INTRODUCTION

School and district staff members, like others in the workforce, are becoming more and more involved in seeking and taking advantage of opportunities to improve their professional skills and increase their effectiveness. The literature on adult learning theory and effective staff development programs together provide a powerful knowledge base that offers guidance in the design, development and implementation of effective staff development programs for teachers and administrators.

This combined knowledge base includes experiential and theoretical discussions, as well as more traditional research studies. Discussions of how and why adults learn and the ways to facilitate that learning, for example, are primarily theoretical in nature; but there is a good deal of research on how to structure staff development programs to support learning. In addition, there is a small but growing group of studies demonstrating the relationship between effective staff development and improved student performance.

This CLOSE-UP focuses on three areas of effective staff development: (1) the needs and characteristics of participant learners; (2) the program characteristics of purposes, structure, content, process and follow-up; and (3) the organizational characteristics that contribute to or support effective staff development. Each of these three areas is examined separately in the following analysis.

The Participant Learner

The learner is a person who wants something; the learner is a person who notices something; the learner is a person who does something; the learner is a person who gets something. John Dollard, in Kidd 1975, p. 17

LEARNING AND CHANGE

A working understanding of the nature of learning is important in understanding the characteristics of the participant learner. While myriad definitions can be found, Smith (1982) suggests that the word LEARNING has been used to describe several SITUATIONS and that understanding each is important:

- When learning refers to a PRODUCT, the emphasis is on the outcome of an experience: the
acquisition of a particular set of skills or knowledge.

- When learning describes a PROCESS, the emphasis is on what happens when a learning experience takes place: how learners seek to meet needs and reach goals.
- When learning describes a FUNCTION, the emphasis is on aspects believed to help produce learning: how learners are motivated, what brings about change (p. 34-35).

Effective staff development programs address all three types of learning situations. Using knowledge about how learning is produced (function) and about what happens when people learn (process), participants in effective programs develop new knowledge and skills as teachers and administrators (product). Effective programs themselves become vehicles for learning as an "active process of transmuting new knowledge, values and skills into behavior" (Smith, p. 45).

Kolb (1984), in his work on learning styles, identifies three types of learning theory:

- RATIONALIST (including cognitive theories): Learning focuses on the acquisition, manipulation and recall of abstract symbols.
- BEHAVIORAL: Learning is a process of changing behavior with no role for consciousness and subjective experience in the learning process.
- EXPERIENTIAL: Holistic, integrative learning is a combination of experience, perception, cognition and behavior.

According to Zemke (1981), "No single theory or set of theories seems to have an arm-lock on understanding adults or helping us work effectively and efficiently with them" (p. 45). Instead, knowledge about the various theoretical approaches is useful in designing staff development that is suitable and effective for a broad variety of learners.

In any learning situation, learners undergo some type of CHANGE, and understanding the nature of change is also important. Research on the implementation of innovations has defined elements of change that can be applied to staff development programs (Hall and Loucks 1978):

- Change is a PROCESS, not an event. Introduction to and training in new ways of doing things does not assure that people will immediately begin to do them. Change is a process that must unfold over time.
- Change must be understood in terms of what happens to INDIVIDUALS. Understanding how individual teachers and administrators may respond to changing their behaviors and practices is critical.
- Change in individuals is a highly PERSONAL experience. Each person perceives, feels about, and reacts to change in an individual way.
- Change by individuals entails GROWTH, both in terms of how they feel about the change and their skill in applying any innovations. This incremental growth is part of the process of change which an individual undergoes over time.

Effective training programs, then, take into account the nature of learning and the fact that learning requires change.

**ADULT LEARNERS**

Teachers and administrators are experienced professionals with extensive backgrounds in educational practice. They are experienced, capable adult learners, and the variety of experiences they bring with them to development programs affects what and how they learn.

In reviewing the literature on adult learning, including examination of all types of learning theory,
the following common descriptors of adult learners emerge:

- Adults learn throughout their lives. Age does not reduce a person's ability to learn but may reduce the speed at which learning takes place. In addition, because of time elapsed since earlier learning experiences, adults may underestimate their own abilities to learn and/or may need additional time to adjust to new learning conditions.
- Adults exhibit a variety of learning styles, and there is no one "right" way of learning. They learn in different ways at different times and for varying reasons.
- The adult learner is a person with a sense of self, bringing all previous life experiences, both personal and professional, to bear on new learning. Past experiences affect what the learner learns and are the foundation for current learning. Adults learn best when new learnings are demonstrably tied to or built upon past experiences.
- Adult learners' stages of development, whether personal (cognitive, moral, ego, conceptual), chronological (early adulthood, mid-life, etc.) or professional (new or experienced teacher, etc.), profoundly affect their learning.
- Adult learners exist in situations separate from the learning context. They are motivated to learn by changes in their situations and learn best when new learnings apply in practical ways and/or are relevant to the changes in their situations.
- The adult learner controls what is learned, selecting new information and/or deciding how to use it, and this takes place at both the conscious and unconscious levels.
- Adults tend to be problem-centered rather than subject-centered learners and learn best through practical applications of what they have learned.
- Adult learners must be treated as adults and respected as self-directed persons. They learn best in nonthreatening environments of trust and mutual respect.
- The optimum role of the adult learner in the learning situation is that of a self-directed, selfmotivated manager of personal learning who collaborates as an active participant in the learning process and takes responsibility for learning.
- New learning is followed by a period of reflection to facilitate integration and application of new knowledge and skills.
- Continued learning depends on achieving satisfaction, especially in the sense of making progress toward learning goals that reflect the learner's own goals.

Effective staff development programs should take into account the nature of adult learners and the need for making learning accessible to them. Smith (1982) suggests that there are six optimum conditions for learning and that adults learn best when these six conditions are met:

1. They feel the need to learn and have input into what, why and how they will learn.
2. Learning's content and processes bear a perceived and meaningful relationship to past experience, and experience is effectively utilized as a resource for learning.
3. What is to be learned relates optimally to the individual's developmental changes and life tasks.
4. The amount of autonomy exercised by the learner is congruent with that required by the mode or method utilized.
5. They learn in a climate that minimizes anxiety and encourages freedom to experiment.
6. Their learning styles are taken into account (p. 47-49).

