

P L A N N I N G F O R
EFFECTIVE STAFF
DEVELOPMENT

SIX RESEARCH-BASED
M O D E L S

MEREDITH D. GALL
ROSEANNE O'BRIEN VOJTEK



ERIC Clearinghouse on Educational Management
University of Oregon

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Library of Congress Cataloging-in-Publication Data

Gall, Meredith D., 1942-

Planning for effective staff development : six research-based models / Meredith D. Gall, RoseAnne O'Brien Vojtek.

p. cm.

Greatly expanded version of: *Effective staff development for teachers*. 1985.

Includes bibliographical references.

ISBN 0-86552-126-3

1. Teachers—In-service training—United States. 2. Teachers—In-service training—California—Case studies. I. O'Brien Vojtek, RoseAnne. II. Gall, Meredith D., 1942- *Effective staff development for teachers*. III. Title.

LB1731.G25 1994

371.1' 46' 0973—dc20

94-19882

CIP

Design: LeeAnn August

Type: 11/13 Palatino

Printer: University of Oregon Printing Department

Printed in the United States of America, 1994

Second printing, 1996

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ERIC/CEM Accession Number: EA 025 786

This publication was prepared in part with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under contract no. OERI-RR 93002006. The opinions expressed in this report do not necessarily reflect the positions or policies of the Department of Education. No federal funds were used in the printing of this publication.

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P R E F A C E

The ERIC Clearinghouse on Educational Management is pleased to add this booklet to the School Management Digest Series. The goal of the series is to provide concise, readable analyses of both research evidence and practical wisdom on important issues facing today's school leaders. Each Digest points up practical implications of major research findings so that its readers might better grasp and apply knowledge useful for the operation of schools.

In this Digest, Meredith (Mark) D. Gall and RoseAnne O'BrienVojtek offer a conceptual framework for making decisions about staff development. The organization and layout of this booklet make it easy for the reader to assess staff development programs in terms of their objectives, models, and program-design features. I believe Gall and Vojtek's scholarly yet practical survey of the research literature will be of value to those teachers, administrators, and policy-makers who have a role in designing, implementing, and evaluating programs of staff development in schools.

Meredith "Mark" Gall is a professor of education and director of the Foreign Language Teaching License Program at the University of Oregon. He is chairman of the executive editors of the *Journal of Experimental Education* and serves as a consulting editor to other journals, including the *Journal of Staff Development*. Among his coauthored textbooks are *Techniques*

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Philip K. Piele
Professor and Director

A U T H O R S ' P R E F A C E

In 1985, the ERIC Clearinghouse on Educational Management published *Effective Staff Development for Teachers: A Research-Based Model* by Meredith D. Gall and Ronald Renchler. That monograph described a staff development model that was derived from existing research findings about effective practices. The model provided a framework for designing staff development programs to help teachers improve student learning.

Since the publication of the original monograph, the research literature on staff development has grown substantially, as has the profession of staff development. It no longer makes sense to think of a single effective model of staff development. There now exists a range of models, each effective for a different purpose. Thus, instead of presenting one model of effective staff development, we describe six models in this new edition. We also present a more differentiated view of the objectives of staff development. The original monograph focused on improving teachers' instructional skills or students' academic achievement as the objectives of staff development. This edition retains these two objectives, but adds six more.

Finally, the original monograph included a list of research-based recommendations for designing effective staff development programs. The recommendations seem less valid now

because they do not acknowledge the fact that there are different types of staff development programs, each with different purposes. Therefore, instead of recommendations, this edition presents questions that should be asked—not prescriptions that must be followed—when designing the various features of a staff development program.

Our intended readership is educators and policy-makers who have responsibility for designing staff development programs for teachers at the building, district, or state level. We hope that the ideas in this monograph will enable them to think more clearly and creatively about the role of staff development in improving schools.

Meredith (Mark) D. Gall
Roseanne O'Brien Vojtek

I N T R O D U C T I O N

Staff development for teachers has become a major enterprise in the United States. Staff developers now have a major organization, the National Staff Development Council. Other educational organizations, such as the Association for Supervision and Curriculum Development, provide many staff development materials and activities for their members.

Staff development has reached the point where educators might welcome a conceptual framework to make sense of it all. That is the purpose of this monograph—to organize staff development objectives, models, and program-design features into a comprehensive framework. With this framework in mind, educators should be able to make sounder decisions as they select or design staff development programs. Also, the framework provides a set of labels for describing the various facets of staff development. These labels should enable educators to communicate better with each other when discussing their staff development efforts and results.

We define *staff development* as any effort to improve teachers' knowledge, skills, and attitudes so that they perform their roles more effectively. Some educators use the term *inservice education* rather than *staff development*. The terms are sufficiently similar in meaning that we use them interchangeably throughout.

Although we focus on staff development for teachers, our method of classifying objectives, models, and program features could be applied to staff development for administrators or other groups.

P A R T 1

THE
OBJECTIVES
OF STAFF
DEVELOPMENT

STAFF DEVELOPMENT OBJECTIVES

INTRODUCTION

Staff development programs occasionally are selected because the speaker has charisma, the price is right, or the packaging looks attractive. However, the most relevant feature of a staff development program should be its objectives. In this section of the monograph we classify the range of possible objectives into eight main types.

The classification system is summarized in table 1. The table shows that five of the staff development objectives relate directly to improvement of teachers' professional skills. The other three objectives relate directly to the improvement of students' learning, curriculum, or the school.

Many staff development programs claim that their primary objective is the improvement of student learning. For example, staff developers often help teachers develop their instructional skills with the expectation that students' learning will improve as a consequence. Or an inservice presenter makes a speech with the expectation that teachers will acquire new knowledge that they then will translate into a change in their curriculum or instructional behavior, which in turn will improve student learning. It is much more likely, however, that the inservice program will achieve its immediate objective than indirect or long-term objectives. Therefore, when analyzing a staff development program, you should focus on determining its immediate objectives and the likelihood that they will be achieved.

