How to Cut "Teacher-Talk" in Half

If you find that an elementary teacher monopolizes over half the time of a so-called classroom discussion lesson, you are scarcely astonished.

But would you not be a bit encouraged to learn that a research team, headed by Walter Borg, was able to reduce the proportion of "teacher-talk" to a more reasonable 28 percent through a self-contained in-service training course?

This improvement in a specific classroom problem is one aspect of a behavior pattern needed for effective teaching. Now the Teacher Education Program of the Far West Laboratory for Educational Research and Development in Berkeley is making measurable progress toward its aim of building a series of such in-service training courses.

Minicourse I, which has been demonstrated actually to improve the questioning techniques of elementary teachers in northern California and Nevada, is a self-contained package (film, handbooks, checklists, refresher materials) that can be used in any school where a video tape recording system is available. Yet it differs from the Stanford University microteaching approach since no trained supervisors are needed to assist the teacher; instead, he gets his feedback from self-evaluation or comments by a cooperating teacher and relies on films of model teachers to learn the behavior patterns or skills. (Research evidence suggests that models can be as effective as supervisory feedback.)

The first minicourse deals with 12 specific skills the teacher can use effectively in a discussion lesson. On the first day he views an introductory film, describing the advantages of microteaching (small groups, immediate feedback, nonthreatening situation, etc.). A practice lesson is included.

On the second day the teacher finishes the practice lesson and sees his first 15-minute instructional film. Here he is introduced to three specific questioning techniques that increase the readiness of pupils to respond to discussion questions, with illustrations of scenes of actual class sessions. Next he sees
his first model film; in it another model teacher conducts a similar lesson while his attention is focused on key points via the comments of a narrator.

Next the in-service teacher is asked to prepare a short lesson (one that fits his current class work) to apply the skills he has seen on the instructional and model films. On the third day he tries his first microteaching session in a small room with five to eight of his own pupils and records the activity on video tape. When the pupils go back to their regular room, the teacher plays back the tape and studies his own behavior. During the playback he identifies specific aspects of the lesson that need improvement.

Because seeing himself on video tape often causes an emotional reaction, he is not asked to focus closely on specific skills during this session. Next the teacher replays his lesson, this time using a checklist to evaluate his performance on the three behaviors dramatized on the instructional film. Then he replans his lesson.

On the fourth day he reteaches the lesson (again recorded on video tape) with a different small group from his class. When he watches the playback, he first considers the general effect and then evaluates his own performance. After school, with another teacher taking the same in-service course, he sees (for the third time) the lesson they both taught that day so that each can give the other further feedback and suggestions for improvement. If he prefers, he may view this replay alone.

To Change Teacher Behavior

In its operational form, Minicourse I consists of four such sequences of instruction, microteaching, and reteaching—plus a refresher course now being completed. In this complete in-service training package, about 10 percent of the course involves telling the teacher and 20 percent involves showing the teacher; in the remaining 70 percent the teacher is trying the skill in a controlled situation and watching his own performance so as to evaluate his progress, eliminate bad habits, and more firmly establish the new techniques he is learning.

Previous studies have shown that teachers talk as much as 70 percent of the time during class “discussions,” thus leaving little time for pupils to contribute. Analysis of the video tape lessons of the 48 teachers who took Minicourse I during the field test showed that on the tapes made before the teacher took the course the average teacher talked nearly 52 percent of the time, whereas on the tapes made after the teacher completed the course the average teacher talked less than 28 percent of the time. Three negative behaviors (repeating the question, repeating the pupil’s answer, answering one’s own question) were significantly reduced.

Another objective of the course is to train teachers to ask questions that call for longer pupil responses and that require pupils to use higher cognitive processes. Instead of “who, what, when” questions, the course encourages the teacher to use “explain, describe, interpret” questions. On pre-tapes, a word count showed the average pupil response to contain six words; on the post-tapes, the average length was increased to 12 words. And one-word pupil replies were also significantly reduced. On the post-tapes, fact questions were reduced to 48 percent (from 63 percent) and higher cognitive questions increased to 52 percent (from 37 percent). These pre- and post-tapes were made with the teacher’s entire class, not just 5 to 6 pupils, thus demonstrating that skills learned in a microteaching situation can be applied to the regular classroom.

Thus the minicourse seems to offer considerable promise as an instructional model to develop specific teaching skills and to change teacher behavior. During 1968 the Far West Laboratory will develop and test six minicourses—to improve the model, to determine in how many instructional situations this model is effective, and to identify alternative models for use where the minicourse is not appropriate.

—FRED S. ROSENANU, Director of External Relations, Far West Laboratory for Educational Research and Development, Berkeley, California.