Adult learners have special needs and special strengths and are themselves a valuable resource for each other in the learning process.

MOTIVATING ADULTS TO LEARN
Information from the literature about motivating adults to learn supplements knowledge about learning, change, and the adult learner to increase effectiveness of staff development programs. Based on an extensive review, Wlodkowski (1985) lists specific factors that have impact on motivation:

- **ATTITUDE**: the learner's combination of concepts, information and emotions about the learning that results in a predisposition to respond favorably
- **NEED**: the current condition of the learner, experienced as an internal force moving the learner toward the goal
- **STIMULATION**: any change in perception or experience of the external environment that prompts the learner's action
- **AFFECT**: the learner's emotional experience (feelings, concerns, passions)
- **COMPETENCE**: the learner's sense of effectively interacting with the environment
- **REINFORCEMENT**: the learning event maintains or increases the probability that the learner will achieve the appropriate response.

These major motivational factors exert maximum influence at particular times in a learning sequence. At the **BEGINNING** of the learning process, the learner's attitudes (toward the environment, the instructor, the topic at hand, and the self) and the learner's needs (immediate and at the time of the learning) should be acknowledged and addressed. **DURING** the learning sequence, stimulation (via the learning experience itself) and the learner's affect (feelings about self, topic, etc.) should be carefully monitored and acknowledged. At the **END** of the sequence, the learner must feel a sense of competence (increased value because of this new learning) and should be reinforced (this is the right learning). Appropriate attention and response to these learner factors at the appropriate time during the learning process can dramatically increase motivation.

Keller (1987) outlines a strategy for attending to these factors, his "ARCS" model. Programs should get participants' attention ("A") with content that is attractive, contain content with high relevance ("R"), stimulate the development of participants' confidence ("C"), and result in learner satisfaction ("S").

Smith (1982) adds that learners' expectations are critical to their motivation and that programs should create the expectation that learners will succeed. Care should also be taken that excessive structure and authority in the program do not become a disincentive for learning.

Generally speaking, learners need to be interested, successful, and supported in their learning, and such intrinsic motivators are critical to program success. Lanier and Little (1986) caution against the use of external motivation in the form of cash incentives, citing several studies in which paying teachers/administrators to participate is efficient in attracting them to professional development activities but is inversely related to classroom implementation of the recommended practices.

**TEACHERS AS LEARNERS**

Staff development programs focus on teachers and/or administrators, a population of adult learners with specialized experience and needs. Simmons and Schuette (1988) suggest that the current paradigm for teachers is that of teacher as reflective practitioner—"one who makes instructional decisions consciously and tentatively, critically considers a full range of pertinent contextual and pedagogical factors, actively seeks evidence about the results, and continues to modify these decisions as the situation warrants" (p. 20).

Exploring this population as a whole, Fullan, Bennett, and Rolheiser-Bennett (1990) examine what
they call teachers-as-learners, a group including all professional educators (classroom teachers, teacher leaders, head teachers, vice-principals, and principals). They propose that there are four key aspects of teacher-as-learner:

- **TECHNICAL REPERTOIRE**: mastery of a variety of skills and practices which increases instructional certainty
- **REFLECTIVE PRACTICE**: careful consideration that results in enhancement of clarity, meaning and coherence in teacher practice
- **RESEARCH**: exploration and investigation to discover ways to improve practice
- **COLLABORATION**: focused interchange with fellow teachers to give and receive ideas and assistance.

"The important question," they say, "is how to integrate and establish the strengths of each of these four traditions in the individual teacher as learner. Rarely have all four received intensive attention in the same setting" (p. 15).

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**PROGRAM CHARACTERISTICS**

**SUSTAINED IMPROVEMENTS IN SCHOOLS WILL NOT OCCUR WITHOUT CHANGES IN THE QUALITY OF LEARNING EXPERIENCES ON THE PART OF THOSE WHO RUN THE SCHOOLS.** Fullan 1991, p. 344

**PURPOSES**

A considerable body of research now exists which examines the characteristics of effective staff development programs. This research base includes teacher inservice experiments; basic skills instruction experiments; teacher effects research; implementation research; descriptive survey research on teachers' preferences and attitudes; and research on teacher expectations, principals and achievement testing (Gall and Renchler 1985). These studies show that there are identifiable characteristics which contribute to the success of staff development programs.

Generally, the DESIRED OUTCOME of staff development is one of the following:

- **INFORMATION TRANSFER**. Participants receive information about new approaches, techniques, requirements, etc.
- **SKILL ACQUISITION**. Participants are taught a particular way to do something.
- **BEHAVIOR CHANGE**. New information and/or skills are taught with the expectation that participants will apply the new learning and change their behaviors (Korinek 1985).

Of the three, the longest-lasting effects are derived from the behavior-change type of staff development program.

Joyce and Showers (1982) identify four LEVELS OF IMPACT for staff development programs, in terms of the response of the participants:

- **AWARENESS**. Participants realize the importance of new information and begin to focus on it.
- **CONCEPTS AND ORGANIZED KNOWLEDGE**. Concepts are understood and organized.
- **PRINCIPLES AND SKILLS**. Principles and tools for action are understood and participants can think effectively about them and have the skills needed to act to apply them.
- **APPLICATION AND PROBLEM SOLVING**. Participants transfer new information in
problem-solving fashion to real-life professional situations.

At the application level of impact, participants in development programs have internalized the new content and use it.

There are a variety of REASONS for staff development:

- **PERSONAL PROFESSIONAL DEVELOPMENT**: a self-directed approach based on individual needs and choice
- **CREDENTIALING**: successful completion of a program as a requirement for licensing or certification
- **INDUCTION**: supplementing skills and knowledge for the newly hired
- **SCHOOL IMPROVEMENT**: staff development to improve student performance by improving staff skills and knowledge (Gall and Renchler 1985).

