

Despite previous research, in-service programs often need improvement

Effective staff development

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Writers in the field of educational change have repeatedly pointed out that change in schools is a process, not an event. Yet, policy-makers, decision-makers, administrators and even staff developers frequently behave in ways that betray this basic assumption. Those of us involved in the study and the delivery of staff development still discover, in amazement, a myriad of one-day, "hit and run" workshops, lectures delivered by visiting experts to whole school systems, classroom walls torn down in July with the expectation of "open classrooms" in September and legislative mandates decreeing massive changes by a certain date.

Staff developers have some control over all of these situations—more control over the types of staff development activities their districts provide, less, perhaps, over external mandates. In either case, the careful design and conduct of staff development activities is essential if any improvement is to take place in our schools. Such activities must reflect what we know about the change process.

Educational change has long been the topic of discussion and debate among researchers, theorists, and practitioners. It is only in the past five or 10 years, however, that attention has been given to the area of implementation and studies have focused on the actual use of innovations by individuals. Two major areas of study are noted: attempts to understand (1) how people change in both their feelings about and their use of new programs, and (2) what processes and characteristics of individuals and settings facilitate or inhibit the change process. Contributions have been made through work by the Texas

R&D Center for Teacher Education, the Rand Corporation, the UCLA/Kettering Foundation Studies, and the Oregon Center for Educational Policy and Management (see reference list).

This article draws on these studies, as well as on our own research and extensive experience in the delivery of staff development, to delineate elements of staff development that are related to successful innovation implementation. We begin by illustrating our belief that "change is a process" by describing four phases of the change process. Within each phase, we then discuss characteristics of effective staff development programs. We end by presenting two short examples of how these elements have been and can be combined in practice.

Our Perspective of the Change Process

We believe that staff development is a "people" activity. Granted, it occurs within an organizational context and must deal with organizational constraints. However, if institutions are to improve, the individuals within them must change. For many years we have been involved in research on the Concerns-Based Adoption Model (CBAM), a model for change which focuses on the individual (Hall, Wallace & Dossett, 1973). It assumes that individuals grow in both their feelings toward and their use of new programs and that, in order to facilitate that growth, one must tailor assistance to specific developmental needs.

When involved with an innovation, individuals generally progress through three global stages in their concerns about the new approach. **Self** concerns manifest during introductory phases (How will this affect me?). Initial use is characterized by concerns about **management** of the program (Will I ever get it all organized?). Only when these prior concerns are resolved do concerns about **impact** on learners dominate (Are they learning what they need?). Research on the CBAM has identified seven Stages of Concern About the Innovation that reflect this general trend (see Figure 1). These stages have been initially verified, measurement procedures have been developed, and they have been used extensively in research and practice (Hall & Loucks, 1979).

Figure 1
Stages of Concern:
Typical Expressions of Concern about the Innovation

Stages of Concern	Expressions of Concern
6 Refocusing	I have some ideas about something that would work even better.
5 Collaboration	I am concerned about relating what I am doing with what other instructors are doing.
4 Consequence	How is my use affecting kids?
3 Management	I seem to be spending all my time in getting material ready.
2 Personal	How will using it affect me?
1 Informational	I would like to know more about it.
0 Awareness	I am not concerned about it (the innovation).

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People also change in their use of new programs. Generally, as individuals become more familiar with an innovation, they become more skilled and coordinated in its use, and more sensitive to its effect on students. Levels of Use of the Innovation (see Figure 2) is a second dimension of the CBAM which describes changes in individuals in relation to their actual use of an innovation (Hall, Loucks, Rutherford & Newlove, 1975).

Figure 2
Levels of Use of the Innovation:
Typical Behaviors

Level of Use	Behavioral Indices of Level
VI Renewal	The user is seeking more effective alternatives to the established use of the innovation.
V Integration	The user is making deliberate efforts to coordinate with others in using the innovation.
IVB Refinement	The user is making changes to increase outcomes.
IVA Routine	The user is making few or no changes and has an established pattern of use.
III Mechanical use	The user is using the innovation in a poorly coordinated manner and is making user-oriented changes.
II Preparation	The user is preparing to use the innovation.
I Orientation	The user is seeking out information about the innovation.
0 Nonuse	No action is being taken with respect to the innovation.

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Using these two concepts (Figure 1 and 2), it is possible to view the change process in four general phases. Each phase is characterized by the concerns individuals experience and how the program is used. These phases are: (1) Orientation and Preparation, (2) Implementation, (3) Maintenance, and (4) Refinement. Within each phase, some staff development activities are more effective than others. In fact, certain kinds may even be required if the innovation is to be successfully utilized.

