volunteers previously had served successfully as a Big Brother or Big Sister. They were generally well educated:

1. Fourteen percent had graduate level college education;
2. Over 50 percent were college graduates;
3. Nearly 25 percent had some college education;
4. Only 11 percent had only a high school diploma or GED.

Over half worked in professional or managerial positions (52 percent), a quarter worked in technical, sales and administrative (24 percent), while the remainder worked in service professions (10 percent), were students (10 percent) or retired or in other professional fields (6 percent).

Of the 478 youth in the treatment group, 78 percent (378) were matched with a Big Brother or Big Sister during the evaluation period. Three quarters of the adult volunteers were white, which resulted in approximately 60 percent of the minority youth being matched with white adult volunteers. The length of the mentoring relationship depended upon when during the 18-month evaluation period that a match was successfully established. The average match period was 12 months. Nearly 70 percent of the matches met three or four times a month for an average of 4 hours.

Evaluation Findings

The overall findings were positive. The following summarizes the observable results of the youth in the treatment group as compared to the youth in the control group.

1. Substantially fewer youth in the treatment group were likely to initiate drug use during the evaluation period (46 percent). A stronger effect was found for minority youth, who were 66 percent less likely to initiate drug use, and particularly for minority females, who were 72 percent less likely to initiate drug use.
2. Fewer youth in the treatment group were likely to initiate alcohol use during the evaluation period (27 percent). Once again, an even stronger effect was found among minority youth (46%), particularly for minority females (53%) as more likely to initiate alcohol use.
3. Academic behaviors, attitudes and performance among youth in the treatment group were superior to those in the control group. The mentored youth skipped half as many days of school and fewer classes, felt more optimistic and competent about doing schoolwork, and showed modest gains in their grade point average. These gains were strongest among female youth, particularly minority female youth.
4. The quality of relationships with parents was better for youth in the treatment group, primarily because they reported having developed a higher level of trust in the parent. This effect was strongest for white male youth, who also reported improved communications with their parents.
5. There were similar improvements in youth's relationships with their peers, experiencing more emotional support. This was most strongly evidenced among minority male youth.
6. Fewer youth in the treatment group (33 percent) were likely to hit someone.
7. There was no statistically significant improvement in the youth' feelings of self-worth, self-confidence or social acceptance.
8. There were no differences in the number of social and cultural activities in which youth from either group participated.

In summary, P/PV found that BB/BS takes a carefully structured approach to mentoring. Local affiliate BB/BS programs diligently adhered to nationally generated criteria and standards that determine the development, maintenance and quality of matches. In contrast, many other mentoring programs were not as well structured or carefully managed.

Big Brothers/Big Sisters Evaluation Conclusions

The researchers conclude that “there is clear and convincing evidence that caring relationships between non-relative adults and youth can be created and supported by programs, and can yield a wide range of tangible benefits” (Tierney, 1995: iv). The most notable results were the deterrent affect on initiation of drug and alcohol use, and the overall positive effects on academic performance. An improved grade point average was also perceived as very encouraging, since non-academic interventions are rarely capable of producing effects in grade performance. These

benefits do not occur automatically, but are reflective of experienced, specialized local programs that follow well-developed national quality standards.

The findings from this evaluation have implications that extend to youth policy in general. The problem-oriented approach prevalent in traditional youth programming (e.g., drug treatment, and juvenile justice sentencing) appears to be less effective than meeting youth' more basic developmental needs.

Two issues were subsequently raised by the researchers for further consideration.

1. The uncertain availability of sufficient number of adult volunteers who are willing to commit the necessary time and attention.
2. The cost for program support and supervision, at approximately \$1,000 per match.