Lanier and Little (1986) note that staff development programs also:

- Serve teachers as individual members of a profession, adding knowledge, skills, and intellectual vigor to professional life
- Satisfy bureaucratic and career advancement purposes
- Involve teachers as responsible members of an institution.

**STRUCTURES**

Professional staff development comes in many forms. It can take place in the workplace or in some other environment, it can be required or voluntary, it can be offered by an organization or sought independently by an individual. Two-hour lectures, three-day conferences and year-long courses can all be considered staff development.

Sparks and Loucks-Horsley (1990), in their extensive review of the research, suggest that five types of staff development models are used for teachers:

- **INDIVIDUALLY GUIDED STAFF DEVELOPMENT**: Individuals identify, plan and pursue activities they believe will support their own learning.
- **OBSERVATION/ASSESSMENT**: Teachers are observed directly and given objective data and feedback about their classroom performance.
- **INVOLVEMENT IN A DEVELOPMENT/IMPROVEMENT PROCESS**: Teachers develop curriculum, design programs, or become involved in school improvement processes to solve general or specific problems.
- **TRAINING**: Teachers engage in individual or group instruction in which they acquire knowledge or skills.
- **INQUIRY**: Teachers identify and collect data in an area of interest, analyze and interpret the data, and apply their findings to their own practice.

Of these five models, the most widely used and researched is TRAINING. Sparks and Loucks-Horsley cite a number of studies in which training programs have been tied to improvements in particular types of student performance, underscoring the appropriateness of this approach to staff development. Gage (1984) reports that in eight of nine experimental studies, "inservice education was fairly effective--not with all teachers and not with all teaching practices but effective enough to change teachers and improve student achievement, or attitudes, or behavior" (p. 92). Fullan (1990) and others, however, suggest that the INQUIRY approach will become more widely used as the teacher-as-learner/teacher-as-reflective-practitioner paradigm takes hold.
In a review of the work of other researchers, the following points related to effective STRUCTURES for staff development programs appear consistently across studies:

- Designs are based on principles of adult learning and a full understanding of the process of change.
- Programs are conducted in school settings.
- Development takes place in more than one incident, and incidents are spaced over time: they are conducted long enough and often enough to assure that participants progressively gain knowledge, skill and confidence.
- Training is conveniently scheduled to avoid interfering with ongoing job requirements of participants.
- Development activities take place at a convenient location.
- Trainers have credibility with the participants.
- Participants are involved in the planning, development and presentation of the training program.

CONTENT

Gall and Renchler (1985) report that, "Research shows the most effective staff development programs are designed for school improvement rather than for staff personal professional improvement" (p. vii).

Review of the research provides the following characteristics of effective CONTENT for staff development programs:

- Programs are planned in response to assessed needs of the participants, and content matches the current developmental level of participants (Wood, et al. 1981; Griffin 1982).
- The focus is school improvement rather than personal professional development (Gall and Renchler 1985).
- Content is concrete and aimed at developing specific skills rather than just introducing new concepts. The theoretical basis or rationale is part of the content about new skills (Berman and McLaughlin 1975; Joyce and Showers 1980).
- Professional development focuses on job- or program-related tasks faced by teachers (Fullan 1982; Purkey and Smith 1983).
- There are clear, specific goals and objectives related to implementation (Wood, et al. 1981; Griffin 1982; Orlich 1984).
- Content is research based and is tied to student performance (Sparks 1983; Gall and Renchler 1985).
- The use of new behaviors is made very clear, and applicability to individuals' home situations is understood (Sparks 1983; Orlich 1984).
- Between-workshop content, such as observation, visitation and discussion, is included to facilitate implementation (Fullan 1982; Sparks 1983; Gall and Renchler 1985).

Overall, content of staff development programs reflects clear program goals and operational objectives defining what participants will learn and how they will be able to use the new learning. Content builds on their prior experience, clearly relates to their home situations and prepares them to apply what they have learned.

Research support for the selected program content is clear, providing the rationale for applications. Both knowledge (the understanding of background and concepts) and skills (the ability to put
knowledge into operation) are included in the program. Participant evaluation and accountability are integrated into the program to increase incentives for learning and application.

**PROCESSES**

The internal structures or instructional processes used in the design and delivery of staff development programs appear to influence the programs' level of impact. Several researchers have studied program components to identify those which are essential. Joyce and Showers (1980) identified five components of effective development programs that have become widely acknowledged as important:

- Presentation of theory or description of the new skill or strategy
- Modeling or demonstration of skills or strategic models
- Practice in simulated and actual settings
- Structured and open-ended feedback to provide information about performance in the practice
- Coaching for application--the follow-up work to help with the at-home implementation of the new skill and/or knowledge.

These components vary in their importance to reaching the transfer level of impact, with evidence strongest for modeling and feedback. Joyce and Showers hypothesize that the combination of all five components has the greatest power.

Sparks (1983) suggests a list of components that includes:

- Diagnosing and prescribing--the pre-program assessment of participants' needs and ways to meet them
- Giving information and demonstrating its application
- Discussing application
- Practicing and giving feedback
- Coaching.

Other researchers emphasize the importance of follow-up for sessions, noting that coaching is but one of a number of activities to assist in transfer of new learning. Little (1986) adds that staff development is most influential where it ensures collaboration adequate to produce shared understanding, shared investment, thoughtful development, and the fair, rigorous test of selected ideas; and where it requires collective participation in training AND implementation.

Generally, the research emphasizes a systematic process approach to move participants from awareness of the new learning through transfer and application, thereby promoting long-term behavior change through staff development. "There is," as Wade (1984) says, "no magical combination of methods for successful inservice."