T A B L E 1

**EIGHT TYPES of
STAFF DEVELOPMENT
OBJECTIVES**

TEACHER-CENTERED OBJECTIVES

1. Development of teachers' knowledge and understanding
2. Attitude change. Helping teachers develop:
 - a. a positive attitude toward a particular inservice program or activity
 - b. good morale
 - c. personal and professional self-esteem
 - d. the belief that they can be effective in their work
 - e. positive expectations about their students' ability to learn
 - f. the desire to maintain a state of wellness
3. Development of teachers' instructional skills and strategies
4. Development of teachers' ability to reflect on their work and to make sound decisions
5. Development of teachers' ability to perform specialized roles

STUDENT-CENTERED OBJECTIVE

6. Development of teachers' ability to improve students' academic achievement

CURRICULUM-CENTERED OBJECTIVE

7. Development of teachers' ability to develop and implement curriculum

SCHOOL-CENTERED OBJECTIVE

8. Development of teachers' ability to restructure their schools' curriculum, instruction, and organization

TEACHER-CENTERED OBJECTIVES

1. DEVELOPMENT OF KNOWLEDGE AND UNDERSTANDING

Teachers cannot rely on what they learned in a preservice program and their first years of teaching as the only basis for their instruction. New research findings and practices keep appearing at a rapid rate. Staff developers can help by informing teachers about these new developments in a format that is comprehensible and useful. For example, they can bring in a consultant to speak on a topic of interest; teachers who attend workshops and conferences can make presentations about what they have learned; or they can arrange for teachers to take university classes. More simply, staff developers can stimulate awareness of new practices and research findings by routing bulletins, articles, lesson plans, and audio and video tapes to teachers.

Smylie (1989) reported that it often is difficult to determine the knowledge that teachers want and value most. Teachers' specific classroom conditions, career stage, or other factors affect their perceptions of what an inservice activity should provide. Also, some teachers are interested in theoretical and research knowledge that informs practice, whereas other teachers prefer craft knowledge that can be applied immediately to their work. Staff developers need to assess these factors in deciding what type of information to provide a particular group of teachers.

The literature on staff development contains numerous examples of programs designed to increase teachers' knowledge and awareness. One example is a staff development program designed for instructional improvement that was reported by Kerrins and Bacon (1990). The program helped

upper elementary and junior high teachers in the Pueblo School District in Colorado acquire knowledge about effective strategies for teaching content area reading skills to students. In addition to this knowledge objective, the program gave teachers the opportunity to practice the strategies so that they could apply them in their classroom.

2. ATTITUDE CHANGE

Some inservice activities are intended to change or improve teachers' attitudes. These attitudes are of six types: (1) satisfaction with staff development, (2) morale, (3) self-concept, (4) self-efficacy, (5) expectations of students, and (6) wellness.

Satisfaction with Staff Development. Teachers have attitudes about many things, including staff development. Often the main intention of the staff developer is simply that teachers have a positive attitude about an inservice activity in which they have participated. For this reason the effectiveness of staff development usually is assessed by having teachers report their degree of satisfaction with the inservice activity.

An example is an evaluation study reported by Keedy and Thompson (1988). They used an attitude questionnaire, observations of training sessions, and interviews to measure teachers' satisfaction with "The Teaching of Thinking Skills" program in the Galax City School District in Virginia. The evaluators found that teachers were satisfied with the program as a whole, but not with certain aspects of the instructional delivery.

Morale. Teachers' morale is a composite of their feelings of satisfaction or dissatisfaction with various aspects of their job. Many school districts sponsor "pony show" programs at the beginning of the school year, or during low periods, to boost morale. Many large conferences also provide keynote speakers for much the same reason.

It seems reasonable that high teacher morale would be associated with better student learning. Only a few studies (for

example, Miller 1981), however, have demonstrated this relationship. Also, a review of research in business, industry, and other work settings (Iaffaldano and Muchinsky 1991) found only a slight positive relationship between job satisfaction and job performance. Nonetheless, there are intrinsic reasons for maintaining high teacher morale. Brodinsky (1984) suggested that providing professional autonomy, daily recognition, and involvement in decision-making are helpful conditions for maintaining high teacher morale.

Self-Concept. Marczely (1990) observed that staff developers often ignore a teacher's self-concept, even though it influences the success of inservice programs and teachers' instruction. She suggested that staff developers can improve teachers' self-concept by giving them opportunities for reflection and by providing them with resources, opportunities for collegial interaction, and the message that they are respected participants in educational reform. Wasley (1991) suggested another approach, which is to give teachers the opportunity to assume leadership roles in school management and reform.

Showers, Joyce, and Bennett (1987) reviewed research studies that examined the effect of teacher self-concept on the effects of transfer of instructional skills into practice. They reported that teachers who have high self-esteem benefit more from staff development training than teachers who have low self-esteem. Similarly, Guskey (1988) found that teachers who feel confident about their teaching abilities are more likely to be receptive to implementing new instructional practices. Teachers who lack this confidence are less receptive. Therefore, staff developers should be sensitive to the possible need for self-esteem enhancement in their work with particular teachers.

Many organizations use inspirational and motivational keynote speakers at their conferences to let educators know that they are doing a great job, and that their contributions are making a difference in the lives of the students they teach. For example, Judy Arin Krupp spoke at the 1991 National Staff Development Council Conference in Toronto about the three

gifts educators must give to themselves: locus of control, self-esteem, and the capacity to manage change. Krupp suggested that educators can improve their self-esteem by focusing on their own strengths, living their values, focusing on positive rather than negative thoughts, and avoiding perfectionism.

Self-Efficacy. Teachers with high self-efficacy believe that they are in control and that they can make a difference in the lives of the students they teach. Ashton (1984) found that teachers with high self-efficacy tend to have students with higher academic achievement than teachers with low self-efficacy.

Sparks (1988) studied the self-efficacy of a group of teachers who had participated in a staff development program on the effective use of instructional time. She compared five teachers who had made the desired changes in their instructional behavior with five teachers who showed no improvement. One of the main differences between the improving and nonimproving teachers was in their feelings of self-efficacy. For example, one of the improving teachers reported that he “no longer felt powerless,” and another stated, “The training helps you see that there are certain things you do have control over and can do something about.” By contrast, two of the nonimproving teachers expressed doubts about the ability of their students to succeed. Underlying these doubts is the assumption that there is nothing that they could do to help the students succeed. Sparks suggested that the self-efficacy of teachers like these might be improved through structured small-group sharing and problem-solving among the teachers participating in the staff development program.

Teacher Expectations. In a review of research, Good (1987) found that teachers’ expectations about students’ achievement potential can have a positive or negative effect on how they interact with students. For example, teachers tend to wait less time for low-achieving students to answer a question, to seat them farther away in the classroom, and to demand less of them. Teachers also have different expectations for students of different ethnic backgrounds and for boys and girls.