GUIDING MINORITY BOYS THROUGH THE TRANSITION TO ADULTHOOD: THE ROLE AND POTENTIAL OF MENTORING

This six-year study by the Urban Institute (Weiner and Mincy, 1993) examined five subpopulations: teenage parents; high school dropouts; women heading welfare dependent families; men detached from the labor force; and young black men involved in violent criminal or drug-related activities. The study concluded that there was little known about preventative programs targeting African American male children and youth that experience problems due to school failure, unemployment, drug addiction and/or crime. Major public policies instead focused on new prisons and mandatory sentencing, leading to rising rates of incarceration. In response, the Urban Institute developed an agenda to research and conceptualize mentoring strategies and programs for young black youth involved in violent criminal or drug-related activities. The following discussion reports those findings (Weiner and Mincy, 1993).

Weiner and Mincy define mentoring, for the purposes of their analysis, as “an adult who uses some functional activity/ies to establish a caring and trusting relationship with one or more youth and uses that relationship to ease transitions to adulthood” (1993: 9). Youth face a range of challenges. Some mentoring programs attend to a wide range of issues (the Big Brother/Big Sister model) while others are focused, such as *Campus Partners in Learning*, in which college students mentor youth in academic matters.

There are different mentoring program models. One-to-one (used by Big Brother/Big Sister) and peer group mentoring rely on volunteer and professional staff to work with many youth, enabling the youth to form relationships with several adults. Mentoring is one of many services that promote healthy development among youth; some youth development programs do not use mentors.

Self-Esteem and Healthy Choices

Building positive youth self-esteem, particularly regarding academic achievement, is fundamental. For example, research by Margaret Beal Spencer reports that the African American males' academic self-esteem declines over time, particularly as they enter

adolescence. Their self-perception as a learner “erodes the longer they remain in the traditional American school.” (Weiner and Mincy, 1993: 6) She recommends that interventions start early and continue in developmentally specific and appropriate ways, with mentoring programs focusing on increasing the school-based self-esteem of young African American males. Such programs can begin to improve grade retention in high school and reverse school dropout rates.

Ron Ferguson suggests an opposing view. He believes that the more basic issue concerns the life options that African American youth are aware of, and for which they perceive themselves qualified. In his view, the ideal youth program promotes success by expanding the number of roles youth know about and feel qualified to pursue, and equips them with the necessary skills. The four key components of such a program would include:

1. caring and nurturing relationships;
2. teaching youth coping and other strategies;
3. enhancing youth skills;
4. helping youth to recognize and experience rewards that encourage healthy choices.

Cross-cultural View

Cross-cultural studies report that African American males (as well as Puerto Ricans, native Hawaiians and Native Americans) can perceive themselves as “involuntary” minorities, victims of slavery, conquest, or colonization. They sometimes occupy menial positions and are not well assimilated into mainstream American society. They may adopt “secondary” cultural differences, producing difficulties with social adjustment and academic achievement.

Mentoring programs designed to address this issue require that mentors understand cultural differences, demonstrate rewards for educational achievement, and demystify the link between school performance and employment skills. The social learning model (discussed in Chapter I) suggests that bicultural competence can be promoted through mentoring by providing youth with the capacity to operate with ease in two social contexts, while maintaining pride in one’s origins and distinctive identity. Bicultural competence expands access to advantages not available to youth whose competence is limited to the inner-city milieu. It enables the youth to use street-wise communications at home and in the neighborhood, and middle-class communication at school (and later at work).

Mentoring and Schools

Weiner and Mincy conclude that community-based mentoring programs can complement schools. Yet most schools are not structured to work with community-based mentoring programs, nor are the programs designed to work with schools. The researchers contend that mentoring programs need to view schools as agents of positive change and to work collaboratively with them.

Some school reform efforts include mentoring. For example, *Project 2000* brings black male adult mentors into boy-only classrooms to serve as mentors and role models. The project also emphasizes recruitment of black male teachers, who themselves serve as role models.

The mentor, peer group and incentive (MPI) model utilizes peer groups to provide academic and life skills training. The goal is to reinforce attitudinal changes regarding academic achievement and responsible sexual behavior. Monetary incentives are offered to encourage continuation in the program, to set and achieve short- and long-term goals, and to reward school completion/college enrollment.