The following list, culled from a number of sources, highlights other key process elements of effective staff development programs:

- Participants are clearly expected to be actively involved in learning and to take responsibility for their own learning; self-directed learning is emphasized.
- The program takes into account that participants will have different concerns at different stages in the process of change.
- Content is presented in a variety of modes and through a variety of activities, including opportunities for both individual and whole-group instruction and small-group instruction.
- Complex knowledge and/or skills are introduced gradually, with the understanding that the more complex the content, the more time is needed to learn and practice it.
- There is reinforcement of learning both within the program and as part of the post-program follow-up.
- Opportunities for collegial learning are integrated into the program: participants work with and learn from each other.
- Readiness activities or self-diagnosis are included at the beginning of the program to ascertain participants' current skill levels.
- New material is presented and then modeled in the course of the program.
- There are opportunities for practice and experimentation in nonthreatening situations, so participants can receive nonthreatening feedback on something they produce (e.g., a presentation, a product).

To facilitate learning, staff development programs are delivered in more than one incident over an extended period of time. The selected delivery model includes presentation of new material, demonstration, practice, feedback, and follow-up for evaluation and accountability. There are readiness activities as the program begins, and complex new material is presented incrementally, with repeated checking for understanding. The delivery of the program includes a variety of instructional modes and activities (individual and group learning, lecture, discussion, video and/or role-play, etc.). As part of the program design, participants learn collegially, in cooperative situations, with and from each other.

**FOLLOW-UP**

A follow-up component to staff development programs provides support and/or assistance in the actual implementation and application of the new knowledge/skills. This follow-up should include some type of accountability to assure that implementation actually takes place and application is maintained.

Fullan (1982) describes follow-through as crucial: "A series of several sessions, with intervals between in which people have the chance to try things (with some access to help or to other resources), is much more powerful than even the most stimulating one-shot workshop" (p. 286). Preparation for evaluating application and/or implementation should be built into the program.

Joyce and Showers (1988) report that follow-up coaching results in teachers generally using new instructional strategies introduced in staff development programs more often and with greater skill, using them more appropriately, exhibiting better long-term retention of knowledge about and skills with strategies, being more likely to explain new models to students, and having generally clearer understanding of the purposes and uses of new strategies.

Showers, et al. (1987) examine the conditions necessary for actual transference of new skills into regular use: "For a complex model of teaching (to reach implementation), we estimate that about 25 teaching episodes during which the new strategy is used are necessary before all the conditions of transfer are achieved" (p. 86). This repeated practice is necessary to enable and achieve teachers' full integration of the new strategy into their teaching repertoire and to assure that the new approach will not be lost due to disuse. There need to be at least 25 follow-up sessions for real transference of a new skill to take place. Most staff development programs do not offer this degree of application: follow-up is critical to the integration of the new knowledge or skill.

Sparks (1986) extended the examination of training processes to differentiate between transference among teachers who attended workshops only, who experienced coaching by the expert trainer,
and who followed training workshops with peer observation with feedback. In this case, peer observation with feedback is more effective than workshops only or trainer coaching.

To reinforce and monitor new behaviors, to assist in implementation and/or to provide support in transferring new knowledge and skills to the home situation, Sparks adds, there is systematic, long-term follow-up of program participants. Participants are accountable for implementing the new knowledge and skills. To help them in this implementation, the program provides for feedback as part of the follow-up activities.

### ORGANIZATIONAL CONTEXT

**STAFF DEVELOPMENT PRESENTED AS A FORM OF REMEDIATION FOR TEACHERS DEFICIENT IN CERTAIN SKILLS OR ATTRIBUTES (A COMMON IMPLICATION IN CURRENT PRACTICE) WILL ENCOUNTER RESISTANCE.** More appropriately, staff development should be based on the expressed needs of teachers revealed as part of the process of collaborative planning and collegial relationships. Purkey and Smith 1983, p. 443-444

Districts, schools, administrators and teachers initiate, select and pursue staff development programs to improve teacher and administrator knowledge/skills and contribute to improving schools. Researchers have identified aspects of organizations that, by supporting staff development, can support school improvement efforts, and a number of them address the issue of the "collaborative culture" in schools--a schoolwide expectation that teachers work and learn together to improve the school.

Staff development represents a change within the organization, and information about support at the organizational level for the change effort is important. Miles (1983) explores the stages of change wherein an innovation is begun, often through a staff development program (initiation), put into place in classrooms (implementation), and eventually becomes a part of the way the school does business (institutionalization). While initial enthusiasm about and skill in using the innovation are important, they do not alone lead to institutionalization. The group using the innovation must grow to stabilize it, and staff changes could jeopardize its continued use. Administrator support is crucial: "Making clearcut changes in organizational structure, rules and procedures seems essential both to stabilize the innovation and to buffer against turnover" (p. 19).

Little (1982) identifies two major characteristics of schools that contribute to successful staff development programs. First, these schools exhibit a NORM OF COLLEGIALITY, wherein there is the expectation for shared work in a cooperative atmosphere for all teachers. Second, there is a schoolwide NORM OF CONTINUOUS IMPROVEMENT, with high expectations for analysis, evaluation and experimentation. Teachers work together with the understanding that the school will continue to improve.

When Fullan, et al. (1990) outline their basic features of school improvement (as opposed to characteristics of effective schools), they cite Little's two norms. In addition, they cite a SHARED PURPOSE AND A SET OF STRUCTURES THAT SUPPORTS SCHOOL IMPROVEMENTS. Those structures include organizational arrangements, roles and formal policies that explicitly create working conditions to support and inspire work toward school improvement. Such factors as time for joint planning, joint teaching arrangements and staff development policies, new roles, and others are suggested as contributing to school improvement. These factors, and the general climate
they produce in the school, contribute to the success of staff development efforts. In examining the staff development literature, Bennett (1987) found support for two major requirements for the successful implementation of training content:

- There is an environment that encourages frequent talk and experimentation in the practice of teaching.
- Teachers and administrators frequently observe each other for feedback, reflection and support regarding the teaching process (p. 5).

