This paper summarizes some of the main conclusions of the Study of Dissemination Efforts Supporting School Improvement, specifically those regarding the process of innovation implementation. The focus is on the contributions of potential assistants to various implementation outcomes, from which implications for policy and practice are derived. The major emphasis is on the crucial (and unanticipated) role of district-level personnel in catalyzing and coordinating successful efforts. The primary conclusion derived from the research is that, in any school improvement effort, the key actors tend to contribute in different ways: principals contribute to both practice-related mastery and plans for continuation; local facilitators contribute to both teacher commitment and perceived efficacy; and external facilitators contribute to practice-specific mastery. Practical implications of these findings are provided for principals, central administrators, and facilitators. The paper concludes with three general recommendations related to coordinating assistance in school improvement efforts: (1) both local and external facilitators should perceive implementation in terms of the 10 outcomes listed in Table 1; (2) local and external facilitators should work out a division of labor; and (3) facilitators should locate and involve a central administrator committed to successful implementation. (TE)
COORDINATING ASSISTANCE IN SCHOOL IMPROVEMENT EFFORTS: ISSUES TO CONSIDER

David P. Crandall
The NETWORK, Inc.
Andover, Massachusetts

and

Jeffrey W. Eiseman
University of Massachusetts
at Amherst

Presented as part of Symposium 30.08,
Configurations of Assistance in School Improvement Efforts:
International Perspectives at the Annual Meeting
of the American Educational Research Association,
Montreal, Canada, April 1983

Printed in USA
The research referred to in this paper was conducted under contract with the U.S. Department of Education, the Office of Planning, Budget and Evaluation. The opinions expressed are those of the author and do not necessarily reflect the position or policy of the Department of Education, and no endorsement by the Department should be inferred.
As has been described earlier in this symposium (Cox, 1983), various configurations of internal and external assistors who support local improvement efforts can contribute materially to the attainment of quite different outcomes. (The master report series of the Study of Dissemination Efforts Supporting School Improvement [Crandall and Associates, 1982] offers the interested reader considerably more detail than we can present here.) In this paper, we would like to rapidly summarize some of our main conclusions regarding the process of innovation implementation and school improvement, especially the contributions of potential assistors to various implementation outcomes, and share what we see as some of the principal implications for policy and practice. Our major emphasis is on the crucial (and unanticipated) role of district level personnel in catalyzing and coordinating successful efforts.

Recall that we collected data from individuals nominated by the local school people in our sample; 96 external facilitators and 78 local facilitators (individuals within districts but outside the particular buildings where new practices were being implemented). These individuals were interviewed and completed a questionnaire regarding their general strategy of assistance, as well as another set focused on their site-specific assistance activities. They were also queried regarding various aspects of their work setting, their prior experience, their various roles, and their perspectives on school improvement efforts. Volume II of our master report series (Loewcks, Cox, Miles and Huberman, 1982) provides full descriptive information about this sample of helpers. These facilitators were affiliated with one of the four programs we investigated (the National Diffusion Network [NDN], the BEN Market Linkage Program, State Administered Dissemination [ESEA Title IV-C Adoption-Adaptation Grants], and ESEA Title IV-C Local Invention/Development efforts). They held a variety of roles, in their agencies, and played a large number in their work. Their activities were directed at promoting school improvement in their service areas. Figure 1 reflects our revised model and the general relationships we discerned.

**Figure 1: Our Revised Model of External Facilitator Activity**

Let us walk briefly through it.
We found that the general orientation of external facilitators is somewhat shaped by their characteristics and contexts, but not by the program with which they are affiliated, nor their particular role in that program. On empirical grounds, the predictor in which we have most confidence is Project Director. In particular, if external facilitators are project directors, they are more likely to be predisposed toward arranging and conducting awareness activities as well as toward working closely with administrators.

That is to say, the general predispositions of external facilitators appear to combine with their program/role type to influence the nature of the assistance they provide in particular sites. Perhaps the most important general assistance predictor of the kind of site-specific assistance external facilitators give is the extent of their predisposition to work closely with administrators. This allows us to build the following chain: if external facilitators are project directors, they are more likely to be predisposed to work closely with administrators; those who have such a predisposition are less likely (than those external facilitators who are project staff) to work closely with teachers.

With regard to school improvement outcomes, we need to look separately, both at the level of the individual and the level of the school. With respect to the former, our data suggest that external facilitators contribute indirectly to such individual-level outcomes as fidelity and practice-related mastery. Beyond this, our data suggest that what external facilitators do probably depends upon whether the innovation implementers in a local school have local facilitators to assist with the implementation of the practice. When local facilitators are present, we believe that external facilitators perceive less need to be involved with teachers. Nevertheless, when they provide teachers with technical assistance and follow-up training, or help them plan implementation schedules and work out procedural details, they prove helpful.

