

Making Peer Tutoring Work

Systematic training, active supervision, structured lessons, daily progress measurement, and an emphasis on mastery characterize the peer tutoring program for elementary and secondary students in Lake Washington.

Peer and cross-age tutoring has deep roots, dating no doubt to prehistoric times. Tutorial instruction (parents teaching their offspring how to make a fire and to hunt and adolescents instructing younger siblings about edible berries and roots) was probably the first pedagogy among primitive societies. Since then it has been periodically rediscovered

in schoolrooms throughout the world.

Although we have been developing and evaluating peer and cross-age tutoring programs for 14 years, we continue to be struck by the power inherent in this intervention, and by how often schools bypass it when searching for effective ways to meet academic and social competence goals.

Aside from the obvious intuitive

merits of tutorial instruction (e.g., pacing that is tuned to the individual student's rate of mastery, intensive practice for those who need it, achievement and personal benefits to the tutors themselves), recent cost-effectiveness research indicates that it yields greater achievement per dollar than other popular educational innovations (Levin et al. 1984). For exam-



Active supervision helps keep tutors and tutees interested in the program and leads to higher achievement for both.

ple, when program costs were equated and reading and math outcomes examined, researchers found that peer tutoring produced more than twice as much achievement as did computer-assisted instruction, three times more than reducing class size from 35 to 30 students, and close to four times greater achievement than would result from lengthening the school day by one hour.

Lake Washington's Peer Tutoring Model

The Lake Washington School District (Kirkland, Washington) has conducted peer tutoring programs for elementary and secondary students for the past four years. Students receiving tutoring in these programs cut across the spectrum of socioeconomic levels and ethnic backgrounds. Some have learning disabilities, others are slow learners, but *all* have failed to achieve satisfactorily with ordinary classroom instruction. The elementary and secondary versions of the tutoring model differ primarily in program organization and instructional content.

Elementary model. Remedial and special education resource teachers at the elementary level organize and supervise peer tutoring. Every day students report to the resource room, where they are taught basic skills (reading, math, or spelling) by a peer or an older student. Lesson content is closely correlated with the classroom program, and the basic lesson structure changes little from day to day. A typical beginning reading lesson conducted by a tutor might involve several minutes' work on letter sounds and on new words, with the remainder of the period devoted to oral reading. The goal of tutoring is to enable students, through supplementary classroom instruction, to master the school's learning objectives and profit from regular classroom instruction.

The program manager, usually a special or remedial education teacher, develops a procedure for measuring student performance on each aspect of the lesson. Tutors measure and chart progress daily, and the manager employs these data in making instructional modifications.

Secondary model. Tutoring classes at the secondary level are part of the regularly scheduled course offerings.

From the semester's courses in which they are enrolled, students select the course(s) for which they wish to receive help. Other students taking the same courses enroll as tutors. Tutoring lessons are thus individualized. The tutoring class meets daily throughout a semester. Tutees attend both their content class and their tutoring class. As many as 10 to 15 tutors may work with the same number of tutees in a given peer tutoring period. Both tutors and tutees receive elective credit for the tutoring class, and tutees also receive credit for the content class for which they are tutored. The program's goal is to help students obtain passing grades.

Each content teacher selects an exemplary student as a notetaker to record classroom lectures and deliver each day's notes to the tutor program manager. Tutors use these notes to help students complete their own notes and to study the class lectures.

Components of Successful Peer Tutoring Programs

The magnitude of tutoring effects can vary considerably depending on such factors as the degree of program structure, cognitive level of the lessons, training of the tutors, and level of monitoring and supervision by teachers (Cohen et al. 1982; Jenkins and Jenkins 1981, 1985). From research and experience we have identified a number of characteristics of successful

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tutoring programs.

1. *Tutoring proceeds smoothly when tutors have a highly structured and carefully prescribed lesson format.* Structured lessons free teachers from inventing new activities for tutors each day and also allow them to assume a managerial role, monitor several tutoring projects simultaneously, and revise problem lessons. We find that the basic lesson format remains the same for 90 percent of the students.