Sparks and Loucks-Horsley (1990) identify characteristics of organizations where staff development is most successful:

- Staff members have a common, coherent set of goals and objectives that they have helped formulate, reflecting high expectations of themselves and their students.
- Administrators exercise strong leadership by promoting a norm of collegiality, minimizing status differences between their staff members and themselves, promoting informal communication, and reducing their own need to use formal controls to achieve coordination.
- Administrators and teachers place high priority on staff development and continuous improvement of personal skills, promoting formal training programs, informal sharing of job knowledge, and a norm of continuous improvement applicable to all.
- Administrators and teachers make heavy use of a variety of formal and informal processes for monitoring progress toward goals, using them to identify obstacles to such progress and ways of overcoming these obstacles, rather than using them to make summary judgments regarding the competence of particular staff members (Conley and Bacharach 1987).
- Knowledge, expertise, and resources, including time, are drawn on appropriately, yet liberally, to initiate and support the pursuit of staff development goals (p. 245).

While supporting the value of collegiality, Little (1989) warns against its use as a mandated approach in a situation where there are no other organizational structures to support it. This "induced collaboration" carries high costs in time spent on adjusting to working together and in risk of being exposed to new kinds of criticism and conflict in small groups. Forced collegiality doesn't work: "At issue here is the congruence or fit between naturally occurring relations among teachers and those collaborations that emerge in the course of institutionally sponsored initiatives" (p. 29).

Continuing her examination, Little finds that collegiality alone is not the answer to school improvement or effective staff development programs:

Patterns of interaction that support mutual assistance or routine sharing may count well for maintaining a certain level of workforce stability, teacher satisfaction and a performance "floor"; they seem less likely, however, to account for high rates of innovation or for high levels of collective commitment to specific curricular or instructional policies.

Hargreaves and Dawe (1989) discuss the concept of a collaborative culture that must be facilitated and supported by leadership so that informal collegiality supports the formal collaborations required in staff development programs. They warn against "contrived collegiality" which can undermine the development of this collegial culture.

Mahaffy (1990) suggests a series of conditions that should be in place PRIOR TO THE INTRODUCTION OF COLLABORATIVE PROCESSES in an organization, and these, too, relate to staff development efforts:
• Some predisposition exists among faculty for improvement.
• The building principal understands and supports the concepts of collaboration and norms of collegiality.
• The school is the unit for change.
• Teachers and administrators are seen as an important resource, and an effort is made to support and take advantage of this.
• Support for enhancing teacher effectiveness is based on knowledge of what teachers do (p. 29).

Griffin (1982) identifies a number of organizational context issues that might affect the design of staff development and change efforts. He mentions the institutional norms, the school's history of change, and the importance of the leadership's ability to analyze the characteristics of the setting and school. Griffin also suggests ways to use knowledge of research to ascertain the need for staff development:

• Determine whether teachers, administrators, and teacher educators agree as to what should be the focus of staff development.
• Determine preferred modes of delivering staff development.
• Diagnose concerns of participants.
• Determine levels of use of a desired/mandated change in practice.
• Infer appropriate interventions.
• Promote methodologically sound means of determining teacher competence.
• Establish a baseline from which staff development strategies can be formulated.

In the Rand Study, Berman and McLaughlin (1975) assert that it is critical that there be opportunity for mutual adaptation of any innovation that is the subject of staff development. In this process, the situation in the organization must adjust to accommodate the new approach/knowledge/skill, and the innovation in turn must be flexible enough to fit into the organizational and situational context.

Pink's (1990) study of urban districts describes common BARRIERS to staff development program effectiveness and argues that these should be addressed by schools and districts PRIOR TO INITIAL PLANNING FOR SCHOOL IMPROVEMENT PROJECTS. Schools and districts should:

• Assure there is adequate time for staff to plan for and learn about the project and to become proficient in skills. The intervention must be tailored to local needs in the school.
• Take into account the limitations of teachers and administrators in project schools. People are at different developmental levels, and using the same staff development for all cannot meet all individuals' needs.
• Plan for technical assistance for program conceptualization, implementation and evaluation. Expedient decisions not grounded in research cause more harm than good.
• Provide for central office support. A lack of central office support for an intervention is frequently a "kiss of death" for the program.
• Provide for local management of school improvement. "Centralized decision making fuels a management model that emphasizes compliance, which in turn leaves little room for innovation at the school level. Districts need to support the involvement of teachers and administrators at the school level in collaborative decision making" (p. 56).
• Acknowledge and plan for the fact that effective school improvement projects by their very nature will disrupt existing organization practices. "Encouraging schools to develop innovative ways to meet their goals and supporting such innovations with waivers from
existing regulations seems a promising strategy" (p. 56).

- Be prepared to understand and accommodate sitespecific (contextual) differences among schools in both the planning and implementation phases. "A promising way to solve this problem is to support each school (as it works to) identify and resolve its own problems. We must acknowledge, however, that such a focus on schoolgenerated improvement strategies requires the adoption of a different change model from that currently in use in most urban districts--it suggests a move to a centrally supported but bottom-up model and away from a centrally mandated top-down model" (p. 56-57).

- Provide adequate funds. Underfunding a project invariably results in problems that cannot be addressed until the next fiscal year, slowing the improvement process.

- Consider ways to reduce teacher mobility to maintain project impetus. "Districts must give some thought to ways to provide greater stability for teachers (and in some cases administrators) in schools engaged in school improvement projects" (p. 57).

- Placing too many competing demands on teachers and administrators sets up a situation where school improvement projects cannot succeed. "Districts must clarify and simplify what they want teachers to do. These expectations must be sensitive to the demands in the school context--this suggests that both the level and speed of implementation will vary from school to school" (p. 57).

- Avoid moving from project to project. "Districts must stay with an intervention long enough to implement it fully and understand what impact it is having: two to three years appears to be the least amount of time needed" (p. 58).

- Consider developing a partnership with a university to strengthen the conceptualization, implementation and evaluation of the intervention. "Districts should explore developing long-term collaborative relationships with universities (as well as other agencies in the community) to maximize the impact of school improvement interventions" (p. 58).