Who Can Be A Mentor?

Research suggests that rethinking the one-to-one adult/child mentoring model may be necessary, particularly because of insufficient mentors from the African American community. Less structured group mentoring models uses peers and school personnel to foster cooperative learning. This extended support system may be of particular value for black youth because it recaptures some of the essence of the extended family. Extended support systems are an important factor in minority student adjustment and achievement.

Debate continues over who should serve as mentors to black youth. Cross-cultural mentoring relationships can help both adults and youth overcome barriers that their personal attributes might pose. However, it is also argued that black male adult role models are essential for teaching cultural history and self-esteem.

One potential solution to the shortage of black male adult mentors is to involve older black youth who have graduated from a mentoring program. These youth also receive benefits from their involvement in an intermediate mentoring role. They learn new roles, skills and responsibilities, have the opportunity to give back to the program, and have a place to be other than on the street. Weiner and Mincy (1993) suggest that the older youth/child relationship can function as an apprenticeship in fatherhood.

To Pay or Not To Pay?

This question applies to both mentors and protégés. For mentors, there is no consensus as to the merits of paid versus unpaid service. Some believe that youth will question the true motives of the adult paid to mentor. The alternative view is that what matters to the youth is that the adult cares. The advantages of payment are twofold. First, the responsibility and time commitment associated with being a mentor are significant, and may not be possible for mentors with full-time jobs. Second, paid mentoring assures a more stable environment for the youth. However, many programs are precluded from paying their mentors because of budget restrictions.

With regards to the question of paying children and youth in some way, there appears to be general opposition, primarily because it is seen as preventing the youth from developing intrinsic (internal) motivation. Extrinsic motivation could lead to the child discontinuing the positive behavior when a reward is no longer provided. On the other hand, long-term incentives, such as college funds, have been shown to be successful.

Conclusions

Effective mentoring programs require careful attention to several key issues:

1. screening, orienting and rewarding mentors
2. the youth/mentor ratio;
3. time commitment for mentors;
4. program costs;
5. race and gender matching;
6. program location (in or outside a school);
7. mentor also serving as a family advocate.

In attempting to determine how large a role mentoring plays in services to minority adolescents, Weiner and Mincy conclude that mentoring is not essential to a successful program model. "Rather, the key is a caring, nurturing adult" (1993: 12). The evidence supports the notion that black male youth are open to bonding with an adult male. However, mentoring is only one type of intervention needed to serve this population. Efforts should focus on broadening the agenda to include multiple interventions and many types of youth development programs.

REFERENCES

- Cahalan, Margaret, and Elizabeth Farris. *College Sponsored Tutoring and Mentoring Programs for Disadvantaged Elementary and Secondary Students. Higher Education Surveys Report*. Rockville, MD: Westat, Inc., May 1990.
- Cloward, Howard D. "Studies in Tutoring," *The Journal of Experimental Education* 36, no. 1: (Fall 1967): 14-25.
- Cohen, Peter A., James A. Kulik and Chen-Lin C. Kulik. "Educational Outcomes of Tutoring: A Meta-analysis of Findings," *American Educational Research Journal* 19, no. 2 (Summer 1982): 237-248.
- Cotton, Kathleen, *Peer Tutoring: Lake Washington High School, Benjamin Rush Elementary School*. Portland, Oregon: Northwest Regional Educational Laboratory, School Improvement Program, 1988
- Flaxman, Erwin, Carol Ascher and Charles Harrington. *Youth Mentoring: Programs and Practices*. New York: ERIC Clearinghouse on Urban Education at Columbia University, 1988.
- Goodlad, Sinclair, and Beverley Hirst. *Peer Tutoring: A Guide to Learning by Teaching*. London: Kogan Page; New York: Nickols Publishing, 1989.
- Lund, Leonard, *Corporate Mentoring In U.S. Schools: The Outstretched Hand*. New York: The Conference Board, 1992.
- Powell, M. Anne. "Peer Tutoring and Mentoring Services for Disadvantaged Secondary School Students," *CRB Note* 4, no. 2 (1997). California Research Bureau, California State Library, Sacramento, California.
- Pringle, Beverly, Leslie M. Anderson, Michael C. Rubenstein and Alexander W. W. Russo. *Peer Tutoring and Mentoring Services for Disadvantaged Secondary School Students: An Evaluation of the Secondary Schools Basic Skills Demonstration Assistance Program*. Washington, D.C.: Policy Studies Associates, Inc., for the U.S. Department of Education Office of Policy and Planning, Washington, D.C., 1993.
- Reisner, Elizabeth R, Christine A. Petry and Michele Armitage. *A Review of Programs Involving College Students as Tutors or Mentors in Grades K-12, Volume I*. Washington, D.C.: Policy Studies Associates, Inc., for the U.S. Department of Education Office of Policy and Planning, Washington, D.C., April 1990.
- Tierney, Joseph P., and Jean Baldwin Grossman, with Nancy L. Resch. *Making A Difference: An Impact Study of Big Brothers/Big Sisters*. Philadelphia: Public/Private Ventures, November 1995.