Two popular staff development programs were designed to help teachers develop positive expectations for *all* students: TESA (Teacher Expectations and Student Achievement) and GESA (Gender Expectations and Student Achievement). TESA and GESA both attempt to make teachers aware of their attitudes and behaviors in order to help them eliminate biases toward particular types of students.

Wellness. Wellness workshops for teachers are growing in popularity across the country. They provide attitude-change and stress-reduction activities, as well as physical-fitness activities, nutrition information, and screening for health problems. For example, the state of Oregon each year holds a Wellness Conference at Seaside, a coastal resort town. It is sponsored by the Oregon Department of Education in cooperation with the Oregon Association for Advancement of Health Education. Girvan (1986) reported that many school districts and organizations across the state send Wellness Teams to participate at the conference. The teams develop action plans at the conference and then go back to their districts and sponsor wellness activities and workshops for their colleagues. Girvan found that districts whose teachers regularly attend the conference place greater emphasis on wellness and have a stronger health program than districts that do not.

3. DEVELOPMENT OF INSTRUCTIONAL SKILLS AND STRATEGIES

Staff development programs are available for improving many types of instructional skills and strategies. A skill is the effective use of a specific teaching technique, such as giving students sufficient time to think after asking a question before calling upon them to respond. A strategy is a set of related skills designed to achieve a particular instructional goal, such as using an inquiry teaching strategy to help students learn to think in a particular way about questions.

A review of research by Veenman (1984) revealed that many beginning teachers have inadequate skills for the challenges of classroom instruction. Problems of classroom management and motivating students to learn are particularly severe. The instructional skills of teachers in general also appear lacking. In one of the largest classroom studies ever (Sirotnik 1983), researchers observed the instruction of more than 1,000 elementary and secondary teachers. Sirotnik concluded from the observational data that the “modal classroom picture” is “a lot of teacher talk and a lot of student listening, unless students are responding to teachers’ questions or working on written assignments; almost invariably closed and factual questions; little corrective feedback and no guidance; and predominantly total class instructional configurations around traditional activities—all in a virtually affectless environment” (p. 29).

Joyce, Showers, and Rolheiser-Bennett (1987) concluded from their review of research that staff development programs can be effective in helping teachers expand their instructional repertoire beyond this “modal classroom picture.” The focus of their research review was the instructional strategies called collectively “models of teaching” (Joyce and Weil 1992). Researchers also have found evidence supporting the effectiveness of staff development programs designed to improve other instructional strategies such as mastery learning (Guskey 1988) and cooperative learning (Munger 1991).

4. DEVELOPMENT OF REFLECTIVE DECISION-MAKING

Simmons and Schuette (1988) identified several paradigm shifts in how educators view effective teaching. Prior to 1960, the dominant paradigm identified teachers as effective if they possessed certain traits such as warmth and enthusiasm. Since then, the paradigms have shifted from the teacher as “skilled performer” to the teacher as “instructional decision-maker,”

and most recently to the paradigm of the teacher as “reflective practitioner.”

Two of the paradigms—teacher as decision-maker and reflective practitioner—are prominent in current staff development (Osterman and Kottkamp 1993). For example, J. Shulman (1991) advocated use of the case-study method to promote teacher reflection. The cases that Shulman and her teacher-colleagues have prepared are “candid, dramatic, highly readable accounts of teaching episodes or series of events. They offer a snapshot of an on-the-job dilemma, complete with the author’s thoughts and feelings” (p. 29). The cases are supplemented by commentaries written by educators who represent different perspectives. By studying the cases, teachers are stimulated to reflect on how they would respond to the dilemma and the rationale for their response. Collections of cases are available for mentor teachers (Shulman and Colbert 1987) and for intern teachers (Shulman and Colbert 1988).

Peer coaching provides a different type of stimulus for reflection. Instead of studying cases, teachers conduct observations of other teachers’ lessons. Joyce and Showers (1988) advocated the use of peer coaching in staff development programs to help teachers learn how to make good decisions about when and how to use newly acquired teaching strategies. The goal is for instruction to occur deliberately rather than haphazardly or by chance.

According to Sparks-Langer and Bernstein-Colton (1991), teaching is now seen by researchers as a “complex, situation-specific, and dilemma-ridden endeavor” (p. 37). Staff developers can help teachers cope with this reality by improving their ability to reflect on their craft in order to make effective, ethical teaching decisions.

5. LEARNING OF SPECIALIZED ROLES

Preservice education generally is inadequate to provide teachers with all the skills and understanding that they will

need to be effective in the classroom. This fact is recognized in most states by requiring teachers to earn inservice education credits to retain or upgrade their teaching license. In addition, many teachers enroll in inservice programs to acquire the skills required to perform specialized roles. For example, teachers can take university coursework to acquire the credentials needed to become a school principal or superintendent. Other teachers return to a university to prepare for positions as reading specialists, counselors, staff development specialists, computer educators, and other specialized roles found in schools.

Some specialized roles take teachers out of regular classroom instruction, but others are part-time. For example, some teachers perform their regular classroom duties, but in addition serve in the role of mentor to new teachers entering the school district. Another specialized role is that of lead teacher or master teacher. These teachers provide leadership in curriculum development, school improvement, and assistance to other teachers in improving their instruction. Staff development programs are available to help teachers move into these roles, but they generally do not have the permanency and intensity of specialist training programs that result in state-regulated licenses and certificates.

Specialist training programs typically have a set of objectives that can be classified using other categories in our classification system—for example, development of knowledge and understanding. However, these programs have an overarching objective—role preparation—that is not adequately conveyed by the other objectives in the classification system. For example, two teachers may participate in inservice courses and activities designed to improve their ability to provide reading instruction. However, one of the teachers may combine these inservice courses and activities with others to achieve a larger objective, namely, to earn the credentials needed to fill the role of reading specialist in a school district.

STUDENT-CENTERED OBJECTIVE

6. IMPROVEMENT OF STUDENTS' ACADEMIC ACHIEVEMENT

Some staff development programs are designed to directly improve students' academic achievement. Cawelti (1981) claimed that public support for staff development rests ultimately on its ability to achieve this type of objective, which he referred to as "productivity criteria."

Gage and Needels (1989) reviewed experimental studies that evaluated the effectiveness of this type of staff development program. Nine of the studies used student academic achievement (mostly in reading and mathematics) as an outcome measure. The experiments involved two groups of teachers: The experimental group participated in the staff development program, and the control group did not. In all but one of the experiments, the staff development program led to changes in teachers' instruction, which in turn resulted in their students achieving at a higher level than students whose teachers were in the control group.