In his re-examination of educational change, Fullan (1991) proposes three guidelines for organizations undertaking professional development:

- Guideline 1 recommends that faculties and schools use three interrelated strategies--faculty renewal, program innovation, and knowledge production--to establish their new niche as respected and effective professional schools (p. 341).

- Guideline 2 is that learning--in this case of adults--must permeate everything the district and school does; it must be held as equally important for all staff regardless of position; districts and schools must strive to coordinate and integrate staff development (p. 342).

- Guideline 3 is that all promoters of professional development should pay attention to and worry about two fundamental requirements: (1) incorporating the attributes of successful professional development in as many activities as possible and (2) ensuring that the ultimate purpose of professional development is less to implement a specific innovation or policy and more to create individual and organizational habits and structures that make continuous learning a valued and endemic part of the culture of schools and teaching (p. 343).

As a final note on organizational context, staff development must be seen as an integral part of teachers' professional lives, not as remediation with the implication that teachers are not adequately doing their jobs. Just as teachers have learned to give homework as a matter of course--never as punishment--so districts must learn the critical contribution that job-embedded professional development can contribute to general school excellence (Purkey and Smith 1983; Howey, et al. 1985).

**STAFF DEVELOPMENT AND STUDENT PERFORMANCE**
NEITHER TRAINING ALONE NOR TRAINING FOLLOWED BY IMPLEMENTATION WERE SUFFICIENT CONDITIONS FOR CHANGE. THESE PARTICULAR BELIEF AND ATTITUDE CHANGES OCCURRED ONLY WHEN TRAINING AND IMPLEMENTATION WERE COMBINED WITH EVIDENCE OF IMPROVED STUDENT LEARNING. Guskey 1985

It is widely assumed that the improvement of teacher practice results in improved student performance. While there are few careful studies examining the important connection between staff development programs and improved student performance, a small group of studies (Gage 1984; Sparks and Loucks-Horsley 1990) do indicate that staff development programs can have positive effect on student performance.

Joyce, et al. (1989) found that a particular staff development approach, given time and support for full implementation, had direct, dramatic effect on student performance. Further studies of this type are needed to support what is generally believed to be true: staff development can and does have impact on student performance.

There is virtually no question that effective staff development programs do change teacher practice. Whether training program, individual inquiry or any of the other models outlined earlier, staff development continues to be a critical element that contributes to teacher effectiveness and school improvement. As Fullan (1991) notes, "The ultimate goal is changing the culture of learning for both adults and students so that engagement and betterment is a way of life in schools" (p. 344).

KEY REFERENCES


A meta-analysis synthesizing experimental research on training practices with an emphasis on inservice teacher education. The study looks at effectiveness of staff development training procedures on teachers' attitudes, knowledge and skill acquisition, and transfer of training to classroom practice.


Report of findings of the Rand study of change agent programs identifying what tends to promote various kinds of changes in the school and what doesn't. This volume reports a three-phase model of innovation process (initiation, implementation, incorporation) and describes the concept of mutual adaptation.


Description and strategies for application of adult learning principles developed through analysis and synthesis of literature in adult education, andragogy, teaching and learning, and other related fields. Excellent resource for background and application.

Corrigan, D.; Haberman, M.; and Howey, K. ADULT LEARNING AND DEVELOPMENT:
Examination of a variety of theoretic orientations to adult learning and conceptions of adult development, plus a look at implications for inservice education and suggestions for future practice.


An examination of many facets of educational change, including information about teacher preparation and development, with guidelines for professional development programs.


An examination of three interrelated areas--classroom improvement, teacher as learner, school improvement--with emphasis on "teacher-as-learner" as the link. Teacher as learner involves four aspects: the technical, the reflective, the research and the collaborative. The balance among these aspects affects specific learnings (new techniques, etc.) and generic learnings (increase of all four aspects in individual teachers).


Examination of the processes of educational change, based on extensive literature review, including discussion of roles and strategies and the critical need for change in school culture to complement and support reform.

Gage, N. "What Do We Know about Teaching Effectiveness?" PHI DELTA KAPPAN 66:2 (October 1984): 87-93.

Review of research on teaching with major focus on nine experimental studies of changes in instructional practice.


A staff development model incorporating 27 researchbased dimensions, including those identified in four inservice experiments. The model focuses on teacher and student objectives, delivery system, organizational context, governance, and selection and evaluation.


Discussion of various approaches to peer interactions that can support professional growth: professional dialogue, curriculum development, peer supervision, peer
coaching, and action research, with suggestions for implementing cooperative professional development.


Review of research on staff development organized into four main areas: context, assessment (needs assessment), content, and process. Identifies issues in each area and describes an eight-point profile of a research-derived staff development program. Excellent annotated bibliography.


Examination of research supports the fact that teachers' attitudes and beliefs change only after they see changes in student performance due to change in their practice.


Report of research on change in schools, particularly the diagnosis of group and individual needs during the process of adopting an innovation.


An examination of a specific type of coaching which is becoming more and more widespread and may be a new "administrative apparatus of surveillance and control" instead of a supportive process for individual teacher development.

Howey, K. R.; Matthes, W. A.; and Zimpher, N. L. ISSUES AND PROBLEMS IN PROFESSIONAL DEVELOPMENT. Oak Brook, IL: North Central Regional Educational Laboratory, 1985.

A literature review focused on recruitment and initial, inductive and inservice education of teachers, including a list of characteristics of effective staff development programs.

Joyce, B.; Murphy, C.; Showers, B.; and Murphy, J. "School Renewal as Cultural Change." EDUCATIONAL LEADERSHIP 47:3 (November 1989): 70-77.

Report of a study of the use of teacher study groups, providing regular training and goal setting and the subsequent positive impact on both teacher practice and student achievement and behavior.


Examination of the research on the ability of teachers to acquire teaching skills and strategies with findings that teachers are "wonderful learners," that specific conditions needed for learning are not common in most inservice settings, and that those
conditions are identified by research.


Description of the effects of coaching in the implementation of new practices learned in staff development programs.