Orientation and Preparation Phase

At this phase, individuals have concerns that are personal and informational in nature. They want to know about the new program and how it will affect them, indicating Orientation and Preparation Levels of Use. Some staff development activities that are likely to be effective in helping people use the innovation during this phase are:

1. Teacher Involvement in Planning

Teachers should be involved in the change process well before they are trained to use the program. There appears to be two reasons why teacher involvement is important. First, staff development activities and support

structures are more likely to meet the needs of teachers who have helped structure them around their concerns. Teachers are often in the best position to anticipate problems they may encounter in implementing a new program. They can lend a note of reality to the planning and help ensure that the activities planned are relevant. Secondly, a teacher who has helped plan is likely to have a greater sense of "ego" involvement and will work to make the effort successful.

Although it is rarely possible for every teacher to be involved in planning a change effort, it is possible for some to be highly involved and for others to have input at particular points. Teachers can also be involved in different ways—some in designing time lines and the overall plan, others in materials construction or in coordinating logistical arrangements. Others can serve as presenters or resource teachers.

There are some constraints to extensive teacher involvement in planning. It requires some provision for released time. Staff development coordinators should also recognize that cooperative planning always takes longer and involves more hassles. Finally, teachers do not always have the expertise or authority to accomplish tasks related to their involvement in planning and may need training simply to be participants in this stage of the change process.

2. Clearly Stated Expectations

The objectives of the change effort should be clearly communicated to teachers so they will understand what is expected of them. This element of effective staff development program planning is targeted at informational and personal concerns. It means two things. First, the objectives of the new program, requirements for implementation (e.g., materials, time, etc.), the components of the innovation, and how it is to be used in the classroom must be clear. In addition, teachers must know what is expected of them in terms of attendance at staff development activities, classroom and role changes, a time line for use in the classroom, and any attendant evaluation activities. They also need to know what they can expect in the way of assistance, when and whom to call for help.

3. A Safe Learning Environment

The social psychological environment in which a staff development activity takes place has an important bearing on its success. As a general rule, staff development activities that generate or take place in a low-threat, comfortable setting in which there is a degree of psychological "safety" for the teacher are most conducive to change. A teacher's openness to learning appears to be enhanced when the teacher is among peers who share similar concerns, problems, and solutions. During learning experiences, teachers should be able to "admit" to areas of need without fear of being evaluated.

4. Opportunities for Active Involvement and Practice During Training

In anticipation of the Management concerns that are typically part of the Implementation Phase, the last activity that occurs in this current phase is the actual training in use of the program. The most successful staff development activities aimed at the question, "how do I do it," are those which provide the teacher an opportunity to become actively involved. These include "hands-on" experiences with materials, participation in exercises that will later be used with students, demonstrations of new

teaching techniques, and practice in using the techniques with the opportunity for constructive feedback. These "dry runs" help teachers anticipate problems they will encounter in using the new program with students.

The Implementation Phase

During the Implementation Phase, teachers are mastering the behaviors necessary to use the innovation smoothly, to integrate it into daily practice. Their first use is somewhat uncoordinated, and they are not able to plan far ahead, indicative of a Mechanical Level of Use. Concerns are often management-related, as each component is used for the first time with students. It is not unlike the first few months in a teaching career.

Staff developers are just beginning to acknowledge the importance of their role in this phase. Clearly, teachers need help when they confront problems in first using the new program with students. If such help is not received, a frequent consequence is that the innovation is changed beyond recognition, in order for the teacher to be able to survive. Some effective staff development practices during this phase are:

1. Opportunity for Follow-Up

Teachers should have the opportunity to ask questions and clarify how the innovation is to be used after initial training is completed. Usually the material and experiences provided in training require time for practice, reflection or "digestion." Often these activities result in more questions, problems, and considerations. Providing a formal opportunity, rather than a "call if you need something," is a useful strategy for solving these emerging problems.

The problems teachers encounter in this phase are mostly idiosyncratic. Thus, large group sessions are rarely required. One staff development strategy called "comfort and caring" involves a staff developer being available in a school during certain times for any input teachers desire: an opportunity to ask questions, a demonstration lesson, an explanation of a puzzling set of materials that do not work the way they are supposed to, a conference about a difficult student, or just emotional support. This regular follow-up provides for individual needs.

2. Continuous Assessment of Needs

Change is a developmental process—new needs arise over time. Teachers should be given an opportunity to express concerns and needs as they arise. Effective staff development depends on knowledge of participants' needs—needs for comfort, security and belongingness, as well as needs for new information, attitudes, and skills. Informal techniques, such as talking to principals or interacting with teachers during follow-up activities, can be used to assess needs continuously.

