

Effects of South Carolina's Hunter-Based PET Program

A Hunter-based staff development program has provided a common framework for improving instruction—but has failed to improve student achievement.

Teacher supervision models based on the work of Madeline Hunter have become exceedingly popular over the past decade. The essence of the Hunter model is to enable teachers to make conscious and appropriate decisions as they plan and execute their teaching activities (Hunter 1979, 1983). Classroom observation and feedback—"coaching"—is an important aspect of model implementation. Coaching is emphasized during the initial training and should be continued until the teacher knows when and why various procedures are appropriate and recognizes when modifications are necessary. According to Hunter and Russell (undated), achieving this level, called a conditional knowledge of teaching, for most teachers requires approximately two years of practice with coaching.

Unfortunately, there is little evidence that student achievement increases after a Hunter-based staff development program has been implemented. Slavin (1987) and Gibboney (1987) have noted this research void and urged researchers to bring data to bear on the issue.

Of the few studies that have been reported, most are inconclusive. For example, the evaluation of the Napa/Vacaville Project (Stallings 1987, Stallings and Krasavage 1986) suffered from design limitations, so the results—at best mixed—must be interpreted with caution. The positive findings of Dildy (1982) must be qualified by the brief treatment period involved and the small sample size (only 16 teachers). In the SIM Project (Manatt and Stow 1986), an adaptation of Hunter's work was one component of a multifaceted school

improvement program implemented in four Minnesota school systems. No positive effects on student achievement were observed, but one should not attribute this result solely to the Hunter component.

The Program for Effective Teaching

A Hunter-based staff development activity known as the Program for Effective Teaching (PET) was first implemented in South Carolina in 1984. Using \$10,000 obtained from a small training grant, 24 hand-picked educators (representing 11 school districts, 4 teacher training institutions, and the South Carolina Department of Education) participated in an intensive 30-day workshop conducted by out-of-state trainers. This cadre then trained other educators in a pyramid design.

Caution! Research Results Ahead

Georga Mohlman Sparks

One nightmare of educational researchers is that a seriously flawed research study will be hailed as "definitively proving" a particular program as effective or ineffective. The Mandeville and Rivers report does not purport to solve once and for all the problem of research on Madeline Hunter-based programs. But it *is* seriously flawed and should not be taken as evidence that "Madeline Hunter doesn't work." There are at least two reasons.

First, the researchers did not adequately address the question, "Did teachers actually use the techniques as intended?" If this question is not answered in the affirmative, the final research question, "Did use of the model cause student achievement to increase?" is irrelevant. Just because two-thirds of the 200 teachers polled said they were using the strategies from the training program does not mean the teachers were, in fact, using the model appropriately. Only careful observations of the 25 teachers with two years' experience in using the ideas could establish this as fact.

Second, it is unlikely that teachers were implementing the model, given the inadequate coaching provided. Showers (1985) and I (Sparks 1983) have clearly established the necessity of coaching for most teachers to actually change their teaching in appropriate ways.

Based on all of the above, the Mandeville and Rivers study establishes that (a) the effectiveness of the Hunter model remains to be adequately investigated, and (b) adequate training and coaching are required for teachers to change practice.

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Georga Mohlman Sparks is Assistant Professor, Eastern Michigan University, Teacher Education, Ypsilanti, MI 48197.

Participating districts have hired substitute teachers to replace trainees when they have been absent from their classrooms (five to six days per training cycle). Some districts have also added one or two PET coordinators to staff positions. In less than four years, approximately one half of South Carolina's teachers and school administrators—representing 87 of the 91 school systems in the state—have received at least the basic first-cycle training.

In spite of the large-scale nature of the South Carolina implementation and the potential problems associated with such a massive effort, our recent survey of about 200 elementary teachers indicates that they are very positive in their evaluations of the training (Rivers 1988). The survey also indicated that teachers are using Hunter's techniques in their instruction. Roughly two-thirds of the responding teachers reported daily use of PET

concepts in the development of lesson plans and at least weekly use of the concepts and terminology in discussions with colleagues.

Regarding subsequent coaching, however, the results were not so positive. If we define "being coached" as being observed at least once per year by a principal or PET trainer, only 57 percent of our sample were coached. In addition, for teachers who were coached according to this minimal definition, there was considerable variability in perceived coaching quality. Finally, PET-trained teachers who had been coached indicated a desire for *fewer* annual formative observations than did a sample of teachers who had not participated in the PET training program.

Achievement Data

The South Carolina Department of Education cooperated in an evaluation of the effects of PET training on student achievement by providing the names of the teachers who had been trained (and dates their training was completed) and by allowing access to existing student test data (Mandeville 1988).

The length of time since completion of the training was considered important in light of Hunter's assertion that two years of coaching may be needed for a teacher to develop a conditional knowledge of teaching. Thus, the earlier PET trainees became the focus of the study; consequently, all teachers who completed training two years prior to the beginning of the 1986-87 school year were identified.