Research background and description of a comprehensive system to support school improvement through staff development.


Description of the theory, background and application of the ARCS model: attention, relevance, confidence, satisfaction.


Early look at adults as learners, the learning process, the teaching/learning transaction.


A statement of the theory of experiential learning and its applications to education, work and adult development.


Description of practices associated with effective programs for information transmission, skill acquisition and behavior change.


Primarily a review of research on teacher preparation programs, offers salient points about inservice continuing education. Notes reasons for programs, types, and nature of teacher involvement.


Study of relatively successful and relatively unsuccessful schools revealed that in successful schools more than in unsuccessful ones, teachers valued and participated in norms of collegiality and continuous improvement and pursued a larger range of professional interactions with fellow teachers or administrators.

A study of three elementary and three secondary schools in a large urban district, conducted in collaboration with the district's office of staff development. Describes school staff development approaches, dimensions of successful staff development, and argues that the "fit" or integration of staff development with major lines of program development and authority is both critical and problematic.


An analysis of the accumulated literature on collegial relationships among teachers in schools, including studies of school culture, studies of specific group or team arrangements, and one-to-one teacher interactions. Examines the patterns of interaction and the variety of conditions of teacher performance and the commitment they produce.


Discussion of key attributes of successful staff development programs, approaches, evaluation, organizational structures, procedures and research.


A rationale for the development of collaboration and collegiality in schools as a necessary condition for substantive and lasting school improvement, plus a conceptual framework for how to develop collaboration and collegiality.


Discussion of how institutionalization of a change effort takes place, including a general model of institutionalization.


A review of research resulting in traits of successful and effective inservice programs, plus a checklist for program design.

Two case studies of urban school improvement projects (one elementary, one secondary) are the sources for analysis of the importance of staff development to both the conceptualization and implementation of school improvement projects. Identifies common barriers to program effectiveness, arguing these should be addressed by schools and districts prior to initial planning for school improvement projects.


A critical review of the effective schools research, including description of the role of staff development programs.


Discussion of findings from research and practical experience in staff development indicate the importance of program design in providing staff development that teachers can take back to their classrooms.


A framework for staff development which focuses on students' acquisition of language is presented as a means to increase teachers' cognitive complexity about the teaching-learning process.


A focus on theoretical bases, developing learning skills and understandings among adults, and providing training to help others learn how to learn. Extensive appendices charting the various learning styles instruments, other assessment devices, key procedures and exercises.


Extensive examination of research suggests five types of staff development models being used for teachers and provides information on underlying assumptions, theoretical/research underpinnings, phases of activity and illustrations/outcomes. Models include:

1. Individually-Guided Staff Development; 2) Observation/Assessment; 3) Involvement in a Development/Improvement Process; 4) Training; and 5) Inquiry.


Examination of research regarding the content, context and processes of staff
development programs designed to improve teaching practices. Includes listing of
general recommendations about staff development programs for more effective
teaching.

"The Effectiveness of Alternative Training Activities in Changing Teacher Practices."

Report of a study of the relative effects of three approaches used to train teachers in
the Stallings use of time model. Results indicate peer observation with feedback is
more effective than workshops only or trainer coaching.


Research review of nine studies exhibiting critical dimensions of staff development
and of effective schools to identify how staff development can support and facilitate
secondary school improvement. Two principles to guide staff development design and
implementation emerge.

Wade, R. K. "What Makes a Difference in Inservice Teacher Education? A Meta-Analysis of

Detailed analysis of 91 research documents (quantitative data, data for effect size
presented, data related to major study question, subjects K-12 public school teachers)
resulted in identification of 28 variables. Eight key variables are explored here: effect
levels, duration, training group characteristics, location and scheduling, sponsorship,
participant incentives, structure, and instructional techniques.

Wlodkowski, R. J. ENHANCING ADULT MOTIVATION TO LEARN: A GUIDE TO
IMPROVING INSTRUCTION AND INCREASING LEARNER ACHIEVEMENT. San Francisco:

Includes a synthesis of motivational theory and research; an extensive examination of
the six major factors that motivate learning (attitudes, needs, stimulation, affect,
competence, reinforcement) within a time frame; and many useful strategies for
increasing adult motivation to learn. Excellent information, suggestions for motivating
adults.

Wood, F. H.; Thompson, S. R.; and Russell, F., Sr. "Designing Effective Staff Development
Programs." In STAFF DEVELOPMENT/ORGANIZATION DEVELOPMENT, edited by Betty

A model for developing staff development programs based on research review and
delineation of school-based staff development assumptions and practices.

Zemke, R., and Zemke, S. "30 Things we Know for Sure About Adult Learning." TRAINING 25:7

Considered a classic since its initial publication in 1981, this article highlights "things
we know" about adult learners and their motivation, about designing curricula for
adults, and about working with adults in the classroom.

Examination of the literature on peer coaching as an integral part of staff development programs designed to increase the transference and use of new skills. Includes review of studies, characteristics, purposes and forms of peer coaching programs, plus issues regarding their design and implementation.


A collection of articles focusing on building a culture for professional growth, research on teaching, research on staff development, the Madeline Hunter model, collegiality and coaching.


Excellent, exhaustive examination and analysis of current approaches to adult learning; a comprehensive review of how adults learn; ways to develop more creative, up-to-date adult education programs. Emphasizes a concept of facilitation that incorporates elements of challenge, confrontation and critical analysis of self and society. Includes case studies from a variety of settings.


Combined synthesis of adult learning principles and findings from staff development research resulting in a set of criteria against which to analyze the book's descriptions of 14 leader development programs in ten countries.


Examination of the need for professional development, its potential impact on teachers working with students at risk, the knowledge base and workplace conditions conducive to effective professional development.


Selections focusing on the context in which staff development occurs, the processes of effective staff development, the content addressed in staff development efforts, the foundations of the speciality, and the competencies needed by staff developers.

A compendium of reprinted articles and book sections focusing on designing effective staff development programs, exemplary staff development practice, evaluating staff development programs and incorporating staff development into the school culture.