3. Reinforcement of Effort

Teachers' efforts to use the innovation need to be recognized and rewarded. Although follow-up during this phase might be problem-oriented or skill-building, it also needs to afford moral support and understanding. When teachers know expectations are not unrealistic for the first year, their personal concerns are lowered. Staff developers and building administrators need to communicate to teachers their understanding that first year programs are often difficult and that problems and roughness are simply part of the change process. Teachers need positive feedback on their efforts to use the innovation, helping them build a sense of mastery or

accomplishment, which is essential if commitment to continued use is to remain high.

This is also a key time for administrators to recognize that in order to encourage use of the innovation, changes may be needed in such areas as teaching schedules, extra-curricular assignments, the reward system and how support personnel are used. By developing supportive and compatible organizational procedures, teachers' efforts to use the new program are reinforced.

The Maintenance Phase

Typically, staff developers concentrate on the Orientation and Preparation phase, and to some extent on the Implementation Phase of the change process. Perhaps this is because, with limited resources, activities at that time have the greatest cost benefit. However, many innovative efforts are lost once teachers have settled back into their classrooms and district efforts are focused elsewhere. At the Maintenance Phase, when use is routine and no particular concerns are expressed, there are some staff development activities that could encourage continued use of the innovation.

1. Ongoing Administrative Support

Administrators need to express understanding and support for the change process if implementation is to be sustained. All studies clearly point to the need for strong administrative support from both the district and building level. Principals need to make it clear that the new program is a priority, and that teachers' needs will be attended to when expressed. Settling this tone early in the change effort is critical. In addition, the principal must be sure expectations are not too high, that teachers know he or she understands that change takes time. Such empathy is an important characteristic of facilitating principals.

But once use is established, it is easy for administrators to forget the innovation. Training is over, the "kinks" are out, teachers are not complaining. But, if use is to continue, administrators must continue to communicate that the program is important, must make certain that materials and supplies are available, and must arrange for thorough and specific training for new teachers. Being tuned into teachers' needs that do arise during this phase of the change effort is important, and arranging for people or activities to meet those needs is critical.

2. Ongoing Opportunities for Problem-Solving

Perhaps the most effective staff development activity during the Maintenance Phase is to provide teachers released time for sharing what they are doing, what has and has not worked. Because at this point teachers are often experienced and savvy, they have a knowledge base for making suggestions and solving problems which otherwise might interfere with continued use of the innovation.

The Refinement Phase

Research indicates that teachers often reach a maintenance phase, where use is routine and no particular concerns are expressed, never moving to program refinement. A variety of reasons can be advanced for this observation, including competing pressures for their time and energy. If refinement of the innovation is valued, then it is often necessary to arouse impact-oriented concerns, which may be done through staff development or related activities. In cases where more impact-oriented Stages of Concern are

already being expressed by teachers, similar staff development experiences are appropriate.

1. Opportunities for Self Observation

Teachers should be taught how to evaluate their own use of the innovation. Since teachers are no longer concerned about the innovation itself, or its management, their energies can turn to its effect on the students. Both guided classroom observations and other thoughtful assessment procedures can give teachers data to refine what they are doing. Providing an opportunity for discussion of findings and next steps allows teachers to pool their knowledge and skills.

2. Individualization

Staff development activities should be targeted at individual needs, which will be different in different classrooms with different student populations and problems. During the Refinement Phase in-service activities which are varied and directed at individual needs are most effective.

3. Opportunity for Choice

Teachers should be able to choose how and when to be involved in staff development activities that increase use of the innovation. During the Refinement Phase, teachers are the best judges of what they need. Assessing needs and providing individualized options is the job of the staff developer. Choosing what best meets classroom needs from those options is the job of the teacher.

4. Opportunities for Leadership

During this phase, a few teachers at high Levels of Use will emerge who have exciting and creative ways of solving what may be common problems. When these people are identified and supported (e.g., released time or extra pay) to provide leadership for others, an effective staff development vehicle is initiated.

5. Administrative Support

Again, administrative support is critical. At the Refinement Phase, since the program is being used routinely, it is "above and beyond the call of duty" for teachers to be expected to do more. One thing the administrator might do is to eliminate, when possible, the competing pressures for teacher time and energy. If teachers are to refine a program, they should not be asked to begin a new one simultaneously. The administrator's active encouragement, support and assistance are as important here as they were in previous stages.

Examples of Effective Staff Development Design

Because of limited resources, it is rarely possible to combine all these elements in a staff development design for innovation implementation. It is possible, however, to combine many of the elements in designs which are significantly more effective than one-shot "hit and run" workshops. We describe two such designs in which we have been personally involved as either facilitator or researcher.

Implementing a District-Wide Curriculum

A large school district decided to revise its elementary science curriculum and implement the revision in 80 elementary schools. Teachers were active in the revision, which was piloted and field-tested in a variety of schools.