The instructional skills that were taught in the experimental staff development programs drew, for the most part, from findings of correlational studies of teacher effectiveness conducted during the 1960s and 1970s. Many of these instructional skills involve increasing academic learning time, that is, the amount of classroom time that students are actively engaged in learning specific academic topics and doing so at an appropriate difficulty level. Other skills covered in the programs involve management techniques to eliminate teacher and student behavior that wastes time in the classroom.

The studies reviewed by Gage and Needels primarily examined experimental staff development programs. The programs' link to student academic achievement was evaluated by testing small-scale, controlled applications of the pro-

grams. Orlich and associates (1993) reviewed research studies of the effectiveness of staff development programs that were implemented under typical school conditions. The main program was Madeline Hunter's instructional model, generally known as ITIP (Instructional Theory into Practice). ITIP has been widely promoted in the United States and elsewhere. The research studies evaluated staff development programs on ITIP that had been implemented throughout a school district or a state. Orlich and associates concluded, "As an exemplar of staff development, Madeline Hunter's ITIP lacks empirical evidence to support claims of improved student achievement as a consequence of its use" (p. 7). This conclusion raises cautions about using staff development programs to improve student academic achievement unless there is evidence supporting their effectiveness for this purpose.

Some staff development programs attempt to bring about changes in student behavior or self-concept, with the expectation that these changes will lead to gains in student academic achievement. An example is a staff development program on classroom management developed for Arkansas teachers. Two evaluations of this program (Evertson 1985 and 1989) found that the program was effective in improving both elementary and secondary teachers' classroom-management practices. As a consequence of this improvement, the teachers' students had better on-task behavior. This change in student behavior is noteworthy because research has demonstrated that increased on-task behavior is associated with greater student academic achievement (Fisher and others 1980). Other staff development programs have been found to be similarly effective in changing teachers' classroom-management practices, with subsequent improvement in students' on-task behavior (Gage and Needels 1989).

CURRICULUM-CENTERED OBJECTIVE

7. CURRICULUM CHANGE

Curriculum development occurs continuously in America's schools. Staff developers participate in this process by providing training for teachers in curriculum-development skills and also by facilitating the implementation of new curriculum. For example, some states currently are mandating statewide curriculum goals. Staff developers are providing workshops on these goals and assisting teachers in revising their local curriculum guides to accommodate the new mandates. They also are training and assisting teachers in selecting and designing new curriculum materials. The development of national standards for various school subjects (described by Zemelman, Daniels, and Hyde 1993) will only increase the need for staff development to help teachers develop and implement new curriculum.

A common format for curriculum-centered staff development is the summer institute. A typical format is for university professors with appropriate content expertise to work in depth with a group of teachers to improve their knowledge of a subject and teaching strategies. For example, Greabell and Phillips (1990) described a summer mathematics institute designed to enhance the mathematical knowledge of elementary teachers. The institute included twelve five-hour sessions. Each session included lecture, individual assistance, and group discussions. An evaluation of the institute revealed that the participating teachers' knowledge about mathematics increased dramatically. The teachers also expressed positive feelings about the institute's format, particularly the camaraderie that developed and the sharing of ideas in group discussions.

SCHOOL-CENTERED OBJECTIVE

8. SCHOOL RESTRUCTURING

The publication of *A Nation at Risk* (National Commission on Excellence in Education 1983) and subsequent reports by other national commissions brought widespread attention to the poor performance of America's students and weaknesses in the public school system. Many states, school districts, and individual schools responded to these reports by undertaking reform initiatives. Some of these initiatives involve school restructuring, which Schlechty (1993) defined as "changing systems so that new types of performances will be possible and encouraged and new or different outcomes can be produced" (p. 46). Schlechty contrasted school restructuring with school improvement, which he defined as efforts to improve the performance of teachers within existing systems. The critical element of school restructuring, then, is systemic change.

Staff development programs that are designed to support systemic change usually are more complex than those designed to achieve other objectives. The reason is that in systemic change efforts, teachers typically need to learn instructional practices that are very different than those to which they have become accustomed. Furthermore, they often must learn how to coordinate their work with the work of their colleagues within a reconfigured system of curriculum and instruction.

Staff developers cannot work alone in the restructuring process. They need to collaborate with other groups—typically curriculum specialists, principals, and central-office administrators. If school restructuring involves a move toward site-based management, staff developers also will need to coordinate their efforts with the school's site-based-management team, which typically includes teachers, students, administrators, and community representatives.

Descriptions of schools that have gone through a restructuring process are available in the literature. Typical is the case of Littleton High School in Colorado (Westerberg and Brickley 1991). The school's restructuring focused on performance-based graduate requirements and interdisciplinary curriculum. The change process, which extended over a period of several years, involved a great deal of committee work, community involvement, political compromise among different stakeholders, and concerted efforts to help teachers change their belief systems to accommodate their restructured work environment. It is clear from the authors' description that the school's teachers grew professionally as a function of participation in the change process. This type of professional development is different from traditional professional development, which focuses on interventions involving the individual teacher rather than the school as a whole.

P A R T 2

**MODELS OF
STAFF
DEVELOPMENT**

MODELS OF STAFF DEVELOPMENT

INTRODUCTION

In the first part of this monograph, we showed how staff development for teachers has matured to the point that it serves a wide range of objectives. As the objectives have become more diverse and complex, so have the strategies for accomplishing them. To classify these strategies, we analyzed various staff development programs to determine how they were designed to achieve their objectives. This analysis led us to identify six major strategies. We call them “models” of staff development.

Other educators have done similar analyses. For example, Sparks and Loucks-Horsley (1989) identified five models of staff development based on their analysis of strategies that share similar assumptions about “where knowledge about teaching practice comes from” and “how teachers acquire or extend their knowledge” (p. 6). Like Sparks and Loucks-Horsley, our analysis focused on how staff development programs differ in how they help teachers learn, but, in addition, we looked at their objectives as a basis for distinguishing separate models.

The six models are described below. A summary of the models, their key features, and the objectives for which they are best suited is presented in table 2 (pages 26 and 27). The order of the list has significance. As we studied the models, some appeared more complex than others. Also, the more complex models have greater potential to affect teachers and students than the less complex models. These perceptions gave us the idea to order the models in ascending order of complexity in table 2 and the following discussion. The ordering should

be considered tentative, subject to change with new research knowledge.