From this group, designated PET2, those who taught in self-contained classes in grades 1-4 were selected for the study. Samples of more recent trainees (PET1 and PET0) and non-trainees (NOPET) who taught in schools similar socioeconomically to those of the PET2 teachers were also identified as study participants. Restricting the study to teachers of self-contained classes was necessary to ensure that each teacher was responsible for the reading and mathematics instruction of the students in his or her class.

Common achievement test data were available because South Carolina tests all public school students in grades 1-3 each spring with a locally developed criterion-referenced test and those in grade 4 with a commercially produced norm-referenced test. The Basic Skills Assessment Program (BSAP) tests, used in grades 1-3, were created to assess state objectives in reading and mathematics. Consequently, they rank high on curricular alignment. Logically, the selection of the Comprehensive Tests of Basic Skills (CTBS) at grade 4 indicates that it is also reasonably congruent with statewide educational objectives.

Student test scores in reading and mathematics from spring 1987 provided the basis for the achievement data used in this study. These scores were adjusted for each student's prior performance on either the BSAP (for 2nd-4th graders) or, for 1st graders, the Comprehensive Skills Assessment Battery (a readiness test given at the beginning of 1st grade). The difference between each student's actual performance in the spring of 1987 and his or her predicted performance served as an achievement datum. These adjusted student test scores were then matched to their teachers and averaged (for each teacher) to provide classroom achievement measures. Teachers for whom this student-to-teacher data attribution scheme was uncertain were dropped from the study.

The results indicated that students achieved at about the same level regardless of whether their teachers had been PET trained. Furthermore, for PET-trained teachers, the number of years since training was not a factor in student performance. This result was based on about 25 teachers trained the first year (PET2) and roughly 50 in each of the other three groups (PET1, PET0, and NOPET). These are the teachers we surveyed with our questionnaire.

The finding of a nonsignificant PET effect on achievement for this relatively small sample was corroborated with a much larger sample that included all teachers in the state (subject

to the qualifications previously described), whether surveyed or not. In this parallel study, student performance for over 900 PET-trained teachers was compared with the achievement of the students of over 3,000 NOPET teachers. The increase in the sample size for PET teachers was due to larger numbers of PET0 and PET1 teachers since all PET2 teachers were in the original study. Although coaching could not be addressed in this study, the data were conclusive that PET training alone had not significantly affected the reading and mathematics achievement of students in 1st through 4th grade who were instructed in self-contained classes.

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Effects of Coaching

Two interesting findings from the survey data, however, appear to support the relationship of student achievement to the quality of the coaching the teacher receives. One of these results concerns the professional roles of the coaches. When teachers were observed by both a principal and a PET trainer, student achievement in mathematics was higher than when coaching was performed solely by the principal. It remains to be determined whether this is a result of increased collaboration between the trainer and the principal or of the separation of the formative and summative evaluation roles.

The second finding involved teachers who reported little or no tendency by their coaches to immediately point out mistakes in their lessons or offer unsolicited opinions about how the lessons should have been taught. The students of these teachers outperformed the students of the other teachers in mathematics.

The Final Analysis

Was PET worth doing? Probably. Madeline Hunter has made great strides in organizing and applying what is known about learning. Implementing her model has, at the least, provided cohesion: prior to the PET program, staff development across South Carolina lacked focus. And the elementary teachers' questionnaire responses indicate that most think it was worth their time.

Was PET done well? Our survey results are evidence of the merit of the initial PET training in South Carolina. These results are especially noteworthy considering the various problems associated with such a large-scale effort. The problems of teacher morale associated with the more limited Hunter-based inservice in Pennsylvania, reported by Garman and Hazi (1987), have largely been avoided. The willingness of nearly all of the school systems to participate, at some expense, and the positive perceptions of teacher trainees, even two years after training, speak well for the statewide effort. The limited data presented ear-

lier, however, suggest that both the quality and the quantity of the coaching may have been insufficient to produce the desired increases in skills for many of the participants. One aspect of the PET implementation—an emphasis on flexibility in model application—may require skills beyond the current capabilities of some coaches. If this problem is not corrected, the morale of some teachers may be adversely affected.

Did PET succeed? At this time, the effects of the PET implementation have been mixed. The South Carolina Department of Education identified four objectives at the inception of the program: (1) establishing a training model relevant to all grade levels, (2) providing a common framework for improving instruction, (3) promoting effective communication through the use of common terminology, and (4) improving student achievement (Tudor 1984). Our results indicate that the first three objectives had been reasonably well achieved for the lower elementary grades, but as

of the spring of 1987, the fourth had not. If Hunter (1986) was correct in her prediction that coaches also need two years of supervised practice to become effective, then spring 1987 may have been too soon to expect increases in student achievement. Whether the passage of an additional two years or changes in coaching will lead to increased student achievement are questions to be addressed in the future. □

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Garrett K. Mandeville is Professor and **Janelle L. Rivers** is a Doctoral Candidate, both in the Educational Research Program, Department of Educational Psychology, College of Education, University of South Carolina, Columbia, SC 29208.



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