2. *Classroom teachers define objectives in terms of their classroom curriculums and evaluate students' competence in relation to success or failure in those materials.* Remedial services based on students' classroom curriculums will more likely improve their performance in that curriculum. In contrast, services based on another curriculum, even if they effectively teach that curriculum's objectives, are less likely to teach the skills that classroom teachers use as their criteria.

3. *Teachers select tutoring content carefully and ensure that students master it.* Conventional wisdom suggests the importance of carefully selecting tutoring content and of guaranteeing that students master the content. In a mastery-based tutoring model, a skill is identified and taught every day until students learn it.

4. *Frequency and duration of tutoring lessons are given careful consideration.* Time available for tutoring may be greatly affected by schedules such as whole-school grouping for reading and math, the number of periods available in which students can earn credits for graduation, and competing extracurricular or service activities.

Two studies that investigated the scheduling factor in elementary tutoring programs (Ellson et al. 1968, Mayhall and Jenkins 1977) found tutoring most effective when scheduled daily for moderate length (half-hour) sessions. At the elementary level, tutoring requires transition time to compensate for the disruptiveness of the comings and goings of tutors and tutees. Classroom teachers who supply tutors and tutees usually prefer a fixed daily period when their students are out of the room so they can plan for and concentrate exclusively on the remaining students.

For secondary schools, ease of scheduling tutoring increases with the

Table 1
How Schools Maintain Tutors' Involvement

- Issue quarterly reports that specify tutors' accomplishments.
- Arrange to have articles about the program and the tutors published in the school or local newspapers.
- Systematically schedule reinforcing events such as tutor luncheons, parties, and awards.
- Allow tutors to congregate in the tutoring room before school.
- Arrange informal discussions with teachers, the principal, and tutors' parents.
- Offer academic grades or credits for tutoring.
- Have the principal make periodic comments to tutors about the importance of their contribution, write regular letters of thanks, and provide letters of recommendation for jobs, camps, or future schooling.
- Devote a page in the yearbook to program activities.
- Display pictures of tutors on the bulletin board, next to those of the school's athletes.
- Present awards to tutors at the school awards assembly.
- Schedule a reception for the tutors and tutees attended by school administrators.

number of periods when the program is offered. Priority registration is helpful, especially for tutors who may have more complex course schedules. The tutor manager may need one released day to modify the schedule and balance the classes between tutors and tutees.

5. *Systematic training is essential to sustain an effective tutoring program.* Left on their own, older children will

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occasionally show impatience with, boss, or ridicule younger students whom they are “helping” (Lippitt 1968). Untrained tutors tend not to confirm accurate responses regularly, give corrective feedback, offer praise, and engage in friendly conversation before and after tutoring (Niedermeyer 1970). At Lake Washington, tutors learn interpersonal skills that enable them to relate to their students in ways that result in comfortable and satisfying experiences for both members of the tutoring dyad. For example, trainees learn positive verbal and nonverbal communication skills (e.g., active listening, conversing, and praising good effort), and how to give clear directions and confirm correct responses. They learn not to overprompt and show impatience, annoyance, or disappointment. Errors are looked upon as a signal for more teaching, not as occasions for disapproval.

Specialized teaching procedures such as teaching letter sounds, sound blending, arithmetic algorithms, specialized correction procedures, literal or inferential questioning, note-taking, and organization of notes around main ideas are also required for tutors who use them.

A smoother, more efficient daily operation results when tutors are shown how to gather and replace instruction-

al materials, measure and record student performance, allocate time to specific tasks, follow the established lesson format, and monitor or participate in post-tutoring games. Trainees need to know the purpose of the program and the responsibilities that accompany being a tutor. Responsibilities pertaining to tutoring itself include the regular time commitment, punctuality, confidentiality, and positive regard for the tutee. The tutors' own classroom responsibilities include maintaining high-quality work and keeping informed about any information they missed while out of the classroom.

In Lake Washington's elementary and secondary programs, initial tutor training lasts approximately two weeks. Additional training is scheduled periodically. Thereafter, the first 5 to 10 minutes of each tutoring class are used for mini-lessons on teaching and study procedures.