An interesting feature of the six models is that they imply different roles for staff developers. Using the names for the models shown in table 1, we might label the roles as follows: (1) expert presenter, (2) clinical supervisor, (3) trainer, (4) action-research facilitator, (5) organization-development specialist, and (6) change agent. Many staff developers currently are performing several of these roles for their school district or other agency. Because none of the roles is simple, the education profession needs to support staff development programs not only for teachers but for staff developers as well. Several such programs have been described in the literature (Mathes 1988).

THE EXPERT-PRESENTER MODEL

Staff development often takes the form of teachers assembling to listen to an expert make a presentation on a topic that they or others have chosen. Because the effectiveness of this method depends on the expertise of the individual making the presentation, we decided to label it the *expert-presenter model*.

The major objective of this staff development model is to help teachers acquire new knowledge about a topic. Another common objective is to influence teachers' attitudes—for example, to sell teachers on the importance of multicultural education and whet their interest in infusing it throughout their curriculum. Various staff developers have suggested presentation techniques that are effective in helping a speaker achieve these objectives (for example, Garmston and Wellman 1992).

Keynote speeches given at professional conferences and school district assemblies illustrate the expert-presenter model in its purest form. University courses also rely on this model: the instructors are the expert presenters, with supplementa-

tion by course readings, videotape programs, and guest presenters. Some of these courses include supervised practicums. In this case, the course is organized around two staff development models: the expert-presenter model and the clinical-supervision model.

Another common format for the expert-presenter model is the “how-to” workshop—for example, a workshop on how to teach computer-keyboarding skills to young children. The workshop leader might choose only to talk about how to do something or might also include elements of the skill-training model. For example, the leader might conduct the workshop in a computer lab and have teachers practice instructing each other in the targeted keyboarding skills.

Staff developers generally do not consider the expert-presenter model to be powerful by itself. Its effectiveness derives from being used in conjunction with other staff development models shown in table 2. An example is the change-process model. The critical first stage of this model is the decision to adopt an innovation that affects an entire school or other setting. Expert presenters can be helpful as one element of a strategy to show teachers the merits of the innovation and address their concerns about implementing it.

The expert-presenter model appears to be the most prevalent of the staff development models that we have identified. Gall, Haisley, Baker, and Perez (1982) collected data on all the inservice activities that a sample of elementary teachers participated in over a year’s time. They found that fully half the activities lasted four hours or less; they consisted mostly of listening to speeches or participating in brief workshops. The longer activities consisted primarily of university courses.

The prevalence of the expert-presenter model also is evidenced in a recent national survey of staff developers (Davidson, Henkelman, and Stasinowsky 1993). The staff developers were asked to indicate their most frequently used instructional methods. Of twenty-one methods they mentioned, the six most frequent were workshops, meetings, cooperative learning, videotapes, seminars, and lectures. With

T A B L E 2**SIX STAFF DEVELOPMENT MODELS
AND OBJECTIVES FOR WHICH
EACH IS BEST SUITED**

STAFF DEVELOPMENT MODEL	KEY FEATURES OF MODEL
1. Expert-Presenter Model	<ul style="list-style-type: none">• Teachers assemble to listen to an expert talk about a topic.
2. Clinical-Supervision Model	<ul style="list-style-type: none">• Supervisor, mentor, or coach identifies a teacher's concerns and goals, collects classroom observation data, reviews data with the teacher.
3. Skill-Training Model	<ul style="list-style-type: none">• Trainer presents theory underlying the skills, explains and models the skills. Teacher practices skills and receives feedback, is coached to promote transfer of training to own classroom.
4. Action-Research Model	<ul style="list-style-type: none">• Teachers do research in their own work setting to answer their questions or test new ideas.
5. Organization- Development Model	<ul style="list-style-type: none">• OD specialist helps teachers and other staff diagnose strengths and weaknesses of their school or system, develop a plan of action, implement the plan, and evaluate its success.
6. Change-Process Model	<ul style="list-style-type: none">• Staff developers help teachers make a decision to adopt a systemwide innovation, put the innovation into action, and institutionalize it.

T A B L E 2**Continued**

STAFF DEVELOPMENT MODEL	OBJECTIVES FOR WHICH MODEL IS BEST SUITED
1. Expert-Presenter Model	<ul style="list-style-type: none">• Development of teachers' knowledge and understanding.• Changing teachers' attitudes.
2. Clinical-Supervision Model	<ul style="list-style-type: none">• Development of teachers' instructional skills and strategies.• Development of teachers' ability to reflect and make sound decisions.
3. Skill-Training Model	<ul style="list-style-type: none">• Development of teachers' instructional skills and strategies.• Development of teachers' ability to improve students' academic achievement.• Development of teachers' ability to develop and implement curriculum.• Development of teachers' ability to reflect and make sound decisions.
4. Action-Research Model	<ul style="list-style-type: none">• Changing teachers' attitudes.• Development of teachers' ability to engage in school restructuring.
5. Organization-Development Model	<ul style="list-style-type: none">• Changing teachers' attitudes.• Development of teachers' ability to develop and implement curriculum.
6. Change-Process Model	<ul style="list-style-type: none">• Development of teachers' ability to engage in school restructuring.

the exception of cooperative learning, these methods represent applications of the expert-presenter model.

THE CLINICAL-SUPERVISION MODEL

Clinical supervision was developed originally for use in preservice teacher education in the early 1960s, but has come to be used in various ways for staff development. As a method, it has three distinctive characteristics. First, clinical supervision is tutorial, meaning that it involves a relationship between one teacher and one other individual, the supervisor. Second, their relationship is structured around repeated cycles of a preconference followed by direct observation of the teacher's classroom instruction and a postconference. The third characteristic of clinical supervision is that the supervisor must be an individual with a good understanding of teaching and teacher development and also good interpersonal and classroom-observation skills.

In a recent book, Pajek (1993) distinguished between several types of clinical supervision. In humanistic-artistic supervision, the supervisor helps teachers develop the expressive, artistic aspects of their teaching style. In technical-didactic supervision, the supervisor helps teachers improve their use of particular instructional techniques. And in developmental-reflective supervision, the supervisor encourages teachers to reflect on their own teaching and discover instructional practices that work for them; additionally, the supervisor sensitizes teachers to the organizational, social, political, cultural, and ethical contexts of teaching.

