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.

**References**


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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.