Program managers model lesson components and small-scale instructional episodes, and then trainees alternate tutor and tutee roles. The manager demonstrates an entire lesson while trainees observe. Finally, tutors are introduced to their jobs by assuming responsibility for parts of lessons.

During the first few solo tutoring sessions, the program manager closely monitors lessons and holds post-tutoring debriefing sessions. Thus, it is helpful to stagger beginning tutors' first lessons so that only a few start on a given day. Later, as tutors grow more accustomed to their roles, managers reduce, but never completely drop, monitoring and debriefing sessions.

6. *A positive class climate and active supervision are significant factors in tutoring programs.* Managers encourage and shape respect and mutual concern between tutors and tutees. On some days managers may spend most of the lesson with one or two pairs, but they should visit every tutoring pair at least once during the session. Active supervision helps keep tutors and tutees interested and leads to higher achievement.

7. *Daily measurement of students' progress is essential.* In government and industry, as well as in classrooms, decision making improves when people have access to pertinent information. The tutor manager uses the

daily performance data that tutors collect on each teaching objective to determine when instructional procedures require change and students are ready for new material. An additional benefit of maintaining a data system is that students are less likely to drift off-task when they recognize that their progress toward specific objectives will be measured every day.

At Lake Washington, considerable time goes into teaching the tutors a data system. In the elementary model, trainees learn what performance data they will collect (e.g., percent correct in math facts, oral reading, and spelling) and procedures for collecting them (e.g., random samples of math facts from specified domains, preselected reading passages). Trainees use stopwatches and pocket calculators to compute summary statistics.

In the secondary model, tutors and tutees keep several types of records to help the manager monitor assignments, tests, and classroom performance.

- Each tutee keeps a daily record of class assignments, which the tutor cross-checks with the notetaker's record.

- To establish and adjust study priorities, tutors maintain a monthly calendar that lists tests, assignments, and projects.

- At the end of the period, each tutoring dyad evaluates accomplishments, establishes a tentative goal for the next day, and records this information in a log. The manager consults the logs in order to make suggestions about the number and quality of their goals and to rate their effectiveness in meeting them.

- Tutors make weekly progress checks by visiting briefly (three to five minutes) with content teachers to inquire about completed assignments, test scores, attendance, and class participation, and to solicit ways to help tutees succeed in the course.

Starting a Tutoring Program

To initiate tutoring in an elementary school, a program developer first secures the support of the principal, staff, and parents. A good rule is to start small, identifying students who need additional practice and who do not have serious behavior problems. The next step is to assess the students'

mastery of curriculum objectives, identifying what they need to learn next.

To initiate a tutoring program in a secondary school, the program developer obtains a commitment from building administrators. The developer then selects staff to teach the classes and identifies the number of periods in which tutoring will be offered. We recommend that tutoring be available to any motivated student who volunteers. The program manager makes a presentation to secure staff support, writes a course catalog description of the tutoring class, and arranges for elective and/or occupational credit for tutors and tutees.

Recruitment and Scheduling

At the elementary level, the program developer obtains names of potential tutors from teachers and holds an orientation meeting with nominees, who must obtain parental permission for participation. The next step is to schedule tutoring periods agreeable to teachers of tutees and tutors.

The most effective recruiters at the secondary level are classroom teachers and counselors who personally recommend the program to potential tutors. The tutor manager can schedule classroom presentations to describe the program and leave applica-

tion forms with the classroom teacher. Once a program has been established in a building, former tutors and tutees can participate in recruitment presentations. Recruiting tutors is a time-consuming task for the manager, requiring two to three days of released time each semester.

Recruiting tutees follows the same process. Teacher and counselor referrals are effective. Parents who are aware of the program may encourage their children to participate, and students may refer themselves if they anticipate difficulty in a course. The tutor manager interviews referrals to ensure that they are motivated to participate.

After tutees have selected a target class and identified both the teacher and period, the manager consults pertinent classroom teachers to identify good notetakers. Teachers arrange for these students to take notes and deliver a copy daily to the tutor room, along with any hand-outs.