Acheson and Gall (1992) identified various conferencing and observational techniques that can be used to support each of these types of clinical supervision. Several examples of conferencing techniques are as follows: identify the teacher's concerns about instruction; assist the teacher in setting self-improvement goals; encourage the teacher to consider alterna-

tive lesson objectives and methods; and acknowledge, paraphrase, and use what the teacher is saying. Examples of observational techniques involve recording teachers' questions during instruction and students' on-task behavior, and making video recordings of lessons. These observational techniques can be supplemented by more reflectively oriented techniques such as dialogue journaling, in which the teacher writes regularly about what is happening in his or her classroom and raises questions and concerns. The supervisor reads the journal and responds in writing or in a conversation with the teacher. Research on dialogue journaling in preservice teacher education (reviewed by Freiberg and Waxman 1990) has found that it helps teachers become more reflective about instruction.

Several methods used in staff development can be considered variants of clinical supervision. One of them is mentoring, which, like clinical supervision, involves a tutorial relationship—in this case between a skilled, experienced teacher and a novice teacher. The mentoring process can be limited to emotional support and availability to answer the novice's questions, but it also can include cycles of classroom observation and conferencing. Research studies (reviewed by Kling and Brookhart 1991) have found that mentoring has a strong influence on new teachers' decision to stay in or leave the profession.

Peer coaching is another staff development method that resembles clinical supervision. It can be highly structured, as when it is used as part of a skill-training model (see page 27). However, peer coaching also can be used in a more open way, as when two or more teachers visit each other's classroom and then discuss what they have seen. Procedures for peer observation and assistance are described by Willerman, McNeely, and Koffman (1991).

Research on clinical supervision has not reached clear conclusions about its effectiveness (Glickman and Bey 1990). The problem may be that clinical supervision is not a unitary practice. As Pajek found, there are different types of clinical

supervision, and each type probably is effective for different purposes. Also, clinical supervision is often diluted in practice, thereby reducing its effectiveness. Graybeal (1984) found that in a sample of thirty-two elementary teachers, the total annual clinical-supervision time averaged only 112 minutes per teacher. The average preconference was twelve minutes; the average observation was twenty-eight minutes; and the average postconference was sixteen minutes. Still another problem is that clinical supervision often is associated with teacher evaluation. Evaluation is an important function of supervision, but if clinical supervision is used primarily for this purpose one should not expect it to promote a teacher's professional development.

There are instances when clinical supervision is undoubtedly effective. Herman (1993) did three case studies of teachers who were placed on plans of assistance because of deficiencies in their classroom instruction. In each case, the clinical-supervision process was an important factor in remediating these deficiencies. The process helped in large part because the supervisor (in several cases, a teaching colleague) could focus on the teacher's unique instructional problems.

Another example of successful use of the clinical-supervision model is the Medicine Hat Project in Alberta, Canada (Greene 1992). The project emphasized three elements of clinical supervision: conferencing, intervisitation by teachers of each others' classrooms, and reflection on teaching. Among the outcomes documented in the project were a more supportive, sharing school culture and teacher empowerment.

THE SKILL-TRAINING MODEL

People require training to learn such skills as the golf swing or the operation of a computer. In a similar sense, teachers need training to learn the skills involved in such methods as classroom discussion and cooperative learning.

Showers, Joyce, and Bennett (1987) did an extensive review of research on the effectiveness of various techniques for training teachers to improve their instructional skills. They found that the following techniques were effective: presentation of the theory or rationale underlying the instructional skills, demonstration and modeling of the skills, opportunity for teachers to practice the skills and receive feedback on their performance, and coaching to help them transfer the skills they learned in the training setting to their own classroom. The use of each of these techniques has been described in extensive detail by Joyce and Showers (1988).

In practice, the training model may include all the techniques identified by Joyce and Showers or some subset of them. Gliessman (1988) concluded from his review of research that teachers can improve their use of some instructional skills, such as questioning, simply by studying descriptions of the skills and their rationale.

The training model is ideally suited for the development of teachers' instructional skills. It also may improve student academic achievement if the training involves instructional skills that have been demonstrated to improve student learning. The staff development programs reviewed by Gage and Needels (1989), which we discussed in the first part of the monograph, generally focus on instructional skills of this type.

The School Improvement Program in Richmond County, Georgia (Murphy, Murphy, Joyce, and Showers 1988), is an example of a staff development program that was based on the skill-training model. The staff developers used theory presentation, demonstration, practice, feedback, and peer coaching to increase teachers' repertoire of teaching strategies. The strategies selected for training are among those known as "models of teaching" (Joyce and Weil 1992). The teachers engaged in initial acquisition of the teaching strategies during a two-week summer training session and then practiced with peers throughout the summer. During the school year, the teachers participated in study groups, viewed videotapes, and received peer coaching and visits by consultants.

THE ACTION-RESEARCH MODEL

Teachers are exposed to many ideas for improving instruction, but they often are skeptical about whether the ideas will work in their own classroom. Or teachers may pose a question about their work for which they cannot find a suitable answer from their colleagues or other sources. Action research can be an effective staff development model in these situations. Teachers do their own research in their immediate work setting to test new ideas or answer questions they have posed.

Action research is more systematic than trial and error, because it draws on methods used in scientific research. However, action research is less formal than scientific research, because its goal is to produce knowledge that contributes to a teacher's professional development; by contrast, scientific research seeks to produce broadly generalizable knowledge.

Several approaches to action research have been developed. Perry-Sheldon and Allain (1987) describe four steps in the action-research process: reconnaissance, planning, acting, and reflecting. Borg, Gall, and Gall (1993) describe seven steps: defining the problem, selecting a design, selecting a sample, selecting measures, collecting and analyzing data, interpreting and analyzing the data, and reporting the findings. An action-research project can be carried out by an individual teacher or by a team of teachers.

Action research is consistent with the constructivist movement in education, which assumes that individuals learn best when they are given responsibility for developing their own knowledge and understanding. In action research, teachers similarly are empowered to try out their own ideas and develop their own understandings, rather than relying solely on what an expert or authority figure has claimed to be true. By carrying out action-research projects, teachers become more reflective about their instruction and refine their instructional skills.

An increasing number of action-research projects by teachers are being reported. In a project described by Sagor (1991), a group of middle-school math teachers wondered whether having students write in their classes would improve their computational skills. Their speculation was that the writing process helps to improve comprehension of what one is studying, and so it should be as applicable to math as to other content areas. The teachers tested this speculation by joining together to do an experiment in which some of their classes wrote about the math concepts that they would be tested on the next day. The other classes served as a control group: the students received the same math instruction, except that they did not do the writing activity. The teachers found that, as expected, writing improved students' learning of math concepts. They subsequently presented their results to colleagues and revised their school's math curriculum to include writing activities on a regular basis.