With regard to school-level outcomes, we consider our most important finding to be the confirmation of our hypothesis that the amount of external facilitator activity predicts the number of principal-identified organizational changes.

It is clear that assistance makes a critical difference, but that the source of the assistance can vary from setting to setting. Stated as a conclusion, the key actors in the teachers' environment tend to contribute to the achievement of different outcomes, and to do so in different ways. Table 1 displays the nature of the impact that three key actors have on ten different implementation outcomes. Apparently, while principals and local facilitators tend to contribute directly, external facilitators tend to contribute indirectly. Furthermore, while all three contribute to perceived benefits, principals alone appear to contribute to both practice-related mastery and plans for continuation, local facilitators alone appear to contribute to both teacher commitment and the degree the practice is perceived to solve problems, and external facilitators alone appear to contribute to practice-specific mastery.
Table 1: Nature of the Contributions of Principals, Local Facilitators, and External Facilitators to Ten Implementation Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Perceived Benefits</th>
<th>Degree Practice is Perceived to Solve Problems</th>
<th>Teacher Commitment</th>
<th>Change in Practice</th>
<th>Practice-Specific Mastery</th>
<th>Fidelity</th>
<th>Organizational Change</th>
<th>Institutionalization</th>
<th>Practice-Related Mastery</th>
<th>Plans for Continuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Indirect</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td>Local Facilitators</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Direct</td>
<td>Indirect</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td>External Facilitators</td>
<td>Direct</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Direct</td>
<td>Direct</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Direct</td>
<td>Direct</td>
</tr>
</tbody>
</table>

Saying that an actor contributes directly to the production of an implementation outcome means that some activity of that actor has achieved at least borderline significance as a direct predictor of that outcome; saying that an actor contributes indirectly means that some activity of that actor has achieved at least borderline significance as a predictor of another variable that is a direct or indirect predictor of that outcome.

For any given actor, different aspects of his/her activity contribute to different outcomes. One example of this is that when external facilitators spend a lot of time on awareness activities and other initial contacts, it tends to result in reasonably good practice-specific mastery, whereas when they concentrate on helping with implementation specifics, it tends to result in reasonably good fidelity, and reasonably substantial change in practice.

Note also that we found that external facilitators tend to concentrate their energies on sites in which local facilitators are either absent or only minimally involved.

What do these findings imply for these individuals in their work, and for those who set the policies which surround such work?

Implications for Principals

From our data, it appears that principals should refrain from entangling themselves in the details of the implementation of the practice unless they are the district expert on it. However, they should overtly demonstrate their commitment to the successful implementation of the practice by ensuring:

- that teachers have access to personnel either within or outside of the district who have practice-relevant knowledge and experience,
- that the relationship between the practice and the school's top priorities is clear and known to all staff,
- that teachers understand that there is an expectation that all of the practice's components are to be implemented (exceptions should only be authorized by designated individuals who have intimate knowledge of the practice), and
- that a school-wide environment conducive to ongoing, systematic problem-solving be maintained.

Implications for Central Administrators

We believe that our data and that of Miles and Huberman (1982) support the following proposition:

The proper role for central administrators is first to understand the process of implementation, especially the factors that predict success on various outcome measures, and second, to apply this understanding by taking whatever steps are necessary to ensure that each of the other actors involved do that which maximizes the likelihood of such success.
Chief among the steps we have in mind are:

- taking an active role in involving appropriate external facilitators,
- participating in the selection of appropriate local facilitators (including themselves) and ensuring that they have sufficient released time to prepare for and carry out this role,
- ensuring that all the actors and the activities are coordinated in such a manner so that all of the necessary functions are performed to the extent needed, and
- ensuring that all the principals who are presiding over schools in which the practice will be implemented understand how both principals and teachers can increase the likelihood of favorable outcomes.

Implications for Facilitators

Collectively, the facilitators that were involved in the sites we studied played a traceable role in producing two of our implementation outcomes (fidelity and institutionalization), a substantial role in producing two more (perceived benefits and plans for continuation), and a decisive role in producing four others (change in practice, the degree the practice is perceived to solve problems, teacher commitment, and practice-specific mastery). However, while the roles facilitators play in orchestrating successful implementations are crucial, there are three points that must be kept in mind when basing future actions upon our findings:

- Although our data show that both kinds of facilitators were involved in producing some implementation outcomes (change in practice and perceived benefits), each type of facilitator appeared to pursue a rather unique mission. In particular, local facilitators appeared to focus their talents on inducing in teachers a productive problem-solving orientation (local facilitators were uniquely associated with the outcomes the degree to which the practice is perceived to solve problems and teacher commitment); external facilitators appeared to concentrate their efforts on inducing teachers to implement the practice-under-study. (This latter conclusion is based upon two kinds of data. First, compared to local facilitators, external facilitators are uniquely associated with three implementation outcomes: fidelity, practice-specific mastery, and organizational change. Second, two kinds of external facilitator activity were singled out as playing crucial roles in producing these outcomes: awareness activities and other initial contacts and help with implementation specifics.)
• We did not collect data about the extent to which local facilitators and external facilitators spent time together, either agreeing to divide up the turf or collaborating, but we do know that external facilitators tended to spend more time in sites in which local facilitators either were absent or projected a low profile.