Selecting and Pairing Tutors with Learners

Although elementary teachers have designed high-quality programs using tutors as young as seven, eight, and nine, fifth- and sixth-graders are generally preferred as tutors because they are easier to train, require less supervision, and are better able to manage discipline problems. Academically capable students often can give up some classroom study time for tutoring and still complete their assignments.

At the secondary level, teachers prefer students who are currently or were formerly enrolled in the target content class. Given the class notes, study guides, and text, though, reasonably good students can successfully tutor in courses they have not personally taken.

Maintaining Tutors' Involvement and Interest

Keeping tutors motivated is a challenge. The most important reinforcer is personal attention from the manager in the form of discussions about the tutoring project and sometimes about more personal matters. Table 1 lists effective procedures for maintaining tutors' involvement. Combinations of motivational procedures such as these have held the interest of tutors at Lake



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Student tutors benefit academically, but they also gain social maturity by assuming responsibility for others.

Washington for up to four consecutive years of service.

Peer tutoring provides a more caring climate in the school; students and teachers monitor each other's behavior and invest in each other's success. As Goodlad (1984) reports, secondary students seek to be recognized and cared about as persons and, yet, the structure of the secondary school all too often prevents this from happening. Interaction between the manager, tutor, and tutee provides abundant opportunities to develop personal relationships.

Benefits to Tutors

Students who tutor benefit academically from the experience (Cohen et al. 1982), but tutoring has even broader influences. Coleman (1974) proposed that the environment of young people should provide not only an opportunity for reaching traditional school goals, but also an opportunity for gaining "social maturity" through responsibilities that affect the lives of others.

Society holds to an ideal that children will grow into responsible citizens who care for and help others. Naisbitt (1983) argues that as society becomes more high tech, it will need to become more high touch. Yet inex-

plicably, within its major institution for socializing the young, society rarely permits students to assume and practice these responsibilities. Nor does the instruction systematically supervise or actively shape effective helping and caring behaviors.

Chuck Martin, principal at Lake Washington High School, reports that "this program has contributed more to helping students succeed and in creating a caring environment than any intervention we've tried in my six years at this school." Were we to accept seriously as one of our goals the development of social maturity, we might include more opportunities and experiences, like tutoring, that would facilitate its attainment. □

References

- Cohen, P. A., J. A. Kulik, and C. C. Kulik. "Educational Outcomes of Tutoring." *American Education Research Journal* 19 (February 1982): 237-248.
- Coleman, J. S. *Youth: Translation to Adulthood*. Chicago: University of Chicago Press, 1974.
- Ellson, D. G., P. Harris, and L. A. Barber. "A Field Test of Programmed and Directed Tutoring." *Reading Research Quarterly* 3 (1968): 307-367.
- Goodlad, J. I. *A Place Called School*. New York: McGraw-Hill Book Company, 1984.
- Jenkins, J. R., and L. M. Jenkins. *Cross-Age and Peer Tutoring: Help for Children with Learning Problems*. Reston, Va.: Council for Exceptional Children, 1981.
- Jenkins, J. R., and L. M. Jenkins. "Peer Tutoring in Elementary and Secondary Programs." *Focus on Exceptional Children* 17, 6 (1985): 1-12.
- Levin, H., G. Glass, and C. Meister. *Cost-Effectiveness of Four Educational Interventions*. Stanford, Calif.: Institute for Research on Educational Finance and Governance, Stanford University, 1984.
- Lippitt, P. "Cross-Age Helpers." *National Educational Association Journal* (March 1968): 24-26.
- Mayhall, W. F., and J. R. Jenkins. "Scheduling Daily or Less-Than-Daily Instruction: Implications for Resource Programs." *Journal of Learning Disabilities* 10, 3 (1977): 159-163.
- Naisbitt, J. *Megatrends*. New York: Warner Books, 1983.
- Niedermeyer, F. C. "Effects of Training on the Instructional Behaviors of Student Tutors." *The Journal of Educational Research* 64 (November 1970): 119-123.

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