THE ORGANIZATION- DEVELOPMENT MODEL

The noted management expert W. Edwards Deming claimed that 85 percent of the problems that affect the quality of an organization's work reside in the structure of the organization, not in the individual employee (cited in Bonstingl 1992). In education, this means that many problems are caused by malfunctions in a school's organization, not by individual teachers. Therefore, if staff developers wish to help in solving these problems, they must be able to work with the entire school in addition to being able to work with individual teachers. The set of methods known as organization development (OD) was created to serve this purpose.

Schmuck and Runkel (1985) defined *organization development* as:

a coherent, systematically planned, sustained effort at system self-study and improvement focusing explicitly on change in formal and informal procedures, processes, norms, or struc-

tures, and using concepts of behavioral science. The goals of OD are to improve organizational functioning and performance. (p. 4)

This definition highlights the fact that OD focuses on groups of teachers and other school staff rather than on individuals. If an OD intervention is done well, not only is the initiating problem solved, but the school's staff improves their capacity to solve future problems and to engage in a process of continuous improvement.

An OD intervention typically involves these phases: diagnosis of a school's strengths and weaknesses, development of a plan of action, implementation of the plan, and evaluation of the success of the plan's implementation. The staff developer can select from a variety of techniques available for each phase. For example, a technique that can be used during the initial diagnostic phase is Survey-Data-Feedback (Schmuck and Runkel 1985, pp. 330-36). In using this technique, the staff developer surveys teachers and other school staff to collect data about the school's organization. After viewing the organization from different perspectives, the staff developer shares the survey results with the school staff. The staff, with the support of the staff developer, uses these results to design a plan for change.

To use the organization model effectively, the staff developer needs to have the flexibility to assume different roles: consultant, facilitator, mediator, trainer, and process observer. Most importantly, the staff developer needs to be able to work with the organization in such a way that once she leaves, teachers and other school staff have the capacity to perpetuate organizational self-renewal. A review of research by Neuman, Edwards, and Raju (1989) found that staff developers who used multifaceted OD interventions were more effective in achieving this goal than were staff developers who used a single OD technique.

Conway (1990) described an OD intervention that took place in a large metropolitan school district in New York State in 1984. The intervention was initiated by a member of the

district's council of secondary school principals, who acknowledged that there were communication problems within the council. The OD consultant collected diagnostic data about the problem by studying council documents, observing the council in action, and interviewing individual council members. Problems of trust and lack of influence in decision-making emerged as key concerns of the council members. The OD consultant then held a workshop with the council members to report his data and to help the council clarify their roles and confront each other with their concerns. Outcomes of the intervention included a new meeting structure, an increase in interpersonal trust, and greater mutual influence among council members.

THE CHANGE-PROCESS MODEL

Some of the staff development models described above have the goal of helping individual teachers, or small groups of teachers, improve their instruction. However, some desired improvements require systemic change at the school or district level—for example, a change in staffing and curriculum to mainstream handicapped learners into regular classrooms, institution of outcomes-based education as the model for a school's instruction, or a schoolwide study-skills program that is articulated across grade levels. We call these kinds of improvement "systemic innovations."

Use of the organization-development model, described above, can create a readiness for systemic innovation, but other interventions are needed as well. Research on these interventions was synthesized by Fullan and Stiegelbauer (1991) to create a model of an effective change process. Building on their synthesis, we present here a change-process model for systemic innovations. The model focuses on the role of staff development. (For other aspects of the change process, consult Fullan and Stiegelbauer's book.)

The change-process model has three stages: initiation, implementation, and institutionalization. In the first stage, which is initiation, staff developers and others work toward a decision about whether to adopt the proposed innovation. A particular type of staff development for teachers is important at this stage: they need to receive continuous, personalized information about the innovation. In other words, they need to have repeated opportunities to learn about the innovation, ask questions about it, and discuss it with their colleagues. This process will help the teachers buy into the adoption decision if the innovation actually has merit.

The implementation stage of the change-process model involves putting the innovation into action in a particular school or other setting. Staff development is critical at this stage, too. No matter how much teachers have learned about the innovation at the initiation stage, they will encounter unanticipated problems, develop new concerns, and identify skills they need but have not mastered. Fullan and Stiegelbauer found that effective staff development in this stage of the change process involves a combination of “concrete, teacher-specific training activities, ongoing continuous assistance and support during the process of implementation, and regular meetings with peers and others” (p. 86).

The final stage of the change-process model is institutionalization, which involves a decision to continue using the systemic innovation indefinitely. This decision is especially difficult when the innovation has been implemented using special, nonrecurring funds or when educators who have been its advocates leave. If the decision to institutionalize is affirmative, staff development is necessary to ensure that the innovation continues to be used as intended. It helps to have available a group of teachers and other educators who are highly skilled in the innovation; they can provide training and support to new staff who come into the setting.

Hall and Loucks (1978) developed a useful conceptual framework for understanding the personal stages of concern that teachers encounter as they progress through the three

stages of systemic change. Their framework, called the Concerns-Based Adoption Model, posits seven stages of concern: (1) little concern about involvement with the innovation; (2) general awareness of the innovation and interest in learning more about it; (3) personal concerns about the innovation, such as whether it will require major changes in their work; (4) concerns about the details of implementing the innovation; (5) concerns about the impact of the innovation on one's students; (6) concerns about how to coordinate with others who are implementing the innovation; and (7) interest in improving the innovation or replacing it with a more powerful alternative. Hall and his associates developed an instrument, the Stages of Concern Questionnaire, that can be used to identify the type of concern that each teacher is experiencing at a particular point in time in the change process. A study by James and Hall (1981) demonstrated how this questionnaire can be used to understand and guide the implementation of a science-curriculum project.

The change-process model is by far the most complex and lengthy of the staff development models. Fullan and Stiegelbauer claim that moderately complex changes can require from three to five years, while major changes can require from five to ten years.

An example of the change-process model in action is the experience of the Pittsburgh Public School District, which started a program of reform in 1980 (Johnston, Bickel, and Wallace 1990). The program's first phase was a staff development experience for all district teachers to refine their instructional skills and update their knowledge about adolescent students and secondary-school curriculum. In the second phase, each school's staff was asked to institutionalize a shared decision-making process and to undertake school-improvement projects. Each project involves a three-stage change process: (1) a developmental phase to build staff ownership of the project and engage in planning, (2) an implementation stage, and (3) a dissemination stage to share the project with other schools in the district. Most of the projects have focused

on personalizing the high-school experience and ameliorating problems of low student attendance and achievement.