Webb, Michael B., *Peer Helping Relationships in Urban Schools*. York, New York: ERIC Clearinghouse on Urban Education, 1987.

Weiner, Susan J., and Ronald Mincy. *Guiding Boys through the Transition to Adulthood: The Role and Potential of Mentoring*. Washington, D.C.: Urban Institute, 1993.

RELATED READINGS

Tutoring

- American Association for Vocational Instructional Materials. *Direct Students in Instructing Other Students: Module C-4 of Category C--Instructional Execution*, 2nd Ed. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center, 1988.
- Barr, Alyce, et. al. *Successful College Tutoring: Focusing On The Learning Disabled Student In The Learning Center*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center, 1978.
- Berrington, S., and A. DeLacy. "Making a Difference," *Middle School Journal* 24, no. 4 (March 1993): 34-36.
- Clearinghouse on Handicapped and Gifted Children. *Peer Tutoring and Small Group Instruction*. Reston, Va: ERIC/OSEP Special Project on Interagency Information Dissemination, 1988.
- Cook, Barbara, and Carole Urzua. *The Literacy Club: A Cross-Age Tutoring/Paired Reading Project*. Washington, D.C.: National Clearinghouse for Bilingual Education, 1990.
- Cooledge, Nancy J., and Stanley R. Worster. "Intergenerational tutoring and student achievement," *The Reading Teacher* (December 1985): 343-346.
- Devin-Sheehan, Linda, Robert S. Feldman and Vernon L. Allen. "Research on Children Tutoring Children: A Critical Review," *Review of Educational Research* 46, no. 3 (Summer 1976):355-385.
- Fogerty, Joan L., and Margaret C. Wang. "An Investigation of the Cross-Age Peer Tutoring Process: Some Implications for Instructional Design and Motivation," *The Elementary School Journal* 82, no. 5 (May 1982): 450-469.
- Freedman, Marc. *The Kindness of Strangers: Reflections on the Mentoring Movement*. Philadelphia: Public/Private Ventures, 1991.
- Fresko, Barbara, and Theodore Eisenberg. "The Effect of Two Years of Tutoring on Mathematics and Reading Achievement," *Journal of Experimental Education* 53, no. 4 (Summer 1985): 193-201.
- Heward, William L., Timothy E. Heron and Nancy L. Cooke. "Tutor Huddle: Key Element in a Classwide Peer Tutoring System," *The Elementary School Journal* 83, no. 2 (November 1982): 114-123.

Kane, Bruce J., and Gordon R. Alley. "A Peer-Tutored, Instrumental Management Program in Computational Mathematics for Incarcerated, Learning Disabled Juvenile Delinquents," *Journal of Learning Disabilities* 13, no. 3 (March 1980): 39-42.