• We want to avoid the "naturalistic fallacy," that is, we want to avoid recommending that because there is a division of labor between local and external facilitators, therefore, there ought to be.

Accordingly, we note that the current division of labor seems appropriate for typical situations. That is, since external facilitators usually have more content expertise, it makes sense for them to concentrate on helping teachers achieve fidelity, practice-specific mastery, and the various organizational changes that are associated with the practice. And similarly, since compared to external facilitators, local facilitators are usually better informed about their own system, its staff, and its problems, it makes sense for them to be the ones working on galvanizing the staff, inducing them to think about the problems they are facing, and the ways in which the new practice can help address them.

Nevertheless, sometimes experts are too involved with the details and refinements to help those for whom the practice is new. Furthermore, external facilitators usually cannot spend as much time with local teachers as the latter group may need. Finally, local facilitators who have been given special training may be more expert than those external facilitators who work with several practices (e.g., NDN state facilitators). Similarly, local facilitators may be too caught up with the system, or may be too much the prophet in their own hometown to be successful at inducing teacher commitment or a problem-solving orientation. In short, what may work typically may not be what is best for a variety of cases.

Let us conclude with three recommendations related to coordinating assistance in school improvement efforts:

• Both local and external facilitators should perceive the implementation task as a process of working toward the achievement of the ten implementation outcomes listed in Table 1. Our intent here is to suggest more than just developing a particular perspective. We also have in mind that facilitators develop the requisite skills.

What kind of skills will help facilitators produce perceived benefits or the perception that the practice solves problems real problems? Obviously facilitators cannot work toward these objectives in isolation. There must be real benefits to perceive, and the practice has to be making a noticeable dent in problems the teachers recognize and consider important. So in the beginning
achieving other outcomes takes precedence. But even at the beginning, important groundwork must be laid. For example, with respect to the **solves problems** outcome, the facilitator should help teachers identify the kinds of problems they are having that the practice might help them solve.

But the direct answer to our rhetorical question is that facilitators need skills related to helping teachers reflect upon their experience. These include including teachers to think about and discuss their answers to such questions as why is this activity part of the practice? What would happen if I left it out? How have my students reacted when I tried to use it? Has the practice helped me in the way that I had hoped? Has it made a difference in other aspects of my teaching?

We did not discuss what facilitators might do to work toward the achievement of the other outcomes. That is because the other outcomes are more straightforward. However, we should add that our data imply that three kinds of activity have special payoff: appropriate groundwork with administrators (including the arranging of training), awareness activities and other initial contacts with teachers, and work on implementation specifics. Put another way, facilitators should perform the "in the trenches" assistance tasks of assessing needs, developing school-level support and commitment, conducting training, and providing follow-up.

- **Local and external facilitators should collaboratively work out an ad hoc division of labor.** Some people believe that the best way to get toothpaste out of a tube is to start at one end using a careful, systematic, cyclical squeeze-and-roll process. Others feel better when they plunge their thumb into the middle of a virgin section of the tube. It is our position that the important issue is whether whatever process that is used eventually gets all the toothpaste out of the tube. Similarly, we believe that local and external facilitators should meet to discuss their strengths, weaknesses, and preferences and work out an arrangement that ensures that progress can be made on all fronts.

- **The facilitators should locate and involve a central administrator committed to the successful implementation of the practice to bless and coordinate their division-of-labor agreement.** Of course a central administrator not only may have initiated the district's involvement with the practice, but also may have recruited the various facilitators. If so, fine; he or she may take on the blessing-and-coordinating responsibility on his own initiative. If not, then the facilitators should figure out who should assume this responsibility, and act on their decision.
We would urge that the issues raised by the foregoing be given prompt attention. Uncovering the key contribution that a knowledgeable central administrator can make to success was one of our most striking findings. At a time when budget cuts in many locales threaten such support positions, we urge extreme caution, for these individuals seem a vital part of successful efforts. When they team with external helpers, the payoff multiplies. Plans for leaner district management should not overlook the downstream consequences of eliminating such individuals. Let us keep our fingers crossed that these key coordinators remain available for the challenging changes we face in the future.
References