Each school's projects involve a change process within the larger change process initiated by the school district. At the time of the authors' report, the larger change process had been in operation for a decade, while the school projects had been under way for three years. These time periods are typical of major change programs. Also typical is the use of several staff development models within an overarching change-process model; the school district had employed organization development, expert presentations, instructional skill development, and clinical supervision in the form of peer observation.

P A R T 3

DESIGN
FEATURES OF
EFFECTIVE STAFF
DEVELOPMENT
PROGRAMS

DESIGN FEATURES OF EFFECTIVE STAFF DEVELOPMENT PROGRAMS

INTRODUCTION

Much research has been done to discover the characteristics of effective staff development programs. Various reviewers (Fullan and Stiegelbauer 1991; Lawrence 1981; Showers, Joyce, and Bennett 1987; Sparks 1983; Wade 1984/1985) have synthesized the findings of this research. However, their syntheses do not take into account the possibility that different program characteristics may be effective for different staff development objectives.

For example, peer coaching may enhance the effectiveness of a program that trains teachers in instructional skills but have no effect in a program that has the goal of improving teachers' ability to reflect on their instruction. The available syntheses of research did not analyze the effectiveness of peer coaching—and other staff development characteristics—for these different outcomes.

Despite the limitations of the above-mentioned research syntheses, they are helpful in suggesting which features of a staff development program determine its effectiveness. The following is a list of these features, which are organized into three categories: objectives, delivery system, and administration. Each feature is accompanied by both a question to facilitate your program planning and a brief comment. Some of the comments refer to findings of the above-cited research syntheses.

A. OBJECTIVES

1. *Type of Objective.* What should be the objective(s) of the staff development program?

Keep in mind the range of possible objectives: knowledge and awareness, attitude change, instructional skills and strategies, reflective decision-making, specialized career roles, students' academic achievement, curriculum change, and school restructuring.

2. *Need.* Do teachers and other stakeholders see the need to accomplish the objectives that have been selected?

The objectives should relate to the perceived needs of teachers and other stakeholders in the change process.

3. *Clarity.* Are the objectives stated in specific, measurable terms?

Research has found that specific objectives that are measured at several points in time are more likely to be accomplished.

4. *Complexity.* Will teachers find that the objectives are complex?

Research has found that complex objectives are achieved more easily by breaking them into simpler objectives and introducing them gradually.

5. *Practicality.* Will teachers perceive the objectives to have practical value?

Research has found that teachers are unlikely to pursue objectives that are not congruent with their work situation and beliefs about what is effective. Staff development activities should be designed to modify teachers' incongruent beliefs and show how achievement of the objectives will increase their effectiveness.

B. DELIVERY SYSTEM

6. *Staff Development Model.* Does the program use the staff development model, or models, that are the most effective for the objectives that the program is designed to achieve?

Keep in mind the range of staff development models: expert presentation, clinical supervision, skill training, action research, organization development, and change process. To determine which model is most appropriate for your objectives, review table 2.

7. *Duration.* How long should the staff development activities be?

One-shot presentations or workshops are of little value, except for developing knowledge and awareness. Research has found that other staff development objectives require activities spaced over time—typically several months or even years in the case of school improvement.

8. *Site.* Should the inservice program be conducted at the teachers' school or at some other site?

The clinical-supervision and skill-training models require school-site activities. There is more flexibility in choosing the site of inservice activities in the other models.

9. *Staff Developers.* What should be the qualifications of staff developers who are selected to do inservice activities?

Research has found that staff developers will not be effective unless they are viewed as credible by the teachers with whom they work. Also, they need the specific skills required by the staff development model that they are implementing. For example, a clinical supervisor needs different skills than an organization-development specialist.

10. *Scheduling.* When should inservice activities be scheduled?

Inservice activities should be scheduled at times that do not interfere with teachers' other obligations.

11. *Composition of group.* Should participants in an inservice activity be teachers from the same school or from different schools?

The composition of the group depends on the staff development model. For example, inservice activities in the organization-development model require a cohort of teachers and other staff from the same school, whereas an inservice activity based on the expert-presenter model can accommodate teachers from many different schools.

12. *Size of group.* How many teachers should be included in the inservice activity?

Different size configurations are possible depending on the staff development model. For example, many teachers can be trained in the action-research model at the same time. However, teachers typically will work as individuals or small groups in carrying out a particular action-research project.

13. *Teachers' Career Stage.* Have the needs and concerns of teachers at different career stages been taken into account?

Research has found that teachers' needs, concerns, and willingness to change vary, depending on whether they are at the beginning, middle, or end of their careers.

14. *Incentives.* What incentives should teachers be given for engaging in staff development?

Research has found that released time, payment of expenses, and college or district credits are effective incentives.

15. *Organizational Climate.* Does the school's climate support staff development for teachers?

Research has shown that positive staff development outcomes are more likely in schools that have norms of collegiality and experimentation.

C. ADMINISTRATION

16. *Administrators' Role.* What role should the principal and other administrators play in an inservice program?

Research has shown that various staff development objectives are more likely to be achieved when the principal is supportive of teachers' involvement in inservice activities.

17. *Recruitment.* Should participation in staff development be voluntary or mandatory?

Participation should be voluntary or mandatory, depending on the staff development objectives. For example, preparation for a career-role change should be voluntary, whereas adopting and implementing a schoolwide systemic innovation will require all teachers' participation.

18. *Governance.* Should teachers be involved in the design and governance of the inservice program?

Research has shown that staff development outcomes improve when teachers share in the responsibility for designing and implementing the inservice program.

19. *Evaluation.* Should the inservice program be evaluated?

Evaluative data can be used to improve the program and also provide evidence to justify its continuation.

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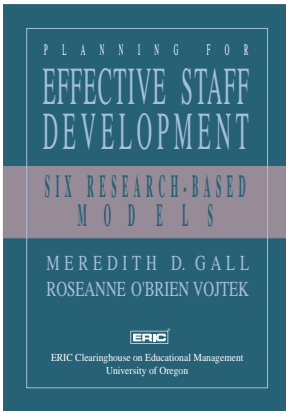
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Staff development for teachers has become a major enterprise in the United States. Staff developers now have a major organization, the National Staff Development Council. Other educational organizations provide many staff development materials and activities for their members.

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Although we focus on staff development for teachers, our method of classifying objectives, models, and program features could be applied to staff development for administrators or other groups.

From the Introduction



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