Lazerson, David B. "'I Must Be Good If I Can Teach!'"—Peer Tutoring with Aggressive and Withdrawn Children," *Journal of Learning Disabilities* 12, no. 3 (March 1980): 43-48.

Mac Iver, Douglas J. *Helping Students Who Fall Behind: Remedial Activities In The Middle Grades*. Baltimore: Johns Hopkins University Center for Research on Effect Schooling for Disadvantaged Students, for the U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center, Washington, D.C., 1991.

McAllister, Elizabeth A. *Peer Teaching And Collaborative Learning In The Language Arts*. Bloomington, Ind.: EDINFO Press, in cooperation with ERIC Clearinghouse on Reading and Communication Skills and Center for Reading and Language Studies, 1990.

White, Gladys F., Francis Bliss, Mary LaTendre, Judy Miller and Alden Moe. "An Evaluative Study of Reading/Tutoring Programs Using Paraprofessionals," *Journal of Reading* (March 1982): 554-558.

Phelps, Margaret S., et. al. *LEarning (Sic) Visions: A Rural Dropout Prevention Model*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center, 1994.

Powell, Jack V., Joseph Wisenbaker and Robert Connor. "Effects of Intergenerational Tutoring and Related Variables on Reading and Mathematics Achievement of Low Socioeconomic Children," *Journal of Experimental Education* 55, no. 4 (Summer 1987): 206-211.

Raughton, Jim L. *The Partners Program*. Denver, Colorado: Colorado College and Occupational Educational System, 1989.

Rodriguez, Joseph. *Proposal to Implement a Penn State Educational Partnership Program in Cooperation with the School District of the City of Erie, Pennsylvania*. Erie City School District, Pennsylvania, August 6, 1990.

Sharpley, Anna M., James W. Irvine and Christopher F. Sharpley. "An Examination of the Effectiveness of a Cross-Age Tutoring Program in Mathematics for Elementary School Children," *American Educational Research Journal* 20, no. 1 (Spring 1983): 103-111.

Shelton, Leslie. *Excellence For All: A New Tutor Training Model: LSCA Title VI Final Performance Report*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center, 1990.

Thousand, Jacqueline S., Richard A. Villa and Ann I. Nevin, eds. *Creativity and Collaborative Learning: A Practical Guide to Empowering Students and Teachers*. Baltimore, Maryland: P. H. Brookes Publishing Company, 1994.

Trapani, Catherine. *Peer Tutoring: Integrating Academic And Social Skills: Remediation In The Classroom*. U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center. Washington, D.C., 1986.

Turkel, S., and T. Abramson. "Peer Tutoring and Mentoring as a Drop-Out Prevention Strategy," *Clearing House* 60, no. 2 (October 1986): 68-71.

Urzua, Carole. *Cross-Age Tutoring in the Literary Club*. ERIC Clearinghouse on Languages and Linguistics. Washington, D.C., 1995.

U.S. Department of Education, *Blueprint for Tutoring Adult Readers*. U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center. Washington, D.C., 1986.

Education-Related Mentoring

Academic Senate for California Community Colleges, *Student Mentoring: Responding To the Laroche Challenge*. Sacramento, California, 1993.

Brockman, Bev. *Iowa's Volunteer Mentor Program*. Lexington, Kentucky: Council of State Governments, 1992.

Campbell-Peralta, Pamela J. *Reducing Suspensions of Minority Males Through a Group Guidance/Mentoring Intervention Program*. Nova Southeastern University: Master of Science Research Report, June 28, 1995.

Coppock, Marjorie L. "Mentoring At-Risk Hispanic Students in Self-Esteem, Academic Growth, and Citizen Awareness," *Equity & Excellence in Education*. 28: 36-43.

Dunn, Rebecca E., and Janice R. Moody. *Mentoring in the Academy: A Survey of Existing Programs*, April 1995.

Evans, Thomas W. *Mentors: Making A Difference In Our Public Schools*. Princeton: Peterson's Guides, 1992.