Review of learning theory; examination of nature of participants in adult learning; suggested model of adult motivation for learning and implications for increasing participation; patterns of adult learning and development; how and what adults learn and want to learn; and a conceptual framework of characteristics of adults as learners. Strong information on motivation, implications.


An examination of the two areas of change and the interrelationship between them, including how individuals are affected, how to design effective staff development programs, and how to evaluate staff development.


Application of basic evaluation theory to staff development issues such as political decisions about how and by whom evaluations will take place, guidelines for developing evaluations, an example and criteria for evaluating the evaluation.


Advice, examples, and ideas for the development of effective staff development programs. Includes a listing of "Elements of a Successful Staff Development Program."


A review of the literature on staff development, focusing on a comprehensive framework for classroom and school improvement, particularly the role of teacher as learner as a bridge between classroom and school improvements.


A review of selected research studies focusing on the planning, conducting and
evaluation of staff development programs. Topics covered include context, assessment, content and process.


Resulting from years of research on the processes of change, this book details the Concerns-Based Adoption Model, the Levels of Concern about an innovation, and the Innovation Configuration components of a comprehensive approach to tracking change.


Based on extensive research on the processes of change, an examination of roles and personal needs of people involved in change and strategies for managing a successful innovation process.


Description of six purposes of staff development derived from a research review: pedagogical development, understanding and discovery of self, cognitive development, theoretical development, professional development, and career development.


Report of a three-year field study to examine the processes of school improvement. Important work in the systematic analysis of the process of change from adoption through early implementation, mastering the new practice, the role of assistance and stabilization.


Results of a meta-analysis describing how collegial support groups can facilitate increased productivity and happier working relationships in a school.


A survey of the knowledge base on staff development; discussion of the changing roles of the current shareholders in staff development; examination of staff development in England, Wales and Australia; and four examples of district-level approaches to staff development programs in Pittsburgh, Pennsylvania; Los Angeles, California; Lincoln, Nebraska; and Anchorage, Alaska.

This book focuses on an integrated learning theory called "andragogy," the art and science of helping adults learn. A classic in the field, it describes adult learning, technologies that support the process, and ways to apply the theory in developing learning programs for adults.


Excellent review of learning theory, adult learning theory through the 1970s, teaching theory, and the application of learning and teaching theories to human resources development. Key reference for major learning theory work. Exposition of the theory of andragogy.


Brief review of adult learning theory called "andragogy," and a series of program and case descriptions of how a variety of organizations applied adult learning principles in the design, development and implementation of adult learning programs in business, industry, health care, education, etc.


A synthesis of findings from more than 1,000 studies of adult development and learning, plus information from diverse fields to create a handbook for practitioners in education and the helping professions.


Description of stages of adult development and how principals' awareness of them affects teacher motivation.


Examination of adult learning theory and strategies for teaching adults, with advice for adult educators stated as keys: understand and reduce anxiety, elicit and incorporate expectations, acknowledge and utilize experience, provide and encourage active participation, identify and incorporate relevant content, facilitate change and growth.


A review of 59 studies sorted into four categories of objectives (cognitive, affective, performance, consequence) and analyzed to find inservice program contexts, materials, and procedures most effective in facilitating change in participants.

Levine, S. L. PROMOTING ADULT GROWTH IN SCHOOLS: THE PROMISE OF

Discussion of major theories of adult development (Erikson, Levinson, Gould, Kohlberg, Loevinger, Kegan) and an indepth examination of the professional lives of four teachers, describing roles, actions and practices.


Report of the 1972 UNESCO Third International Conference on Adult Education in Tokyo, summarizing position papers and giving general historical perspective. Cites expected trends in adult education across the globe.


An early synthesis of research on staff development.


Information about adult development (particularly as relevant to planning and implementation of staff development programs) and a framework for inservice programs based on developmental theory and research that can be used as a model for promoting teachers' growth to higher levels of ego, conceptual and moral development.


Description of three potential roles for staff development in contributing to and supporting the restructuring of schools, plus descriptions of the roles in practice as carried out in staff development activities at three locations.


Report of a study of elementary schools and the work of teachers within them, examining the finding that the social organization of schools "renders meaning to the nature of teaching." One component examined is opportunities for teacher learning.


Report of a study resulting in the identification of 18 skill areas that are key for personnel who work in the areas of staff development and school improvement.

A study of 17 sixth, seventh, and eighth grade language arts and social studies teachers trained in models of teaching to determine the contribution of a coaching treatment to teachers' ability to transfer training into their active teaching repertoires. Results strongly support the power of coaching for facilitating teacher transfer of training but do not support the hypothesis that increased teacher transfer would result in improved student performance.


Suggests that a learner passes through specific stages in complex, meaningful learning. The nature of learning is fundamentally different at each stage:

1. initial phase is acquiring isolated facts that are interpreted in terms of preexisting schemata and add to existing knowledge structures; 2) intermediate phase where pieces are assembled into new schemata creating in turn more conceptual power until 3) terminal phase where the schemata are better integrated and function more autonomously (automatic, unconscious, effortless performance because knowledge structures now control behavior more directly). There is little understanding about the nature of the transitions between these stages and what precipitates them.


Examines teacher career development, teachers as self-directed learners, teacher psychological development and student growth in terms of student performance based on brief research review.


A general curriculum model for adult and continuing education courses: guides for more precise, coherent and fundable learning experiences for adult clients.


Practical advice for the development and carrying out of instruction for adults: specifying objectives, organizing instructional plans, designing learning activities, using community resources, variety of teaching techniques, devising test items and evaluating learning programs.

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An effective staff development programme aims to enable staff to gain increased satisfaction from work and develop individual careers through enhanced qualifications. Such an approach has proven to help staff develop their skills, knowledge and aptitudes necessary to make a more effective contribution to the organisation and instils within them a sense of recognition, achievement and job satisfaction. Existing staff should be assessed to determine their background and aptitude in being able to deliver what is expected.