The implementation design called for phasing in-services, so that attention was focused on teachers within

only one-third of the schools at a time. The sequence of staff development activities was:

1. Administrator orientation. Principals were provided schedules, supplies, order forms, and information about how to support teachers with different needs at different phases of the change process.

2. Teacher overviews. Two or three months before the in-service workshops began, teachers were given brief overviews of the new program, including information about the curriculum and in-service schedules, and they were provided with the new teacher's guide.

3. Teacher in-service. Teachers attended three released-time training sessions, scheduled approximately three months apart. These included active involvement in activities they would later carry out with students, providing these teachers with experience using materials and equipment. Effective classroom management techniques were also demonstrated.

These sessions were taught by other teachers who had used the curriculum in their classrooms and had planned and been trained in conducting in-service activities. During a part of the in-service days, teachers were given choices for activities in which they could participate. Choices ranged from learning better management strategies (grouping, scheduling, materials, etc.), to techniques for understanding and involving students more.

Prior to the second and third sessions, teachers were encouraged to share "war stories" and solutions to persistent problems.

4. Comfort and caring. Between in-service sessions, science department staff visited classrooms and schools where they reorganized science closets, did classroom demonstrations, worked on scheduling and classroom arrangement, and helped individual teachers with specific problems.

5. Refinement input. After two years, teachers were given the opportunity to attend in-service sessions involving techniques for grouping students and fostering cooperative learning. This provided one avenue for refinement of curriculum use.

More information about this particular example may be found in Loucks and Pratt (1979) and Pratt, Melle, Metz-dorf, and Loucks (1980).

Implementing the Instructional Coordinating Teacher Program

Our second example relates to the implementation of a new approach to staff development. Here, participants in the implementation are teachers being trained in a new role. In this district, the superintendent responded to community pressure to decentralize staff development by placing a teacher freed from actual teaching in each building as an "instructional coordinating teacher." This person was not to be involved in teacher evaluation, but would help school staffs plan staff development programs, implement curricula, and in general, improve the quality of classroom instruction. The ICT's would function as teacher advisers offering support, resource materials, teaching assistance and consultation. Because teachers who might be unfamiliar with district-wide resources were going to be recruited for these positions and because these teachers would have to establish good working relationships with principals, the implementation plan called for a four-phased training design. The first phase

was composed of a series of workshops to discuss the role itself; the second phase was an orientation to district resources; the third phase was targeted on the coordinating teachers' immediate concerns with beginning in the role; and, the fourth phase focused on ongoing support.

1. Workshops on Defining the Instructional Coordinating Teacher's Role. When the positions were announced, the superintendent outlined only broad parameters for the job. A series of workshops held combining persons in various roles (e.g., ICT's and building administrators), resulted in an evolving job description for the ICT's. Time was set aside at each workshop for meetings of people by roles, for individual conferences between ICT's and principals, for questions and answers, and for role-playing dilemmas the ICT's would inevitably encounter on-the-job.

2. Orientation Sessions. To help ICT's become more familiar with district resources, at a second set of meetings all central office personnel presented overviews on the services available to the ICT's, and described how to use them.

3. Intensive Preparatory Training. The third phase of staff development was planned on the basis of an extended needs assessment and interviews with ICT's. During a one-week intensive workshop, ICT's discussed strategies for working with teachers and principals, prepared resource materials, role-played consulting situations between an ICT and a teacher, discussed strategies for gaining entry and establishing trust, and continued to familiarize themselves with various curriculum areas. Some of the sessions were offered by ICT's so that participants would begin to see each other as valuable resources.

4. Initial Task Assignments. In order to give each ICT a chance to "jump right in" as a staff developer, they were given the task of planning their building's pre-school workshop in conjunction with the principal, and in some cases with a group of teachers. The teacher center and central office staff developers provided support and consultation.

5. Weekly Meetings. Throughout the first year, ICT's met weekly in support groups, sometimes by grade level, sometimes by area, to talk about problems and to share resources. The teacher center in the district maintained supplies and resource materials and, more importantly, offered support and consultation. Principals also met with staff developers during this time to talk about needs they perceived and to share suggestions they had for improving the program.

6. Refinement. Refinement activities are beginning as the program enters its second year. Teachers and administrators both are involved in the planning.

Conclusion

School improvement can be successful if staff development and support activities are designed according to the developmental needs of the participants. Early awareness activities should aim at information and personal concerns. Experiential skill development training should occur next, followed by specific and timely problem-solving. Finally, self-analytical, student-oriented, classroom application activities are merited. Add to this phasing the continuous input of participants, monitoring of progress and needs, and administrator support—and the trend of failure in innovative efforts has a significant chance of being reversed.

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