McPartland, James M., and Sandra Murray Nettles. *Using Community Adults as Advocates or Mentors for At-Risk Middle School Students: A Two-Year Evaluation of Project RAISE*. Baltimore: Center for Research on Effective Schooling For Disadvantaged Students, Johns Hopkins University, May 1991.

Newton, Anne, et al. *Mentoring A Resource And Training Guide for Educators*. Andover, Mass: Regional Laboratory for Educational Improvement of the Northeast and Islands for the U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center, Washington, D.C., 1994.

Smith, Thomas B. *Home-Based Family Literacy Mentoring, A Guide for Head Start Teachers*. Pittsburgh, Pennsylvania: Pittsburgh University, Generations Together, sponsored by the National Institute for Literacy, Washington, D.C., 1994.

Staudt, Denise. *Mentoring: A School-University Partnership That Is Making A Difference*. Paper presented at the Texas University/School Research Collaborative at Texas A & M University, College Station, Texas, 1995.

Mentoring

Furano, Kathryn, Phoebe A. Roaf, Melanie B. Styles and Alvia Y. Branch. *Brothers/Big Sisters of America: A Study of Program Practices*. Philadelphia: Public/Private Ventures, 1995.

Greim, Jeffrey L., *Adult/Youth Relationships Pilot Project: Initial Implementation Report*. Philadelphia: Public/Private Ventures, October 1995.

Hamilton, Stephen F., ed. *Unrelated Adults In Adolescents' Lives*. Ithaca: Western Societies Program, Cornell University, 1991.

Hamilton, Stephen F., and Mary Agnes Hamilton. *Final Report on a Mentoring Program for Youth*. Ithaca: Cornell Youth and Work Program, Cornell University, June 1990.

Ianni, Francis A. J. *Social, Cultural, and Behavioral Contexts for Mentoring*. New York: Institute for Urban and Minority Education, Columbia University, 1990.

McCartney, Crystal A., Melanie B. Styles and Kristine V. Marrow. *Mentoring in the Juvenile Justice System: Findings From Two Pilot Programs*. Philadelphia: Public/Private Ventures, Winter 1994.

Marrow, Kristine V., and Melanie B. Styles. *Building Relationships With Youth in Program Settings: A Study of Big Brothers/Big Sisters*. Philadelphia: Public/Private Ventures, 1995.

Murray, Margo, and Marna A. Owen. *Beyond The Myths And Magic Of Mentoring: How To Facilitate An Effective Mentoring Program*. San Francisco: Jossey-Bass Publishers, 1991.

National Mentoring Working Group. *Mentor Training Curriculum, A Product Of The Convened By United Way Of America And One To One*. Alexandria, Virginia: National Mentoring Initiative, United Way of America, 1991.

Norton, Cheryl S. *Mentoring: A Representative Bibliography*. New York: ERIC Clearinghouse on Urban Education at Columbia University, December 1988.

Obgu, John U., and John Wilson, Jr. *Mentoring Minority Youth: A Framework*. New York: Institute for Urban and Minority Education, Columbia University, 1990.

Roaf, Phoebe A., Joseph P. Tierney and Danista E. I. Hunt. *Brothers/Big Sisters of America: A Study of Volunteer Recruitment and Screening*. Philadelphia: Public/Private Ventures, 1994.

Schonert-Reichl, Kimberly A. and Daniel Offer. *Seeking Help and Social Support in Adolescence: The Role of Non-Related Adults*. Institute for Urban and Minority Education at Columbia University, 1992.

Sipe, Cynthia L. *Mentoring: A Synthesis of P/PV's Research: 1988-1995*. Philadelphia: Public/Private Ventures, 1996.

Styles, Melanie B., and Kristine V. Morrow. *Understanding How Youth and Elders Form Relationships: A Study of Four Linking Lifetimes Programs*. Philadelphia: Public/Private Ventures, 1996.

U.S. Department of Education. *One on One: A Guide For Establishing Mentor Programs*. Washington, D.C., 1990.