To Make an Omelette
You Have to Break the Egg
Crate

In schools where teachers have opportunities to discuss and exchange ideas, proposed schoolwide changes are more likely to be accepted and implemented.

H. Dickson Corbett

A predominant barrier to the spread of change throughout a school is the independence of staff members and the lack of opportunity for them to interact.

Consider three schools studied over a three-year period: "Oldtown," an inner-city senior high; "Middletown," a working-class suburban elementary; and "Smalltown," a rural elementary. All were involved in projects that sought to alter teachers' instructional behavior. In the two elementary schools, the emphasis was on increasing the use of instructional time to improve student achievement; in the high school, the goal was to incorporate career awareness activities into regular academic subjects. Specific changes were to be identified by teachers and included having student materials in place before class began, using large-group instruction more frequently, providing career-related examples during discussions of regular subject matter, and devoting entire class periods to career activities.

The hope was that instructional changes would spread to a large number of teachers in each of the schools. Although teachers and administrators all indicated they were receptive to the changes and committed school resources to the projects, the resulting patterns of implementation varied considerably.

At Smalltown, the principal was asked if teachers who were not participants knew about the project and had made related changes. His response was, "You obviously aren't familiar with elementary schools. Things spread through the grapevine here almost as soon as they happen." Nevertheless, interviews with teachers indicated that information spread faster and was acted upon more in some sections of the "grapevine" than in others.

For example, in one intermediate grade, team teachers routinely discussed classroom activities, which they jointly planned and evaluated. Two years after the project had ended, all of the teachers had implemented new instructional strategies to make better use of class time, including a complicated arrangement for team teaching. Staff new to the team quickly adopted similar strategies, to the point that the team captain challenged a researcher to try to pick out the teacher who had been on the team for only five months.

On the other hand, teachers in one of the primary grades teams did not work in such an integrated fashion. No joint planning and little informal discussion of classrooms took place among them. In this team, only the teacher who had been a participant ever made changes. For the remainder of the grades, implementation involved more than just the participant teachers, but not entire teams. Perhaps not coincidentally, teachers identified these teams as "working together" more than the primary team but not as much as the intermediate.

Like Smalltown, Middletown originally targeted a group of four or five teachers to receive training. However, during the next year, regular meetings were arranged for these teachers to train other teachers in their grades. To support this activity, schedules were rearranged to provide for a common planning period, the first time such opportunities had been provided. Over the course of the year, all teachers received training, and many were enthusiastic about the changes. Toward the end of the school year, however, several meetings were cancelled. Not only did teachers perceive this as decreased administrative support for the project, but their formal opportunities to exchange ideas were reduced. After that, they did not use the common planning time for informal discussions about the changes, and their enthusiasm for project activities diminished.

Oldtown was typical of most schools in the study. To the extent that classroom changes were made, they were made by teachers initially targeted to be in the project. In fact, after a year of implementation, project teachers reported that no other teachers in the school had adopted any of the classroom activities. They said a major reason was a lack of opportunity to talk with one another. Because of a split schedule, teachers in a department were seldom all at school at the same time. Consequently, few formal meetings were held. In addition, the few schoolwide meetings that were held addressed issues identified by state mandates. As a result, little information about project goals and proposed teaching strategies was available beyond the target group.

Achieving Interdependence

In these schools, high interrelatedness of teachers' work occurred in two ways. One way was through an overlap of job responsibilities where teachers shared responsibilities for teaching, planning instructional activities, and evaluating those activities. These integrative tasks gave teachers a heightened sense that they had a stake in what went on in each others' classrooms. With team teaching, teachers had to cooperate to make an activity a success; with joint planning and evaluation, teachers relied on each others' ideas and data from each others' classrooms to improve activities. In such settings, information about instruction flowed freely and peer support for (or

H. Dickson Corbett is Senior Research Associate in Field Studies, Research for Better Schools, Philadelphia, Pennsylvania.

The preparation of this article was supported by funds from the National Institute of Education, U.S. Department of Education. The opinions expressed do not necessarily reflect the position or policy of NIE, and no official endorsement should be inferred.
department would learn of innovations and perhaps implement them. The second way of attaining at least a modicum of teacher interdependence was through more frequent opportunities to interact, such as the common planning periods and scheduled meetings at Middletown and the meetings at Oldtown. Certainly teachers talked informally with other teachers about the projects at lunch and in the lounges. However, the transfer of knowledge from one person to another is most effective in intensive relationships (Louis, 1977), and generally teachers did not have the opportunity to develop such relationships with other teachers. Thus, regular project-related interaction had to be established.

Relaying only on increased interaction rather than on an overlap in job responsibilities seemed less effective as a way to make changes routine once they were implemented. For example, a decrease in discussions about the innovations occurred at both Middletown and Oldtown after formal meetings ended. This suggested that the meetings served as both a source of information about innovations and a source of incentives for making changes. Once formal meetings ended, peer encouragement was less available; and if administrators did not show other signs of interest in the projects, teachers believed administrators no longer cared whether changes were made. Thus, without other incentives to continue changes, ending formal discussions led to decreased enthusiasm for the innovations.

Implications
The issues discussed here have at least three major implications for managing change in schools. First, in projects where widespread diffusion of an innovation is the goal, it may be more important to identify initial participants because of their location in the social system of the school rather than starting with a core of highly committed individuals. This is particularly important if a "turnkey" approach—where a core of individuals are trained to train others—is used. The selection procedures should take advantage of existing communication networks. If few integrated networks are present, substantial provisions for formally scheduled activities with many teachers may be necessary.

Second, in schools where there is little interdependence among teachers, the burden of providing encouragement and incentives for changes likely will fall to administrators, especially when formal meetings end. It is important for an administrator to be aware of this responsibility. Not only is the administrator one of the few people with opportunities to interact with teachers routinely, but if his or her commitment to the changes is not apparent, both project and nonproject teachers are apt to interpret the ending of formal activities as a lack of administrative interest. This cycle of arranging formal meetings and providing strong follow-up would have to be repeated for each classroom-level change project.

Third, to avoid this cycle, one can focus on increasing the day-to-day interdependence of teachers by breaking out of the egg crate form of organization. This can be done by encouraging team arrangements, providing regular opportunities for teacher interaction, or assigning teachers joint responsibilities for instructional tasks. Increasing interdependence increases the probability that important knowledge obtained by a few teachers will find its way to others.

Of course, promoting interdependence does not ensure that widespread change will follow. It only removes some organizational barriers. But until these organizational problems are addressed, other hindrances to change are relatively unimportant. Devoting attention to them may waste energy that could be more appropriately expended elsewhere.

References